

IUCLID 6.7 MICROBIAL ACTIVE  
SUBSTANCE APPLICATIONS  
MINI-MANUAL  
**European Food Safety Authority (EFSA)**





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# INTRODUCTION

*This manual is intended to support applicants in compiling Microbial Pesticide Active Substance applications in line with the new applicable rules and with the relevant changes released with IUCLID 6.7.*

*Documents no longer included in the updated table of contents within the IUCLID dossier are available in Section "11: Previously used documents now obsolete, kept until April 2024" (active dataset) or "14: Previously used documents now obsolete, kept until April 2024" (product dataset). Please note that the retention time for the obsolete documents will be extended.*

## Regulations and data requirements

### Regulatory background for microbial pesticide active substances applications

The procedures for approval and renewal of approval of active substances are set by **Regulation (EC) No 1107/2009**<sup>1</sup> for rules governing plant protection products and the active substances contained in those products, as amended by **Regulation (EU) 2019/1381**<sup>2</sup> (**Transparency Regulation**), and as implemented by **Commission Implementing Regulation (EU) 2021/428**<sup>3</sup> and by **Commission Implementing Regulation (EU) No 2020/1740**<sup>4</sup> – that applies as from 27 March 2021 and replaces the previous procedure under Implementing Regulation (EU) No 844/2012<sup>5</sup> – respectively.

Active substances (including micro-organisms) can only be approved for use in plant protection products if they fulfil the approval criteria that are laid down in **Regulation (EC) No 1107/2009**<sup>1</sup>, as amended by Commission Regulation (EU) 2022/1438<sup>6</sup>, where relevant, subject to conditions or restrictions. Companies may apply for amendments of conditions of approval, which follow the same regulatory process.

The initial approval of an active substance is valid for a limited period and the approval of an active substance needs to be reviewed periodically. A renewal of approval is only granted after the substance is re-evaluated and at least one safe use of the substance is demonstrated.

### Data Requirements for Microbial Pesticide Active Substances Applications

Following the entry into force of the **Transparency Regulation**, Regulation (EC) No 178/2002<sup>7</sup> (General Food Law Regulation) was amended by introducing **new requirements regarding transparency of submitted data**, including the **submission of dossiers** for pesticide active substances (including micro-organisms) **applications using IUCLID format**.

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<sup>1</sup> Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC

<sup>2</sup> Regulation (EU) 2019/1381 of the European Parliament and of the Council of 20 June 2019 on the transparency and sustainability of the EU risk assessment in the food chain and amending Regulations (EC) No 178/2002, (EC) No 1829/2003, (EC) No 1831/2003, (EC) No 2065/2003, (EC) No 1935/2004, (EC) No 1331/2008, (EC) No 1107/2009, (EU) 2015/2283 and Directive 2001/18/EC

<sup>3</sup> Commission Implementing Regulation (EU) 2021/428 of 10 March 2021 adopting standard data formats for the submission of applications for the approval or the amendment to the conditions of approval of active substances, as provided for in Regulation (EC) No 1107/2009 of the European Parliament and of the Council

<sup>4</sup> Commission Implementing Regulation (EU) 2020/1740 of 20 November 2020 setting out the provisions necessary for the implementation of the renewal procedure for active substances, as provided for in Regulation (EC) No 1107/2009 of the European Parliament and of the Council, and repealing Commission Implementing Regulation (EU) No 844/2012

<sup>5</sup> Commission Implementing Regulation (EU) No 844/2012 of 18 September 2012 setting out the provisions necessary for the implementation of the renewal procedure for active substances, as provided for in Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market Text with EEA relevance

<sup>6</sup> Commission Regulation (EU) 2022/1438 of 31 August 2022 amending Annex II to Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards specific criteria for the approval of active substances that are micro-organisms

<sup>7</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety



These new requirements, as implemented by the Practical Arrangements<sup>8</sup> laid down by EFSA, are reflected in the EFSA "Administrative guidance on submission of dossiers and assessment reports for the peer-review of pesticide active substances and on the MRL application procedure"<sup>9</sup> and apply to all pesticides applications submitted as of 27 March 2021.

Four implementing Regulations amending the current rules relevant to micro-organisms are applicable from 21 November 2022 onwards ([https://food.ec.europa.eu/plants/pesticides/micro-organisms\\_en](https://food.ec.europa.eu/plants/pesticides/micro-organisms_en)).

The new rules reflect the latest scientific developments and are based on the specific biological properties of micro-organisms.

- [Commission Regulation \(EU\) 2022/1438](#), amending Annex II to [Regulation \(EC\) No 1107/2009](#) as regards specific criteria for the approval of active substances that are micro-organisms
- [Commission Regulation \(EU\) 2022/1439](#), amending [Regulation \(EU\) No 283/2013](#) as regards the information to be submitted for active substances and the specific data requirements for micro-organisms
- [Commission Regulation \(EU\) 2022/1440](#), amending [Regulation \(EU\) No 284/2013](#) as regards the information to be submitted for plant protection products and the specific data requirements for plant protection products containing micro-organisms
- [Commission Regulation \(EU\) 2022/1441](#), amending [Regulation \(EU\) No 546/2011](#) as regards specific uniform principles for evaluation and authorisation of plant protection products containing micro-organisms

Information on the updated tables of content in alignment with the new data requirements and the transition phase is available in the Crosswalks EU PPP Micro-organisms - active substance application (product) to New Data Requirements (Commission Regulation (EU) 2022/1439 & Commission Regulation (EU) 2022/1440): <https://zenodo.org/doi/10.5281/zenodo.7188149>.

## Confirmatory information dossiers

In case the (renewal of) approval of an active substance is subject to the condition of the submission of further **CONFIRMATORY INFORMATION** to Member States, the Commission and EFSA, studies necessary to meet that condition are likewise subject to the obligation to use the IUCLID software for their submission<sup>10</sup>.

**Important!** If the submission contains confirmatory information, the dedicated box in the dossier header must be ticked.

## How to build an IUCLID Dossier

Before starting to compile a dossier, it is recommended to check [EFSA's Applicants Toolkit](#) for the latest resources available to support its preparation.

For specifics on the IUCLID tool, it is recommended to consult the [IUCLID 6 user manual](#) describing the functionality of IUCLID 6, accessible via its web interface.

For further details on how to use IUCLID check the "[IUCLID for Applicants](#)" training available in EU Academy.<sup>11</sup>

For further details on confidentiality, please refer to the [User guide on confidentiality](#).

The **first step** is to create a Legal Entity for the organisation which is submitting the application and to create **user accounts** for the people authoring the dossier. See the Overview of ECHA Cloud Services section of 'IUCLID Training for applicants', [Video 8](#) and the image below. More details on user management can also be found in [ECHA accounts manual](#).

<sup>8</sup> <https://www.efsa.europa.eu/en/corporate-pubs/transparency-regulation-practical-arrangements>

<sup>9</sup> Administrative guidance on submission of dossiers and assessment reports for the peer-review of pesticide active substances and on the maximum residue level (MRL) application procedure <https://www.efsa.europa.eu/it/supporting/pub/en-6464>

<sup>10</sup> This does not apply to substances conditionally approved under Implementing Regulation (EU) No 844/2012.

<sup>11</sup> Please note that EU Login is required for accessing the training platform



**Important!** A functional mailbox address and the number of a switchboard must be provided in the 'Legal entity' since this is always published. Personal contact details should be included in the 'Contact' entity.

Legal entity name\*  
EFSA IUCLID demo

Legal entity type  
company

Remarks

Other names ⓘ ^ + New item ⓘ Imp

| #                                       | Flags |
|---|-------|
| Address ⓘ ⓘ                             |       |
| Address 1<br>Via Carlo Magno, 1A        |       |
| Address 2                               |       |
| Postal code<br>43126                    |       |
| Town<br>Parma                           |       |
| Region / State                          |       |
| Country<br>Italy                        |       |
| Phone<br>+390521036111                  |       |
| Fax                                     |       |
| Email<br>generic.company.email@mail.com |       |
| Web site<br>www.company.com             |       |

The **second step** to build a valid IUCLID dossier is to create a new "Mixture" dataset and select the Working context '**EU PPP Micro-organisms – active substance application (product)**'.

**Note:** Pay attention to the instructions for setting the confidentiality flag/s since a non-confidential version of the dossier will be made publicly available once the application is deemed 'valid for further evaluation'. The public version of any attachment should not be in word/rtf format, but rather in pdf format.

The **third step** is to compile the IUCLID dossier with relevant information.

The **dossier header** must be completed. It should identify the type of submission and provide administrative information to support the processing of the dossier:

- **Purpose of the application:** depending on the process, select: 'approval of an active substance for use in plant protection products' or 'renewal of an active substance for use in plant protection products'. Additional information can be included in the remarks box.
- **Confirmatory information:** this box must be ticked if the submission contains confirmatory information.
- **European Reference Number** – this must be maintained for all submissions within a regulatory action and should only be amended if requested to do so by EFSA.
  - Notification of studies pre-application identifiers.
  - The Rapporteur Member State (RMS).
  - Reason for re-submission (if the dossier is updated).

Two main **datasets** must be completed:

1. one or more **MIXTURE DATASET/s**: with data on the representative mixture/s (including the GAP, as a mandatory document). The mixture dataset and corresponding table of contents (TOC) are equivalent to the data requirements in Reg. (EU) No 284/2013 as amended by Commission Regulation (EU) 2022/1440;
2. one **ACTIVE SUBSTANCE DATASET**: with data on the TARGET active substance. The active substance dataset and corresponding table of contents (TOC) are equivalent to the data



requirements in Reg. (EU) No 283/2013 as amended by Commission Regulation (EU) 2022/1439.

If appropriate, **one/several METABOLITE dataset(s)** can be created in the document [FLEXIBLE SUMMARY.Metabolites](#) (Section 1.4.1 Information on metabolites - product dataset), with data on secondary metabolite(s) of (potential) concern produced by the micro-organism (as requested in the data requirements). See dedicated chapter [below](#) for detailed information on how to report data on secondary metabolites.

Information on **other substances** relevant for the assessment can be reported creating an additional row under the mixture composition document and compiling the relevant newly created dataset, e.g. in case of relevant impurities, co-formulants and killed/deactivated micro-organisms where the toxin is to be assessed (see '[Special cases: submission of dossiers on deactivated/killed micro-organisms](#)' paragraph).

**Safeners, synergists and co-formulants** can be entered in the [FLEXIBLE RECORD.MixtureComposition](#) document (Section 1.4 'Detailed quantitative and qualitative information on the composition of the preparation' – Product dataset) even when they are mixtures (e.g. a co-formulant dissolved in a solvent). Information on the alternative co-formulants should be entered similarly to other co-formulants.

In case of **multiple representative products**, these can be listed in the **product composition section** (1.4.2 'Other representative products' – Product dataset).

Watch [video n.2](#) to see how you can access the different datasets in an IUCLID dossier ([Navigating through datasets within a product/mixture](#)).

**Note:** the dataset in which a study is reported is **dependent on the test material**. All studies should generally be reported only once. The cross-reference function should be used for studies within same dataset to avoid duplicate data entry.

Since it is currently not possible to cross-reference between different datasets, when data provided for the product dataset are needed also for the active substance dataset (or vice-versa), a waiver should be included to indicate where the scientific data can be found. In such cases, reference to the UUID of a IUCLID document can be made in the Reason field of the cross-reference section.

In case of studies including micro-organism and metabolites the following approaches should be used:

- If the test material is the **micro-organism**, studies should be included under the **active substance dataset**;
- If the test material is a **metabolite**, studies should be reported under the **metabolite dataset**;
- If the test material is a **micro-organism and metabolite/s**, studies should be reported under the **active substance dataset**.

**As a general principle, IUCLID documents should be fully completed.** The required data **must be reported in the relevant IUCLID documents** (Dossier Header, Endpoint summaries, Endpoint study records, Flexible records, Flexible summaries, etc).

Duplication of information should be avoided. Attachments should be provided only as indicated in the instructions provided in this manual.

Where **templates** have been recommended by evaluators and the IUCLID document does **not contain a structured section**, the formatted data should be entered as specified in the templates published in Knowledge Junction and listed in this manual.

When no study is provided for a data requirement/endpoint, a detailed **justification for data waiving** must be completed in the endpoint study record. Only a short description of the justification for data waiving should be reported in the relevant endpoint summary to avoid duplication of information.



## Study naming – best practices

Personal data must be avoided, e.g. Endpoint study records should not include author names.

It is recommended to name the study with the shortest name possible and to use the Year of the study, the endpoint and additional relevant context where multiple studies exist for an endpoint.

Examples:

- Analytical methods: 2007\_Post-approval control and monitoring purposes\_cereal
- Identity, taxonomy and phylogeny: 2021\_A.s.name\_WGS\_analysis
- Infectivity and pathogenicity: 2018\_pathogenicity\_rat
- Toxicity aquatic invertebrates: 2012\_pathogenicity\_daphnia magna
- Good agricultural practices (GAP).001: Crop\_zone.001, ex. Apples\_NEU.001

## Special cases: 1 - submission of dossiers on deactivated/killed micro-organisms

In case the active substance is a deactivated/killed micro-organism, it does not fall under **part B** of Commission Regulations (EU) 283/2013 and 284/2013, as amended by Commission Regulations (EU) 2022/1439 and 2022/1440.

In order to allow reporting of information related to the micro-organism itself (taxonomy, fermentation, whole genome sequencing, etc), the EU PPP Micro-organisms working context should be used, following the instructions given in this paragraph:

1. Create a product dataset.
2. When completing the **Mixture composition document** to describe the components, create a **substance dataset** for the Micro-organism, set Type of Substance to '**micro-organism or toxin produced by a micro-organism**' and assign the function 'active substance' to it. In this way documents such as the biological properties can be completed.
3. Within the same mixture composition document create a **substance dataset** for the 'killed component' but in this case assign the function 'active substance (other not to be assessed)' to it and set Type of Substance to '**UVCB**'. The attached dataset in this case will follow the Table of Contents of an active substance. In this case all relevant studies can be reported in the relevant dataset.
4. Add a note in the 'Dossier submission remarks' field within the Dossier header highlighting that the active substance under evaluation is not the micro-organism itself but the deactivated/killed micro-organism even if, due to technical constraints, the micro-organism is flagged as the active substance throughout the dossier.
5. To facilitate the correct identification of the active substance under evaluation, the names of the micro-organism and the dossier itself (which are published) should enable evaluators/the public to understand the situation (see screenshots below).
6. The 'active substance (other, not to be assessed)' must not be flagged confidential either at the level of the reference substance or in the mixture composition since this is actually the active substance under evaluation.

Note: Due to the complexity described above, you may receive some validation assistant errors. In this case, export the excel file for the validation assistant report, provide justifications and submit it to the RMS





PPP containing Deactivated micro-organism  
 a9358044-0e35-4b0e-9ed3-90ad8f2b3

View Dossiers Validate Create dossier

1 Identity of the applicant, identity of the plant protection product and manufacturing information

1.1 Applicant, trade name or proposed trade name

1.2 Producer of the preparation and the microorganism(s)

1.3 Producer's development code number of the preparation if appropriate

1.4 Detailed quantitative and qualitative information on the composition of the preparation

Composition of PPP name

- Deactivated micro-organism/s name/s (part B dataset)
- Deactivated micro-organism/s name/s (part A dataset)
- Water

UIID: d3092544-678c-4b65-a68c-28e850f7fa51

Active substance approval Notification of studies Specific submissions Other submission related information

Dossier name (given by user)  
 Deactivated/killed <<micro-organism/s name/s>> approval dossier

Dossier submission remark  
 The active substance under evaluation consists of deactivated/killed <<micro-organism/s name/s>>, no live components are present.  
 A set of data according to part A of Commission Regulation (EU) No. 283/2013 is provided under the dataset "deactivated <<microorganism/s name/s>> (part A dataset)" in the mixture composition document.  
 Specific information on the microorganisms (e.g. biological properties, pathogenicity, etc.) is provided under the dataset "deactivated <<microorganism/s name/s>> (part B dataset)" in the mixture composition document.

Active substance approval

European reference number\*  
 664211a5-fcdd-46c2-a8c3-e50b84fc259

PPP containing Deactivated micro-organism  
 a9358044-0e35-4b0e-9ed3-90ad8f2b3

EU PPP Microorganisms - active substance application (product)

PPP containing Deactivated micro-organism

1 Identity of the applicant, identity of the plant protection product and manufacturing information

1.1 Applicant, trade name or proposed trade name

1.2 Producer of the preparation and the microorganism(s)

1.3 Producer's development code number of the preparation if appropriate

1.4 Detailed quantitative and qualitative information on the composition of the preparation

Composition of PPP name

- Deactivated micro-organism/s name/s (part B dataset)
- Deactivated micro-organism/s name/s (part A dataset)
- Water

1.4.1 Information on metabolites

1.4.2 Other representative products

1.5 (Of 1.4) Physical state and nature of the preparation

1.6 Method of production of the preparation and quality control

1.7 Packaging and compatibility of the preparation with proposed packaging materials

2 Physical, chemical and technical properties of the plant protection product

3 Data on application

Composition of PPP name  
 UIID: 35e83331-6544-491c-8eee-23590130430a

Administrative data General information Components

Mixture/product name  
 PPP name

Trade names + New item Import file

Brief description  
 PPP is a plant protection product containing deactivated/killed <<micro-organism/s name/s>>

Formulation type  
 WP Wettable powder

Components

| # | Compo... | Name   | Function                                     | Typical concen... | Concentration ...   | Remarks   |
|---|----------|--|--|-------------------|---------------------|---|
| 1 |          | Deactivated micro-organism/s name/s (part B dataset) | active substance                             | 0 CFU/g           | 0 - <= 0 CFU/g      | This is not the actual active substance, as the micro-organism was deactivated/killed |
| 2 |          | Deactivated micro-organism/s name/s (part A dataset) | active substance (other, not to be assessed) | ca. 20 % (w/w)    | > 10 - < 30 % (w/w) | This is the actual active substance, i.e. the deactivated micro-organism              |
| 3 |          | Water   7732-18-5                                    | solvent                                      | ca. 80 % (w/w)    | > 70 - < 90 % (w/w) |   |

Edit Deactivated micro-organism/s ...

Substance name\*  
 Deactivated micro-organism/s name/s (part A dataset)  
 Public name

Legal entity  
 EFSA Agency | Helsinki | Finland

Third party

Other substance identifiers + New item Import file

| # | Flags | Identifier | Identity | Country | Relation | Remarks | Actions |
|---|-------|------------|----------|---------|----------|---------|---------|
|---|-------|------------|----------|---------|----------|---------|---------|

Contact persons + New item Import file

Identification of substance  
 Reference substance

Type of substance  
 Type of substance  
 UVCB  
 Origin  
 organic

Role in the supply chain

- Manufacturer
- Importer
- Only representative
- Downstream user

Edit Deactivated <<micro-organism...>>

Substance name\*  
 Deactivated <<micro-organism/s name/s>> (part B dataset)  
 Public name

Legal entity  
 EFSA Agency | Helsinki | Finland

Third party

Other substance identifiers + New item Import file

| # | Flags | Identifier | Identity | Country | Relation | Remarks | Actions |
|---|-------|------------|----------|---------|----------|---------|---------|
|---|-------|------------|----------|---------|----------|---------|---------|

Contact persons + New item Import file

Identification of substance  
 Reference substance

Type of substance  
 Type of substance  
 microorganism or toxin produced by a microorganism  
 Origin

Role in the supply chain

- Manufacturer
- Importer
- Only representative
- Downstream user



## Special cases: 2 - submission of dossiers on micro-organisms whose mode of action is based on secondary metabolites present in the product

In case the metabolite is the actual active substance present in the product, a dossier in accordance with Part A of Reg 283/2013 (i.e. the data requirements for chemical active substances) is required in addition to the dossier for the micro-organism.

Also in this case, the **EU PPP micro-organisms working context** should be used, following the instructions given in this paragraph:

1. Create a product dataset.
2. When completing the **Mixture composition document** to describe the components, create a **substance dataset** for the Micro-organism, set Type of Substance to '**micro-organism or toxin produced by a micro-organism**' and assign the function 'active substance' to it. In this way documents such as the biological properties can be completed.
3. Within the same mixture composition document create a **substance dataset** for the metabolite but in this case assign the function 'active substance (other not to be assessed)' to it and set Type of Substance to '**mono-constituent substance**'. The attached dataset in this case will follow the Table of Contents of an active substance. In this case all relevant studies can be reported in the relevant dataset.
4. The metabolite acting as active substance should also be linked in the section '**List of metabolites**' of the [FLEXIBLE SUMMARY.Metabolites](#) document in Section 1.4.1 'Information on metabolites' (product dataset).
5. Add a note in the 'Dossier submission remarks' field within the Dossier header highlighting that the metabolite is the actual active substance present in the product even if, due to technical constraints, it is flagged as 'active substance other, not to be assessed' throughout the dossier.
6. The 'active substance (other, not to be assessed)' must not be flagged confidential either at the level of the reference substance or in the mixture composition since this is actually the active substance under evaluation.

Note: Due to the complexity described above, you may receive some validation assistant errors. In this case, export the excel file for the validation assistant report, provide justifications and submit it to the RMS

## How to report information on secondary metabolites

With regards to the 'Guidance on the risk assessment of metabolites produced by micro-organisms used as plant protection active substances'<sup>12</sup>:

If the **principal mode of action** of the active substance is based on the **presence of secondary metabolites** in the formulated plant protection product (i.e. metabolite/s is/are the actual active substance present in the product), then the metabolite/s must be reported in the '**Mixture composition**' document (Section 1.4 – Product dataset) and relevant studies reported in the **linked dataset**.

A **summary** and **conclusion** of the assessment performed by the applicant on the secondary metabolites must be included in the '[Biological properties of the micro-organism](#)' document in **Section 2** of the active substance dataset, under '[Information on the production of relevant metabolites and toxins](#)', including the **evidence for exclusion of metabolite production**. If **genetic sequencing data** is included as supporting evidence for exclusion, this information should be reported in 1.3 'Identity, taxonomy and phylogeny of the microorganism' in the '[Genomic Characterization Micro-organism](#)' document.

The **metabolites under assessment in accordance with the SANCO/2020/12258** Guidance (including all the **metabolites of potential concern** resulting as the outcome of Stage 2 of the guidance) should be listed in the section '**List of metabolites**' of the [FLEXIBLE SUMMARY.Metabolites](#) document in Section 1.4.1 'Information on metabolites' (product dataset). They should be linked as 'Reference substances' unless any studies are

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<sup>12</sup> [https://ec.europa.eu/food/system/files/2020-11/pesticides\\_ppp\\_app-proc\\_guide\\_180653\\_microorganism-metabolites-concern\\_202011.pdf](https://ec.europa.eu/food/system/files/2020-11/pesticides_ppp_app-proc_guide_180653_microorganism-metabolites-concern_202011.pdf)



available and should be reported in the relevant metabolite dataset, in which case they should be linked as 'Substances'. In the case of **metabolites of concern**, these should be linked as 'Substances' and strain-specific **experimental data** should be reported in 'Other substance datasets'. In addition, for the sake of efficiency and harmonisation of the assessment of secondary metabolites, it is highly recommended to use the **template** for the **overview table for secondary metabolites** as provided in **Appendix I** to the 'Explanatory notes for the implementation of the data requirements on micro-organisms and plant protection products containing them in the framework of Reg. (EC) No 1107/2009' ([https://food.ec.europa.eu/system/files/2023-10/pesticides\\_ppp\\_app-proc\\_guide\\_imp-data-req\\_micro-organisms-ppp\\_imp-reg-11072009.pdf](https://food.ec.europa.eu/system/files/2023-10/pesticides_ppp_app-proc_guide_imp-data-req_micro-organisms-ppp_imp-reg-11072009.pdf)).

The **overview table** should be uploaded in the 'Reports and administrative information' section of the Flexible\_Summary.SummaryEvaluation document (Section 10.2 'Other Reports' - active substance dataset).

Based on Stage 2 in the SANCO/2020/12258 Guidance, 'a first batch of information on the production and/or relevance of metabolites may come from literature'. The main results of this broad range literature search should be reported in the 'Information on the production of relevant metabolites and toxins' section of the 'Biological properties of the micro-organism' document (Section 2 - active substance dataset). The search process should be documented in the Literature Search document (Section 3.5 'Literature data' - Active substance dataset), taking care of creating literature reference entities for all relevant and reliable studies and linking them in the FlexibleRecord.LiteratureSearch 'link to Relevant Studies' field(s). A link to the Literature Search(es) should be included in the biological properties document, under 'Literature search' field.

The results of **targeted literature searches** for all metabolites of potential concern should be reported in **two additional IUCLID Summary documents** in the **Active Substance dataset**, that should be completed to **conclude on the assessment** of metabolites of concern:

- Section 5.5.1 - Information and toxicity studies on metabolites (Flexible Summary.InformationToxicityMetabolites)
- Section 8.8 - Information and ecotoxicity of metabolites (FLEXIBLE SUMMARY.InformationEcotoxicityMetabolites)

In addition, in the same two documents, a further evaluation of the body of knowledge from the scientific literatures presented should be done, based on Step 5 of SANCO/2020/12258, to conclude whether there is sufficient information to conclude on the metabolites of concern.

## Components of a IUCLID dossier

Data is entered in IUCLID in **entities** and **documents**.

**Entities** are data elements that can be re-used and are usually managed in inventories, for example Substance entity, Legal Entity, Literature Reference entity.

**Documents** gather all relevant data fields for a specific type of information, for example Endpoint study record on acute oral toxicity or Flexible summary on Proposed residue definition.

### ENDPOINT STUDY RECORDS

An Endpoint Study Record is a document (template) with predefined fields in which data is entered to describe a study carried out within the subject area defined by the section's title.

IUCLID captures information complying with the reporting requirements of the OECD Test Guidelines, as well as other national/international methods used for chemical studies. The OECD Harmonised Templates for Reporting Chemical Test Summaries (OHTs) are standard data formats designed to be used in a wide range of regulatory contexts. More information on OHTs can be found on the [OECD website](https://www.oecd.org/ehs/templates/)<sup>13</sup>. ECHA has recently published a [Guidance and Standard Procedure for Drafting Robust Study Summaries](#) which can be consulted for generic guidance on the completion of OHTs.

The endpoint study records usually consist of the following data entry blocks: 'Administrative data', 'Data source', 'Materials and methods', 'Test material', and 'Results and discussion'. There

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<sup>13</sup> <https://www.oecd.org/ehs/templates/>



are also sections for any 'Overall remarks, attachments' and the 'Applicant's summary and conclusion'.

**Important note:** The main information requested in the data entry boxes of the endpoint study record document (e.g. materials and methods, results and discussion) must always be filled in, also for endpoints which are considered supportive by the applicant and it are based on literature data.

### ENDPOINT STUDY SUMMARIES

Endpoint summaries are found in the same Section as the endpoint study records and are used to provide a conclusion from the available studies.

For data requirements where experimental data can be provided, the relevant endpoint study record should be completed for each study which has been notified and is used as evidence of safety in the submitted dossier.

The link/s for the endpoint studies considered to be relevant and reliable should be added in the Endpoint summary. When linking endpoint study records with multiple results make sure to check the relevant checkboxes to identify the **KEY RESULTS**. Provide the scientific conclusion for the endpoint/s reported in the endpoint study records. Information provided in this document will be used to generate lists of endpoints with Report Generator.

**Note:** None of the fields in ENDPOINT SUMMARIES are subject to the UNLESS\_CONF flags, as they are not expected to contain confidential business information ('CBI'). These documents should be completed in a clear and transparent manner as they will be published without redaction as part of the Public Consultation Process foreseen in the Transparency Regulation.

### FLEXIBLE/FIXED RECORDS

Similarly to endpoint study records or to endpoint summaries, this name is used for documents in IUCLID where the information stored in the record is not a study and it is not based on an OHT.

- A fixed record is created in a section where there can be only one record.
- A flexible record is created in a section where there can be more than one record.

## **Attachments**

Applicants should provide the following as attachments:

- full study reports (in line with the provisions of the Transparency regulation)

or

- other supporting material (e.g label of packaging) in case they cannot be entered in a specific IUCLID document

**Full study reports** (including publications and QSAR, QMRP or QPRF reporting forms) must be uploaded as attachments **ONLY to the relevant literature reference entities**. The "Attachments" field of the endpoint study records (when present) **should be not used** to attach the full study reports and duplication of attachments should be avoided. The public version of any attachment **should not be in word/rtf format**, but rather in pdf format.

The literature reference entity allows different types of attachments to be uploaded. Only one attachment with the Attachment type = 'full study report' is permitted.

Other **supporting material** (e.g. excel templates, kinetic fitting reports, MSS/DER composers xml files) can also be added as attachments completing the 'Attachment type' to classify the material.



For attachments other than the full study report, indications are provided below.

| Table of contents  | Attachment  |
|--|---|
| <b>10.2 Other Reports – active substance dataset</b>   | <b>Overview table for secondary metabolites</b> as provided in <b>Appendix I</b> to the ' <a href="#">Explanatory notes</a> for the implementation of the data requirements on micro-organisms and plant protection products containing them in the framework of Reg. (EC) No 1107/2009' should be uploaded in the Section ' <a href="#">Reports and administrative information</a> ' of the Flexible_Summary.SummaryEvaluation document. |
| <b>1.5.1 Production and quality control – active substance dataset</b><br><br><b>1.6 Method of production of the preparation and quality control – product dataset</b> | <b>Document J</b> (see dedicated paragraph below)<br>Picture of the manufacturing process/flow chart for the active substance and the plant protection product should be added in the "Attached background material" section in 1.5.1 - active substance dataset and 1.6 – PPP dataset, respectively.   |
| <b>1.7 Packaging, compatibility of the preparation with proposed packaging materials – product dataset</b>   | Picture of label of packaging.  |
| <b>12. Summary and evaluation – product dataset</b>  | Safety data sheets for the formulants (attached to "Other references" field)<br>Administrative documents such as cover letters (attached to the "Reports and administrative information" field).<br><i>Important note:</i> Such letters do not need to be provided via email or post, but solely attached in the respective IUCLID section.   |

### DOCUMENT J

**Note:** work is on-going to ensure that all information can be reported in the IUCLID documents and **as from April 2025**, the PDF Document J will no longer be accepted in EU PPP dossiers.

Doc J can be uploaded in the FLEXIBLE\_RECORD.Manufacturer\_EU\_PPP:

- Doc J for plant protection product: in '1.6 Method of production of the preparation and quality control' – Product dataset
- Doc J for active substance: in '1.5.1 Production and quality control' – active substance dataset

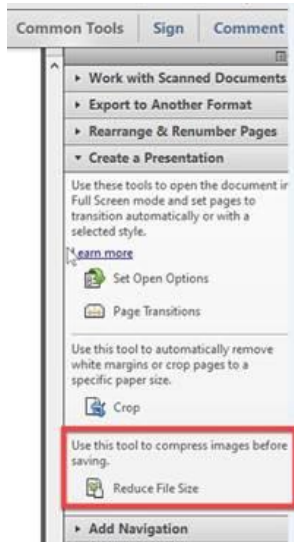
Please note that the information contained in doc J must also be provided in the correct sections of the IUCLID documents. To the extent information typically provided via Document J can already be provided in and flagged confidential via relevant IUCLID records/summaries, applicants should abstain from including the same information in Document J with a view to avoiding duplication of information.

### ATTACHMENT SIZE

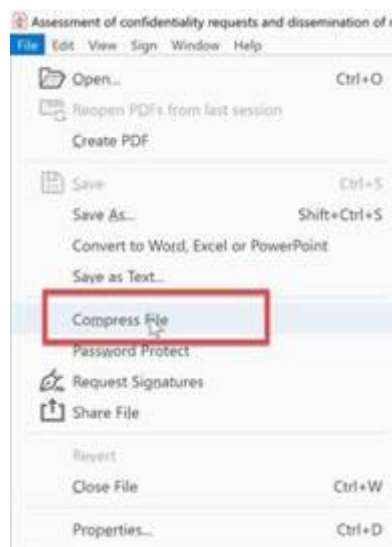
Attachments greater than 100MB will cause issues upon dossier submission. In case of large attachments please follow the instructions below. Reducing the size of attachments in IUCLID documents will result in better performance for dossier processing steps and it is therefore always recommended as best practice.

1. Generate the attachment report for the dossier / dataset to be submitted to get an overview of all the attachments. The most detailed report is shown below and the .ftl files can be downloaded from the IUCLID 6 website. Similar reports for datasets are also available. These attachment reports generate a .csv file (that can be opened in Excel) and list all attachments with their size and type.
2. Identify all the PDF attachments that have an excessive size (e.g. >100MB)

a. Download the large PDF attachments and use Adobe features to reduce the PDF file size: In the past this feature was called "Reduce File Size" in Adobe Acrobat Pro



b. In latest version of Adobe Acrobat Pro you can find the following menu item: "Compress File"



3. Upload smaller version of the PDF as attachment to the dataset.

This approach can be applied to PDF attachments only, though similar size reduction solution can be applied for other attachment types as well: e.g. extremely large images (with some loss in resolution quality).

When reduction of the size of the attachments is not possible, documents can exceptionally be split. In such cases, please pay special attention in naming the files.

### Notification of Studies (NoS)

In accordance with Art. 32(b) of Regulation (EU) 2019/1381, "business operators must, without delay, notify the Authority of the title and the scope of any study commissioned or carried out by them to support an application or a notification, as well as the laboratory or testing facility carrying out that study, and its starting and planned completion dates.

Laboratories and other testing facilities located in the Union shall also, without delay, notify the Authority of the title and the scope of any study commissioned by business operators and carried out by such laboratories or other testing facilities to support an application or a notification, its starting and planned completion dates, as well as the name of the business operator who commissioned such a study".

Pursuant to the [EFSA Practical Arrangements on pre-submission phase and public consultation](#) a justification must always be provided in the dossier header of each application in IUCLID for:

- studies notified but not submitted in the application;
- studies notified with delay, i.e., after the study starting date;
- studies notified and later withdrawn;
- studies commissioned or carried out after 27 March 2021, not notified but submitted in the application

IUCLID Report Generator allows applicants and Evaluators to generate a NoS extraction report listing all the studies submitted in the application that were notified, justified and without notification.

Further information on Notification of Studies are available in the User Guide on Notification of studies at the following link: <https://www.efsa.europa.eu/sites/default/files/2021-07/user-guide-notification-of-studies.pdf>





## Validation Assistant

Before submitting a dossier, it is important to run the validation assistant to check the dossier is technically complete. Authorities can run the validation assistant before declaring a dossier admissible. As the rules applied are dependent on the information included in the Dossier Header, make sure this is completed correctly. If the report shows a **business rule failure** (anything starting with BR e.g. BR\_PPP\_033) this will prevent the applicant from successfully submitting the dossier. If the report shows a **validation warning** (anything starting with QLT e.g. QLT\_PPP\_001) the applicant will be able to submit the dossier but may encounter problems during the admissibility check.

It is important to resolve all validation assistant warnings, since this will support the 'admissibility check' of the RMS. If Applicants cannot resolve all the warnings re-run validation assistant, it is recommended to download the "Validation assistant Report" in excel format (this excel file replaces document O) and include in this file the justification for not resolving the warning and provide this directly to the RMS. Note that missing studies for a specific data requirement/endpoint should be justified using the data waiver section in the relevant endpoint study record.

In addition to the automated checks, it is important to make sure all the IUCLID documents are well completed and that all the relevant scientific data is provided.

Information on the applicable validation rules is available here:

<https://doi.org/10.5281/zenodo.5141356>

Watch the video on validation assistant:

<https://zenodo.org/record/6603483#.YpoTY6hBxD9>

Common mistakes training **5. Validation rules:**

[https://zenodo.org/record/6603483#.Y1\\_cZHbMKUm](https://zenodo.org/record/6603483#.Y1_cZHbMKUm)

Working context: EU PPP Active substance application (product)

View Dossiers Validate Create dossier

EU PPP Active substance application (product)

M1

LIUID: d174f43b-e294-4ae9-b2f5-09e4d5e1f9a2

Mixture/Product name\*  
M1

Public name  
None

Legal entity owner\*  
ABC Germany | London | United Kingdom of Great Britain and Northern Irela...

Third party  
None

Other identifiers + New item

| # | Confidential | Name type | Name | Country | Remarks | Action |
|---|--------------|-----------|------|---------|---------|--------|
|---|--------------|-----------|------|---------|---------|--------|

Save

Validation assistant report

Submission checks 1 Quality checks 95

Business rules 1 Completeness check rules 0

Mixture 1  
Dossier header

Dossier header is incomplete. European reference number field must be filled in and the format must be UUID.



## Compare tool

The Compare tool can be used for comparing different versions of a dossier and highlights the differences between the latest submission and any previous versions. It can be used by Applicants before re-submitting a dossier to check which changes were made.

The compare tool can be accessed from the Dossier actions menu (three dots next to the Validation button)

A window will open showing all related dossiers. Select the version of the dossier you want to compare with the current version. An .HTML file is downloaded, open this in a browser application.

### Select dossier to compare

6 results found |  Show only dossiers of MO testing new DR

Show results 25

|                                |                                      |                  |  |
|--------------------------------|--------------------------------------|------------------|--|
| <b>MicroorganismWithErrors</b> |                                      | 14/04/2023 14:59 |  |
| Subject name                   | MO testing new DR                    | Submission type  | EU PPP Microorganisms - active substance application (product) |
| Dossier UUID                   | 263fce4f-6266-485e-8dbe-8e61c9ac7368 |                  |  |

|                                |                                      |                  |  |
|--------------------------------|--------------------------------------|------------------|--|
| <b>MicroorganismWithErrors</b> |                                      | 14/04/2023 14:56 |  |
| Subject name                   | MO testing new DR                    | Submission type  | EU PPP Microorganisms - active substance application (product) |
| Dossier UUID                   | 703f409f-3589-4722-9a30-49ab15746d6b |                  |  |

If nothing has changed for a specific section/document in a dossier the report indicates 'identical'

| 7.1.4.2 - Experimental exposure data water                               |           |  |
|--|-----------|--|
| ExpressionInAFreshwaterEnvironment: Experimental exposure data water.001 | Identical | ExpressionInAFreshwaterEnvironment: Experimental exposure data water.001 |

If there is a difference in a section/document in the dossier the report indicates 'different'

| 9.1 - Predicted concentrations in the environment                   |                           |   |
|---|---------------------------|---|
| EstConcOtherRoutes: Predicted concentrations in the environment.001 | <a href="#">Different</a> | EstConcOtherRoutes: Predicted concentrations in the environment.001 (content reference: <Ref3>) |

Clicking on the 'different' link will provide more information on the nature of the changes in the dossier when compared with the selected comparator.





| Field  | Source  | Target |
|--|---|--------|
| <p><i>i</i> Estimation of concentrations from other routes of exposure &gt; Description of key information</p>   | <p><i>default</i></p> <p>Predicted concentrations in the environment</p>  |        |
| <p><b>PEC other routes</b></p> <p><i>i</i> Estimation of concentrations from other routes of exposure &gt; PEC from other routes of exposure &gt; PEC other routes</p> | <p><b>PEC other routes</b></p> <p>Use description</p> <ul style="list-style-type: none"> <li>● <i>GAP</i>: Data on application (GAP).001</li> </ul> <p>Parent / metabolite parent</p> <p>Substance  Microorganism a.s. Genus species</p> <p>Route of exposure</p> <p><i>default</i></p> <p>Freshwater</p> <p>Method of calculation</p> <p><i>default</i></p> <p>OECD Calculation method</p> |        |

In this case a Predicted concentrations document has been completed in the newer dossier. Using compare, deletions can also be checked, in this case the target column would be completed and the source would not.

Watch these Videos on how to use the compare tool:

- Comparison of **Dossiers**: SPC Comparison tool demonstration - YouTube
- Comparison of **Documents**: <https://www.youtube.com/watch?v=cUy6ahta3dE>

## Report Generator

IUCLID provides a feature called "[Report Generator](#)" which allows data extraction from single IUCLID dossiers or datasets and generate a readable, user-friendly, customised report of IUCLID information in different output formats, for example, RTF, PDF, CSV and HTML.

Where available, Report generator should be used to compile the reported information into the format required for evaluation.

Many reports are ready to use and made available by default inside IUCLID 6. Templates to create PPP-specific reports are published in Zenodo Knowledge Junction and new versions, including changes and bug fixes, are published regularly and included in the list of "Default IUCLID reports" at each IUCLID release. These templates can also be uploaded in Report Manager as indicated in [the IUCLID user manual](#) [https://iuclid6.echa.europa.eu/documents/1387205/1809908/iuclid\\_user\\_manual\\_en.pdf/9d01cb53-902d-dbb6-fb00-fa141688c395?t=1684669746962](https://iuclid6.echa.europa.eu/documents/1387205/1809908/iuclid_user_manual_en.pdf/9d01cb53-902d-dbb6-fb00-fa141688c395?t=1684669746962). After downloading they will appear under the section "Uploaded IUCLID reports" of Report Generator.

The list of available reports for PPP can be found on the Applicants toolkit page: [Toolkit | EFSA \(europa.eu\)](#)

**Note:** report generator and other tasks are now run as 'Background tasks' which can be accessed from the IUCLID dashboard.



Mapping of Appendices of EFSA administrative guidance on submission of dossiers and assessment reports<sup>14</sup> to IUCLID documents

| Appendix old name   | New name, link and mapping  |
|---|---|
| Appendices C1-C4  | Dismissed.<br>Public consultations are managed through the OpenEFSA platform  |
| Appendix D<br>Template for the overview table for analytical methods used for risk assessment | The overview table for analytical methods should be included in the field 'Description of key information' of the ENDPOINT_SUMMARY.AnalyticalMethods document (Section 5 - Product dataset; Section 4 - active substance dataset) based on <a href="#">Template 4.1 - Template for the overview table for analytical methods for risk assessment</a> (available in zenodo: <a href="https://doi.org/10.5281/zenodo.4556992">https://doi.org/10.5281/zenodo.4556992</a> )  |
| Appendix I<br>Template for presentation of assessment of endocrine disrupting properties      | Dismissed / Not relevant for microbial pesticide active substance   |
| Appendix J<br>Template for presentation of the assessment for the equivalence of batches      | <p>Template 1.1</p> <p>The template 1.1 for presentation the assessment for the equivalence of batches is available on EFSA knowledge Junction and replaces the Appendix J of the old EFSA administrative guidance (EFSA, 2019)</p> <p>The filled-in template should be included in the Document J which can be uploaded in the "Production and quality control" document (Sections: 1.5.1 – Active substance dataset; 1.6 – product dataset). The new <a href="#">Analytical profile of batches – Flexible Summary</a> document should also be used (Section 1.4.3 – Active substance dataset).</p> <p>Note: work is on-going to ensure that all information can be reported in the IUCLID documents and as from April 2025, the PDF Document J (and therefore also Template 1.1) will no longer be accepted in EU PPP dossiers.</p> |

Inclusion of active substance in Annex IV to Regulation 396/2005 as part of an active substance approval or renewal process

If the assessment of the approval/renewal of an active substance leads to a proposal to include an active substance in **Annex IV** of Regulation 396/2005, this should be highlighted directly in the endpoint summary (Section 6.3) **of the approval/renewal dossier**. There is **no need to submit a separate MRL dossier** in IUCLID.

### Joint Submission and sharing of studies

In accordance with Art. 5(2) of Commission Implementing Regulation (EU) No 2020/1740, "where there is more than one applicant requesting the renewal of the approval of the same active substance, those applicants shall take all reasonable steps to submit their dossiers jointly." In light of the above, companies submitting a renewal of approval of the same substance, should reach an agreement on sharing studies and data within a Joint Submission. There are two main types of Joint Submission:

1. joint submission with a third-party representative and a number of member applicants. This third-party representative could be e.g. a consultant;
2. joint submission with a lead applicant and a number of member applicants.

In situation 1), the consultant is expected to submit a renewal dossier with all joint information (including all studies to be evaluated) as well as confidential information of each member of the

<sup>14</sup> EFSA, 2019. Administrative guidance on submission of dossiers and assessment reports for the peer-review of pesticide active substances. <https://doi.org/10.2903/sp.efsa.2019.EN-1612>



joint submission<sup>15</sup>. To identify the studies contributed by the different parties in the joint submission it is possible to use Inherited templates. Each template has a legal entity, the studies linked to a specific legal entity can be included in a single template and it can also be useful when LoAs to studies not owned by the applicant are to be included in a dossier. Data segregation among applicants is guaranteed provided that a third party is involved and manages the submission as a whole. To include a template, use the inherited templates link at the end of the dataset. More information can be found in the [IUCLID User Manual Page Section 7 page 96](#).

## ▼ Inherited templates

### Renewal impurity 222196

In the case in which one company owns the data for the active substance and different company/ies own the data for the product/s data it is important that the correct legal entity is entered in the substance (SUBSTANCE.OwnerLegalEntity) and mixture dataset (MIXTURE.OwnerLegalEntity). This approach can also be applied to metabolite and other representative product datasets. The 'Third party' information in all datasets must be completed with the legal entity of the consultant preparing the dossier. The consultant can use IUCLID advanced export options to provide separate versions of the dossier to the members of the joint submission once a submission has been made to EFSA Agency IUCLID.

In the situation 2) the lead applicant is expected to submit a renewal dossier which includes joint information submitted by the lead on behalf of all the members including all studies to be evaluated and presented in (robust) study summaries. In addition, the lead applicant would also add his own confidential information in the main lead dossier. Any data which are not to be shared in full with other members of the joint submission can be included in the supplementary renewal dossiers. Lead and member dossiers should not in principle contain and/or refer to the same study reports since it is sufficient for the data to be provided once. The supplementary confidential dossiers should be indicated by selecting 'Joint submission' = yes and 'Lead applicant' = no.

All members of a joint submission or task force must provide the same unique UUID in the EU\_PPP\_ACTIVE\_SUBSTANCE\_FOR\_MIXTURES.ActiveSubstanceApproval.EuJsNumber (Joint submission number) field of the dossier header. All members of a joint submission or task force must use the same reference substance entity for the active substance in all submitted dossiers.

### LETTER OF ACCESS

In relation to sharing of studies among companies which own separate data and which give data citation rights (Letter of Access) to each other for active renewal purposes, the approach would be as follows.

To indicate that a Company has a letter of access, follow these instructions in relation to the "Data Source (Literature Reference)" compilation:

- In the reference field: indicate the data is linked to a letter of access
- In the data access field: indicate that data submitter has a letter of access
- In the data protection claimed field: indicate data protection was claimed by the data owner
- In the Attached document field: upload the letter of access in the literature reference entity and set type to 'Letter of access'

Note: Providing a Letter of Access to the data is not sufficient to fulfil the data requirements since all studies supporting the approval/renewal of an active substance must be provided. Applicants must ensure that the studies are either included in their dossier or are provided by

<sup>15</sup> In case the same study report is linked in an IUCLID record/summary of two or member dossiers forming part of the same joint submission, the confidentiality justification as well as the earmarks in the confidential version of the study report and the blackening in the public version of the study report must be consistent in the member dossiers concerned.



the data owner in a linked submission (or in the applicant's submission by means of inherited templates).

## The Submission Portal

When preparing a dossier for submission please ensure that your dossier is compliant with the published submission portal rules: European Food Safety Authority. (2021). IUCLID submission rules for PPP dossiers (1.0). Zenodo. <https://doi.org/10.5281/zenodo.5141356>

Ensure the correct legal entities are assigned in the datasets and in the dossier header. During the submission process the DOSSIER.EU\_PPP\_ACTIVE\_SUBSTANCE\_FOR\_MIXTURES.subject.legal\_entity is checked. The owner of the dossier or the lead applicant in the case of a taskforce must be indicated in the **Mixture document**. If a third-party consultant has prepared the dossier the legal entity of the consultant must also be indicated (see below).

UUID: 3541e6f9-4f20-4e61-9957-501c4deab044

**Mixture/Product name\***  
TOPIK\_ACR

**Public name**  
Product A

**Legal entity owner\***  
🏠 Producer of plant protection product | Parma | Italy

**Third party**  
🏠 Consultant ABC | Roma | Italy | 98645235438 465985

During the processing of dossier submissions in the portal the information on the active substance is taken from the MIXTURE.composition document. It is essential this is filled in before you submit your first dossier. For every submission there is a check that the Legal Entity and the Active Substance are the same for a given European Reference Number.

**Ensure that the submitter has the role of Submission Portal Manager:** If the submitter is a user of the Legal Entity owner organisation, ask the Legal Entity Manager to give the user the Submission Portal Manager role.

| Username       | Name                | Email                  | User roles   |
|----------------|---------------------|------------------------|--|
| 🏠 EFSA_DGSANTE | EFSA Pilot DG SANTE | iuclid6@echa.europa.eu | IUCLID Beta Full Access<br>Submission Portal Manager |

If the submitter is a third-party consultant, then they need to ask the Legal Entity Manager of the owner/lead applicant organisation to add the submitter as a foreign user with the role Submission Portal Manager

Please see this short explanatory video for more information on foreign users:

<https://www.youtube.com/watch?v=YH5edrjBkxI&list=PLGDvgn1aAEEbL7dMwwWAjoAiK-DgoJmZrY&index=9>

If the dossier is being prepared by an organisation other than the Legal entity owner the recommended approach is that the Legal entity owner exports their legal entity details and provides them to the organisation authoring the dossier. This legal entity information can be exported from within ECHA's Identity Management solution (IDM) and not from within IUCLID.



Exporting from IDM ensures alignment with Legal Entity in ECHA IDM when the dossier is submitted.

Note that by submitting the dossier as a foreign user, this person only has access to the submission report in the submission portal and would therefore see the substance name and other basic information. There is no follow-up communication within IUCLID/the submission portal as all subsequent steps are managed by email using the main contact person(s) for the dossier i.e. the third-party consultant. If the submitter should not see equivalent details for other submissions, the Restricted (Submission Portal) role should be applied (see page 9 of the ECHA accounts Manual for Industry Users).

**Exporting the Legal Entity:** To view the details, please visit: <https://ulem.echa.europa.eu/ui/dashboard>. Log in with a user account that has the Legal Entity Manager role assigned. Navigate to the Legal Entities tab (on the left) and from the updated central page select the legal entity of the dossier. From the page, find the Export button to export the legal entity details.

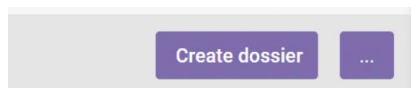
The Legal Entity information will be exported as a IUCLID .i6z file which you can then import in IUCLID.

**Importing the Legal Entity in IUCLID:** The organisation authoring the dossier should add this legal entity to their Legal Entity inventory and use this legal entity in the dossier. The easiest way to import the legal entity details is from the IUCLID dashboard landing page and to import it directly<sup>16</sup>, i.e. either by dragging the file onto the import box or by browsing for it.

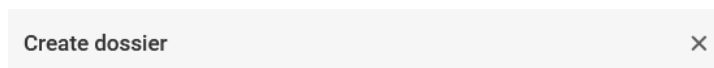
If the Legal entity owner is not in the dossier header, you will need to recreate the dossier and ensure the 'Include legal entity' is checked from the advanced settings of the 'Create dossier' function.

The advanced settings can be accessed from the 'three dots' button.

<sup>16</sup> It can also be imported through the Configuration management page ( ) and using the Legal Entity section of Inventory Manager



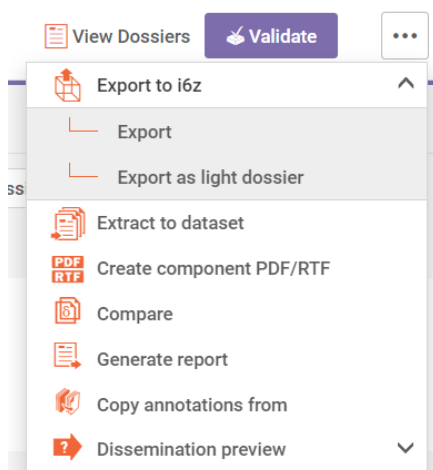
**Proceed to submission:** If you are using the IUCLID 6 ECHA Cloud services to author the dossier, simply use 'Create Dossier' and 'Proceed to submission' function. Then follow the submission portal steps listed below



✓ Dossier creation was completed successfully.



**Export dossier:** For Client or Server versions of IUCLID the dossier should be exported as an **i6z file** (the ZIP format for IUCLID). The **export** is accessed from the top level of the application window.



For the first submission of a dossier the standard '**Export**' function should be used.

**The submission portal:** Log in to the submission portal and upload the i6z file. Do not forget to switch legal entity if you are submitting for another organisation. Please note the speed of your submission will be dependent on the size of your dossier and the upload speed of your internet connection. It is important that you check the submission report for your dossier submission. If the Submission event in the report shows "Dossier received by EFSA" then your submission is complete. If the Submission event is 'Dossier failed validation checks' your dossier has been rejected. In this case, 'View Validation report' to identify the issues with your submission, update the dossier and repeat the submission process.

**Once a valid submission is received EFSA, RMS and EC are informed via an automated e-mail. Additional confirmation of IUCLID submissions via email or letter is NOT necessary unless specifically requested to do so within a certain process. Any cover letters should be added in the 'Summary and Evaluation' section. Dossier submissions via any route other than the Submission Portal will not be accepted for evaluation.**



efsa EFSA Application  
European Food Safety Authority

[Submit a IUCLID dossier](#)  
[Search for EFSA Applications](#)  
[Create a dossier in IUCLID Cloud](#)

Please upload your dossier for submission. Only i6z files are permitted for upload.  
● Note that currently only **PCN, SCIP and PPP dossiers** can be submitted.

Drop file to upload or [Browse](#)

## Submission events

04/01/2022 16:02 Dossier submitted  
04/01/2022 16:02 Dossier passed validation checks  
04/01/2022 16:02 Dossier received by EFSA

**Export as a light dossier (preferred option for resubmissions):** This is the preferred option in case of a resubmission since the file that is generated is always smaller than the full dossier. A light dossier includes the full IUCLID dossier with the exception of the attachments that had been provided previously (in the base dossier) and have not been modified.

The screenshot shows a dropdown menu with the following options: Export to i6z, Export, Export annotations, Export as light dossier (highlighted with a red arrow), Export as editable dataset, Create component PDF/RTF, Compare, Generate report, and Dissemination preview. In the background, a table titled 'Select the base dossier' shows one item found:

| 1               | 29/01/2021 17:18                              |
|-----------------|---|
| Subject name    | M1  |
| Submission type | EU PPP Active substance application (product) |
| Dossier UUID    | 4a4501e9-48d3-4fe4-b4c2-5c33421c491b          |

This option can also be used to sequentially load a large dossier if issues importing a dossier into the submission portal are encountered. The first submission should include as a minimum the Mixture dataset, a completed mixture composition dataset including the active substance component with a completed substance and reference substance document. Once this dossier has 'Dossier received by EFSA' status additional datasets (e.g. metabolites, other representative formulations) can be linked to the main Mixture dataset and exported as 'light dossier' until the full dossier has been submitted.

## Resubmission Of Applications

Applications should be prepared in accordance with the relevant legal provisions in place and **all data should be provided as complete as possible already in the initial dossier**. Nevertheless, after submission of an application, applicants **may be required to re-submit the IUCLID dossiers** in the following cases:





## **1. RE-SUBMISSIONS FOLLOWING REQUEST FROM RELEVANT REGULATORY BODY (RMS/EMS/EC/EFSA).**

In the cases foreseen by the legislation, applicants may be required to submit an updated IUCLID dossier upon specific request by the relevant regulatory body.

It is important to highlight that the relevant regulatory body will only consider in their assessments dossier versions resulting from a specific request. With the exception of the cases listed in point 2 below, **versions submitted by applicants without having been requested, will not be taken into consideration in the assessment phase.**

For clear identification of the dossier, in addition to the EU reference number, the UUID of the dossier/s should be stated in each report submitted by the applicant.

Before re-submission, **applicants should always check if a newer IUCLID release is available**, to ensure a valid submission taking into account potential new business rules and validation checks included in the latest IUCLID update.

Any change in the dossier should be limited to addressing specific requests from the relevant regulatory body.

The applicant should respect the confidentiality decisions previously agreed with EFSA and submit new **confidentiality claims limited to the newly provided information only.**

### **1.1 Request for update during admissibility check**

In the context of the admissibility check, the relevant regulatory body must ensure the compliance of the application with the requirements of the applicable regulations.

The admissibility check includes:

1. the **completeness check** against the **data requirements**
2. the check on the **Notification of Studies**
3. a light **check** on the presence of **key elements in confidentiality requests** submitted by the applicant
  - a. sanitised personal data
  - b. for confidentiality requests submitted, background documents and justification

For each of the checked points, the relevant regulatory body may ask the applicant to provide additional information<sup>17</sup>. It is important to highlight that the relevant regulatory body should judge the importance of the missing data and whether this will have an impact on their admissibility decision (e.g. in case of missing studies), leading to a decision of non-admissibility. The relevant regulatory body should also consider that a first version of the dossier will be published "as is" immediately after the declaration of admissibility.

### **1.2 Request for update in the context of the confidentiality request assessment/implementation**

In the context of the confidentiality check, the applicant may be required to submit an updated version of the IUCLID dossier i) in response to a request for clarification regarding the confidentiality requests or ii) following the decision taken on confidentiality claims submitted with a view to implementing that decision in the IUCLID dossier.

### **1.3 Request for update during application evaluation**

Once an application has been declared admissible, in the context of the application evaluation, the relevant regulatory body may ask the applicant to provide additional information<sup>18</sup>. This additional information must be submitted in the form of an updated dossier in IUCLID.

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<sup>17</sup> According to Art 9 of Reg 1107/2009, for new active substance applications and request for amendment of approval conditions:  
According to Art 8 of Reg 1740/2020 for renewal application

According to SANCO Guidance on MRL setting procedure (SANTE/2015/10595 Rev. 6.1, for MRL applications

According to Article 32b (2) and (3)<sup>17</sup> of Regulation (EC) No 178/2002 and EFSA practical arrangements for all applications

<sup>18</sup> According to Art 11 of Reg 1107/2009 for new active substance applications





### **1.4 Request for update during EFSA peer-review**

During the peer-review process, EFSA may request the applicant to submit additional information<sup>19</sup>. When responding to EFSA's request for additional information, the applicant must upload the additional information using the IUCLID format and the central submission system through which the additional information is made available to EFSA, to the RMS, all Member States and the European Commission.

## **2. SPONTANEOUS RE-SUBMISSIONS**

Note: Spontaneous re-submissions should be limited to the cases foreseen by the current legislation as detailed in the paragraph below.

### **2.1 Re-submission following changes in administrative information for renewal applications**

In case of changes in the administrative information of applications, the applicant should inform the relevant regulatory body via email and update the IUCLID dossier (update limited to specific administrative change)<sup>20</sup>.

### **2.2 Re-submission following identification of potentially harmful or unacceptable effects**

In case new information is available on potential harmful or unacceptable effects of the active substance, in accordance with Art. 56 of Reg 1007/2009, *"the holder of an authorisation for a plant protection product shall immediately notify the Member States that granted an authorisation of any new information concerning that plant protection product, the active substance, its metabolites, a safener, synergist or co-formulant contained in the plant protection product, which suggests that the plant protection product no longer complies with the criteria set out in Articles 29 and 4 respectively"*.

When making a resubmission make sure the reason for resubmission is reported in the **"Specific submissions" section at the bottom of the dossier header**. Flag that the submission is an update and then provide additional details on whether:

- a) the update is due to an official request, in which case you are asked to provide details on the requester and the reason for the request or a spontaneous update followed by details on the reason

The submission is an update

Official request    + New item    Import file ▼

1 Requester  
EMS / RMS

Request type  
request for update during admissibility check

Remarks  
Missing data on xxx have been provided

- b) the update is spontaneous, followed by details on the reason

According to art 11 of the Reg 1740/2020 for renewal application  
According to SANCO Guidance on MRL setting procedure (SANTE/2015/10595 Rev. 6.1) for MRL applications  
According to Article 32b (2) and (3)18 of Regulation (EC) No 178/2002 and EFSA practical arrangements for all applications  
<sup>19</sup> According to Article 12(3) of Regulation (EC) No 1107/2009, or according to Article 13(2) of Commission Implementing Regulation (EU) 2020/1740 in case of renewal of approval  
<sup>20</sup> According to Art 15 of Regulation 1740/2020



Spontaneous update + New item Import file

- Reason for resubmission  
update following a legal entity change
- Remarks  
New legal entity (and contact) details provided

## Dossier publication

Information not meant to be published is removed from the dossier, in accordance with the published version of the filtering rules. The public version of the dossier is then made available via the OpenEFSA Portal (<https://open.efsa.europa.eu/>). Dossier filtering is an automated process.

Prior to submitting a dossier, the 'View report and create filtered dossier' function under 'Dissemination Preview' can be used to create a filtered dossier.

The screenshot shows the IUCLID interface for a dossier titled 'Mixture 1'. The dossier submission type is 'EU PPP Active substance application (product)'. The dossier subject is 'M1'. A dropdown menu is open, showing options: 'Export to i6z', 'Export annotations to i6z', 'Create component PDF', 'Compare', 'Generate report', and 'Dissemination preview' (highlighted with a red box).

Although a visual check of the filtered dossier can be useful to check how the published dossier will look, it is recommended to also use the dissemination preview excel file to filter for sensitive documents and check the publication status of each completed field in that document. All fields with the outcome = Published will be visible in the dossier available on the OpenEFSA portal. Dossier filtering is an automated process.

Pay attention to remark fields in open and closed picklists as currently these are not published if a corresponding confidentiality flag has been set in the relevant IUCLID record/summary.

| A  | B                   | C   | D  | E   | F   | G   | H                          |
|----|---------------------|---|--|---|---|---|----------------------------|
| 1  | entity              | sectionName                                 | documentName                                   | field   | outcome   | sourceDocumentKey   | referencedDocumentKey path |
| 2  | Dossier             |   | Efsa basic                                     | EU PPP Basic substance                                | Not published   | de84bbd8-7acf-42db-b09a-c3735c1f94b5/de84bbd8-7acf-42db-DOSSIER/EU_PPP_BASIC_SUBSTANCE_NA                         |                            |
| 3  | Dossier             |   | Efsa basic                                     | EU PPP Basic substance                                | Not published   | de84bbd8-7acf-42db-b09a-c3735c1f94b5/de84bbd8-7acf-42db-DOSSIER/EU_PPP_BASIC_SUBSTANCE_LEI                        |                            |
| 4  | Dossier             |   | Efsa basic                                     | EU PPP Basic substance                                | Not published   | de84bbd8-7acf-42db-b09a-c3735c1f94b5/de84bbd8-7acf-42db-DOSSIER/EU_PPP_BASIC_SUBSTANCE_RE                         |                            |
| 5  | Dossier             |   | Efsa basic                                     | EU PPP Basic substance / Basic substance a            | Published   | de84bbd8-7acf-42db-b09a-c3735c1f94b5/de84bbd8-7acf-42db-DOSSIER/EU_PPP_BASIC_SUBSTANCE_Ba                         |                            |
| 6  | Dossier             |   | Efsa basic                                     | EU PPP Basic substance / Basic substance a            | Published   | de84bbd8-7acf-42db-b09a-c3735c1f94b5/de84bbd8-7acf-42db-DOSSIER/EU_PPP_BASIC_SUBSTANCE_Ba                         |                            |
| 7  | Mixture/Product     | 1 Identity and applicant                    | efsa test basic 1                              | Mixture / Mixture/Product name                        | Published   | 69295a37-e087-4416-aa8e-8f840b506c95/de84bbd8-7acf-42db-MIXTURE.MixtureName                                       |                            |
| 8  | Mixture/Product     | 1 Identity and applicant                    | efsa test basic 1                              | Mixture / Legal entity owner                          | Published   | 69295a37-e087-4416-aa8e-ECHA-fc3c9382-ed4a-4990-bdf2-70C.MIXTURE.OwnerLegalEntity                                 |                            |
| 9  | Mixture/Product     | 1 Identity and applicant                    | efsa test basic 1                              | Mixture / Contact persons / 1                         | Not published   | 69295a37-e087-4416-aa8e-8f840b506c95/de84bbd8-7acf-42db-MIXTURE.ContactPersons[0]                                 |                            |
| 10 | Mixture/Product     | 1 Identity and applicant                    | efsa test basic 1                              | Mixture / Contact persons / 2                         | Not published   | 69295a37-e087-4416-aa8e-8f840b506c95/de84bbd8-7acf-42db-MIXTURE.ContactPersons[1]                                 |                            |
| 11 | Mixture/Product     | 1 Identity and applicant                    | efsa test basic 1                              | Mixture / Role in the supply chain / Manufa           | Published   | 69295a37-e087-4416-aa8e-8f840b506c95/de84bbd8-7acf-42db-MIXTURE.RoleInSupplyChain.Manufact                        |                            |
| 12 | Flexible Record     | 2 Preparation of the substance for use      | Mixture composition.001                        | Composition (mixture) / Components / 1 / Ns           | Published   | 3fe10c84-2eb8-4c8c-961c-8340dfb6-efea-4086-9c06-4667854269b/de84bbd8-7acf-42db-FLEXIBLE_RECORD/MixtureComposition |                            |
| 13 | Flexible Record     | 2 Preparation of the substance for use      | Mixture composition.001                        | Composition (mixture) / Components / 1 / Fu           | Published   | 3fe10c84-2eb8-4c8c-961c-dab0d8fd14/de84bbd8-7acf-42db-FLEXIBLE_RECORD/MixtureComposition                          |                            |
| 14 | Flexible Record     | 2 Preparation of the substance for use      | Mixture composition.001                        | Composition (mixture) / Components / 1 / Ty           | Published   | 3fe10c84-2eb8-4c8c-961c-dab0d8fd14/de84bbd8-7acf-42db-FLEXIBLE_RECORD/MixtureComposition                          |                            |
| 15 | Flexible Record     | 2 Preparation of the substance for use      | Mixture composition.001                        | Composition (mixture) / Components / 2 / Ns           | Published   | 3fe10c84-2eb8-4c8c-961c-4094f25d-7eb4-412d-af25-767d92b5c00/de84bbd8-7acf-42db-FLEXIBLE_RECORD/MixtureComposition |                            |
| 16 | Flexible Record     | 2 Preparation of the substance for use      | Mixture composition.001                        | Composition (mixture) / Components / 2 / Fu           | Published   | 3fe10c84-2eb8-4c8c-961c-dab0d8fd14/de84bbd8-7acf-42db-FLEXIBLE_RECORD/MixtureComposition                          |                            |
| 17 | Flexible Summary    | 4 Application template, studies, bibliograp | Application template, studies, bibliograp      | Application template and confidentiality requests.001 | Not published   | 523fb0ff-59c3-438e-bf3e3da782b/de84bbd8-7acf-42db-FLEXIBLE_SUMMARY/SummaryEvaluat                                 |                            |
| 18 | Legal entity        | Breaking Bad                                | Legal entity / General information / Legal ent | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.LegalEntityN |   |                            |
| 19 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 20 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 21 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 22 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 23 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 24 | Legal entity        | Breaking Bad                                | Legal entity / General information / Address   | Published   | ECHA-fc3c9382-ed4a-4990-bdf2-70041a08d23/de84bbd8-7acf-42db-LEGAL_ENTITY.GeneralInfo.ContactAddr  |   |                            |
| 25 | Reference substance | Water                                       | Reference substance / Reference substance r    | Published   | 8340efb6-efea-4086-9c06-4667854269b/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.ReferenceSubst         |   |                            |
| 26 | Reference substance | Water                                       | Reference substance / IUPAC name               | Published   | 8340efb6-efea-4086-9c06-4667854269b/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.IupacName              |   |                            |
| 27 | Reference substance | Water                                       | Reference substance / Inventory / CAS numb     | Published   | 8340efb6-efea-4086-9c06-4667854269b/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.Inventory.CASN         |   |                            |
| 28 | Reference substance | Bis[2-(2-methoxyethoxy)ethyl] etl           | Reference substance / Reference substance r    | Published   | 4094f25d-7eb4-412d-af25-767d92b5c00/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.ReferenceSubst         |   |                            |
| 29 | Reference substance | Bis[2-(2-methoxyethoxy)ethyl] etl           | Reference substance / IUPAC name               | Published   | 4094f25d-7eb4-412d-af25-767d92b5c00/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.IupacName              |   |                            |
| 30 | Reference substance | Bis[2-(2-methoxyethoxy)ethyl] etl           | Reference substance / Inventory / Inventory    | Published   | 4094f25d-7eb4-412d-af25-767d92b5c00/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.Inventory.Inven        |   |                            |
| 31 | Reference substance | Bis[2-(2-methoxyethoxy)ethyl] etl           | Reference substance / Inventory / CAS numb     | Published   | 4094f25d-7eb4-412d-af25-767d92b5c00/de84bbd8-7acf-42db-REFERENCE_SUBSTANCE.Inventory.CASN         |   |                            |
| 32 | Contact             | tds; Breaking bad                           | tds; Breaking bad                              | Not published   | d4e869be-bf46-45dd-bba7-4b2a074a6eb2/de84bbd8-7acf-42db-CONTACT                                   |   |                            |
| 33 | Contact             | tds; Breaking bad                           | tds; Breaking bad                              | Not published   | dbc9040f-57c4-471d-af76-1760772e417f/de84bbd8-7acf-42db-CONTACT                                   |   |                            |



**Note:** The Dissemination preview works on **dossiers** and **not datasets**.

If report generator is being used to prepare reports for inclusion in the dossier, a sanitised version of the report can be created by running report generator on the filtered dossier.

Confidentiality of dossiers submitted via IUCLID

For guidelines on requesting confidentiality in IUCLID dossiers, please refer to the "User Guide on confidentiality" available on the EFSA toolkit page: <https://www.efsa.europa.eu/en/applications/toolkit>

## Validation rules

IUCLID submission rules for PPP dossiers currently applicable in the Submission portal are available in a separate document at the following link: [IUCLID Validation Assistant rules for PPP dossiers](#)

## Filtering rules

IUCLID filtering rules for PPP dossiers currently applicable are available in a separate document at the following link: [IUCLID for PPP Filter rules | Zenodo](#)



## ANNEX 1 – NEW AND AMENDED DOCUMENTS

*This section includes instructions on how to compile new/amended documents introduced to make the micro-organisms working context fit for purpose so as to accommodate the submission of data in accordance with the new regulatory framework. For the remaining documents, please refer to the micro-organisms manual: <https://doi.org/10.5281/zenodo.4773526>*

### EU PPP MICRO-ORGANISMS - ACTIVE SUBSTANCE APPLICATION WORKING CONTEXT – ACTIVE SUBSTANCE DATASET

#### Genomic characterisation of the micro-organism – Endpoint Study Record

##### Section 1.3 - Identity, taxonomy and phylogeny of the microorganism

###### Purpose

Record for reporting micro-organism identity, including the possibility to submit Whole Genome Sequencing (WGS) information and FASTQ files.

In the area of plant protection products, Commission Regulation (EU) No 283/2013, as amended by Commission Regulation (EU) 1439/2022, also recommends the most appropriate molecular analytical methods to be used to characterize the micro-organism. The WGS-based data analysis can provide information to unequivocally assign taxonomic identification of the strains, as well as on the characterization of their potential functional traits of concern (e.g. virulence factors, resistance to antimicrobials of clinical relevance for humans and animals, production of known toxic metabolites).

| ENDPOINT_STUDY_RECORD.GenomicCharacterisationMicroorganism |   |  |
|--|---|--|
| Name   | Instructions  | Data type                                |
| <b>Administrative data</b>                                 | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">Administrative data – common block</a><br><a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a> | Header 1                                 |
| <b>Data source</b>   | <a href="#">Data source – common block</a>  | Header 1                                 |
| <b>Background</b>  |   | Header 1                                 |
| <b>Background information</b>                              | Use this field to include any background information, if required, or any relevant introductory remarks on the study summary. Leave field empty if not applicable. Do not include information for which specific fields are provided.<br><br>Example:<br>This field can be used for summarising the pipeline followed to characterise the micro-organism using genomic methods, e.g. WGS.       | Text (2,000 char.)<br><br>Display: Basic |
| <b>Materials and methods</b>                               | <a href="#">Material and methods – common block</a>   | Header 1                                 |
| <b>Test material</b>                                       | <a href="#">Test material – common block</a>  | Header 2                                 |
| <b>Sample preparation</b>                                  |   | Header 2                                 |



|  |  |   |
|--|--|---|
| <b>Culture conditions</b>                                | Describe the type of culture and culture conditions for the microorganism prior to the extraction of genetic material, if applicable (e.g. pure culture, monosporic culture).  | Text (2,000 char.)<br>Display: Detailed             |
| <b>Genetic material extraction procedure</b>             | Describe the protocol / method used to extract DNA (with chromosomal and extra-chromosomal elements) or RNA (e.g. for viruses).  | Text (2,000 char.)<br>Display: Detailed             |
| <b>Library preparation</b>                               | Describe the library construction method for sequencing, e.g. DNA fragmentation method and selection of fragments, addition of adapters...<br><br>Specify the manufacturer's instructions followed, including version number, and describe any deviations from that method.        | Text (2,000 char.)<br>Display: Detailed             |
| <b>Sequencing and Quality Control</b>                    |  | Header 2  |
| <b>Sequencing platform / instrument</b>                  | Indicate the sequencing platform / instrument used for sequencing, including the technology used (e.g. Sequencing by Synthesis, Pyrosequencing, Nanopore...), the company and the device. Further details about the method can be provided in field 'Details on sequencing method' | Text (255 char.)<br>Display: Basic                  |
| <b>Read type</b>   | Select the type of reads generated by the instrument.  | List sup. (picklist with remarks)<br>Display: Basic |
| <b>Details on sequencing method</b>                      | Provide any further details about the sequencing strategy and any base-calling method, where applicable.   | Text (2,000 char.)<br>Display: Detailed             |
| <b>Trimming, adapter removal, and filtering strategy</b> | Describe the strategy followed for trimming, removing adapters and filtering, including software, version and parameters used.   | Text (2,000 char.)<br>Display: Detailed             |
| <b>Quality control method</b>                            | Describe the method for quality control, including software, version and parameters used.  | Text (2,000 char.)<br>Display: Detailed             |
| <b>Assembly</b>  |  | Header 2  |
| <b>Type</b>  | Indicate the method used for the assembly.   | List sup. (picklist with remarks)<br>Display: Basic |



|  |   |   |
|--|---|---|
| <b>De-novo assembly (if applicable)</b>        |   | Header 3                                |
| <b>Assembly strategy</b>                       | Describe the strategy followed for the assembly, including software, version and parameters used.   | Text (2,000 char.)<br>Display: Detailed |
| <b>Post-assembly strategy</b>                  | If post-assembly processing is carried out, describe the approach followed, including software, version and parameters used.  | Text (2,000 char.)<br>Display: Detailed |
| <b>Genome annotation</b>                       | If genome annotation is carried out, describe the approach followed, including software, version and parameters used. Database(s), version (where applicable) and/or date of accession should be indicated. | Text (2,000 char.)<br>Display: Detailed |
| <b>Reference-based mapping (if applicable)</b> |   | Header 3                                |
| <b>Reference genome</b>                        | Indicate the reference genome(s) / database(s) used for the mapping and justify this choice.  | Text (2,000 char.)<br>Display: Detailed |
| <b>Mapping strategy</b>                        | Describe the approach followed for mapping to the reference genome, including software, version and parameters used.  | Text (2,000 char.)<br>Display: Detailed |
| <b>Taxonomic identification</b>                |   | Header 2                                |
| <b>Taxonomic identification strategy</b>       | Describe the strategy followed for the taxonomic identification of the microorganism, including software, version and parameters used.  | Text (2,000 char.)<br>Display: Detailed |
| <b>Detection of contamination</b>              |   | Header 2                                |
| <b>Contamination detection strategy</b>        | Describe the strategy followed for detection of contamination, including software, version and parameters used.   | Text (2,000 char.)<br>Display: Detailed |
| <b>Identification of traits of concern</b>     |   | Header 2                                |
| <b>Genetic modifications</b>                   | Describe the methodology (e.g. alignment strategy) and sequences used for the detection of genetic modifications, including reference genome used, alignment software and parameters.                       | Text (2,000 char.)                      |



|  |   |  |
|--|---|--|
|  |   | Display:<br>Detailed                           |
| <b>AMR genes</b>   | Described the strategy followed to identify genes related to antimicrobial resistance, including databases, software, version and/or accession date.  | Text (2,000 char.)<br><br>Display:<br>Detailed |
| <b>Toxigenicity and pathogenicity</b>                              | Described the strategy followed to identify genes related to toxigenicity and pathogenicity (e.g. production of toxins, invasion and adhesion factors, participation in metabolic pathways involved toxigenicity, etc), including databases, software, version and/or accession date.   | Text (2,000 char.)<br><br>Display:<br>Detailed |
| <b>Any other information on materials and methods incl. tables</b> |   | Header 2                                       |
|  | <p>In this field, you can enter any information on materials and methods, for which no distinct field is available, or transfer free text from other databases.</p> <p>You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing or spreadsheet document, provided it was converted to the HTML format.</p> <p>You can also upload any .htm or .html document.</p> <p>Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry.</p> | Text (rich-text area)<br><br>Display: Basic    |
| <b>Results and discussion</b>                                      |   | Header 1                                       |
| <b>Sequencing and quality control</b>                              |   | Header 2                                       |
| <b>Raw sequencing data</b>   | <p>Attach here the files containing raw sequencing data. Accepted formats are:</p> <ul style="list-style-type: none"> <li>- <b>fastq</b> (*.fastq.gz; *.fq.gz)</li> <li>- for assembled genomes: <b>fasta</b> (*.fasta; *.fna; *.fa; *.fasta.gz; *.fna.gz; *.fa.gz)</li> </ul>  | Attachment (multiple)<br><br>Display: Basic    |
| <b>Raw reads quality control (before filtering and trimming)</b>   | Include data on the raw reads (before filtering and trimming).  | Header 3                                       |
| <b>Total reads</b>   |   | Numeric (integer)<br><br>Display: Basic        |
| <b>Average read length</b>   |   | Numeric (decimal)                              |



|   |   |   |
|---|---|---|
|   |   | Display: Basic                          |
| <b>% bases Q<sub>≥</sub> 20</b>                                       |   | Numeric (decimal)<br>Display: Basic     |
| <b>% bases Q<sub>≥</sub> 30</b>                                       |   | Numeric (decimal)<br>Display: Basic     |
| <b>% GC</b>   |   | Numeric (decimal)<br>Display: Basic     |
| <b>Remarks</b>  |   | Text (2,000 char.)<br>Display: Detailed |
| <b>Processed reads quality control (after filtering and trimming)</b> | Include data on the processed reads (after filtering and trimming). | Header 3                                |
| <b>Total reads</b>  |   | Numeric (integer)<br>Display: Basic     |
| <b>Average read length</b>  |   | Numeric (decimal)<br>Display: Basic     |
| <b>% bases Q<sub>≥</sub> 20</b>                                       |   | Numeric (decimal)<br>Display: Basic     |
| <b>% bases Q<sub>≥</sub> 30</b>                                       |   | Numeric (decimal)<br>Display: Basic     |
| <b>% GC</b>   |   | Numeric (decimal)<br>Display: Basic     |
| <b>Remarks</b>  |   | Text (2,000 char.)<br>Display: Detailed |
| <b>Assembly</b>   |   | Header 2                                |
| <b>Genome size</b>  | Indicate the genome size from the assembly.                         | Numeric (integer)                       |





|   |   |   |
|---|---|---|
|   |   | Display: Basic                              |
| <b>Coverage</b>   | For de-novo assembly, indicate the % of reference genome covered by the assembly.<br><br>For reference-based mapping, indicate the coverage at >5x depth. | Numeric (decimal)<br><br>Display: Basic     |
| <b>Gene annotations</b>                                   |   | Block of fields (repeatable)<br>Start       |
| <b>Type of genes / elements</b>                           |   | List (picklist)<br><br>Display: Basic       |
| <b>Total number</b>                                       |   | Numeric (integer)<br><br>Display: Basic     |
| <b>Remarks</b>  |   | Text (2,000 char.)<br><br>Display: Detailed |
| <b>Gene annotations</b>                                   |   | Block of fields (repeatable)<br>End         |
| <b>Additional details on assembly and gene annotation</b> |   | Text (2,000 char.)<br><br>Display: Detailed |
| <b>De-novo assembly (if applicable)</b>                   |   | Header 3                                    |
| <b>Number of contigs</b>                                  |   | Numeric (integer)<br><br>Display: Basic     |
| <b>Total contig length</b>                                |   | Numeric (integer)<br><br>Display: Basic     |
| <b>N50</b>  |   | Numeric (integer)<br><br>Display: Basic     |
| <b>Longest contig length</b>                              |   | Numeric (integer)<br><br>Display: Basic     |
| <b>Mean contig length</b>                                 |   | Numeric (integer)                           |



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|---|--|--|
|   |  | Display: Basic                                     |
| <b>Remarks</b>  | E.g. if size not +/- expected length                   | Text (2,000 char.)<br>Display: Detailed            |
| <b>Reference-based mapping (if applicable)</b>        |  | Header 3   |
| <b>% reads mapped</b>                                 |  | Numeric (decimal)<br>Display: Basic                |
| <b>Median read depth</b>                              |  | Numeric (decimal)<br>Display: Basic                |
| <b>Taxonomic identification</b>                       |  | Header 2   |
| <b>Organism type</b>                                  |  | List (picklist)<br>Display: Basic                  |
| <b>Species</b>  |  | Text (255 char.)<br>Display: Detailed              |
| <b>Strain</b>   |  | Text (255 char.)<br>Display: Detailed              |
| <b>TaxID</b>  | Indicate NCBI's Tax ID for the organism.               | Numeric (integer)<br>Display: Detailed             |
| <b>Identity to reference genome</b>                   | Indicate ANI for bacteria, ANI or % identity for fungi | Numeric (decimal including unit)<br>Display: Basic |
| <b>Phylogenetic tree</b>                              | Attach here the phylogenetic tree                      | Image upload<br>Display: Basic                     |
| <b>Additional details on taxonomic identification</b> |  | Text (2,000 char.)<br>Display: Detailed            |



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|--|---|---|
| <b>Contamination</b>                       |   | Header 2                                |
| <b>% contamination</b>                     |   | Numeric (decimal)<br>Display: Basic     |
| <b>Organism identified</b>                 |   | Block of fields (repeatable)<br>Start   |
| <b>Organism</b>                            |   | Text (2,000 char.)<br>Display: Detailed |
| <b>% total reads</b>                       |   | Numeric (decimal)<br>Display: Basic     |
| <b>Remarks</b>                             |   | Text (2,000 char.)<br>Display: Detailed |
| <b>Organism identified</b>                 |   | Block of fields (repeatable)<br>End     |
| <b>Additional details on contamination</b> |   | Text (2,000 char.)<br>Display: Detailed |
| <b>Traits of concern</b>                   |   | Header 2                                |
| <b>Genetic modifications</b>               |   | Header 3                                |
| <b>Genetic modifications detected</b>      |   | List (picklist)<br>Display: Basic       |
| <b>List of genetic modifications</b>       |   | Block of fields (repeatable)<br>Start   |
| <b>Type</b>                                | Select the type of genetic modification                 | List (picklist)<br>Display: Detailed    |
| <b>Start</b>                               | Indicate the start position of the genetic modification | Numeric (integer)<br>Display: Basic     |
| <b>End</b>                                 | Indicate the end position of the genetic modification   | Numeric (integer)<br>Display: Basic     |



|  |   |  |
|--|---|--|
| <b>Strand</b>                                      | Indicate the strand   | List (picklist)<br>Display: Basic                      |
| <b>Genetic element type</b>                        | Select the type of genetic element(s) or feature(s) (e.g. gene, CDS, regulatory element...) affected by the genetic modification. Picklist values are based on the feature key definitions of the International Nucleotide Sequence Database Collaboration (INSDC) <a href="https://www.insdc.org/submitting-standards/feature-table/">https://www.insdc.org/submitting-standards/feature-table/</a> . If none of the key features is applicable, please select "other" and indicate the genetic element. You can provide further information in the remarks field. | List (picklist) sup. with remarks<br>Display: Detailed |
| <b>Genetic element name</b>                        | Indicate the name of the genetic element (e.g. gene name) affected by the genetic modification, if applicable   | Text (255 char.)<br>Display: Detailed                  |
| <b>Remarks</b>                                     | Indicate any additional information or annotations regarding the genetic modification or the genetic element affected   | Text (2,000 char.)<br>Display: Detailed                |
| <b>List of genetic modifications</b>               |   | Block of fields (repeatable)<br>End                    |
| <b>Graphical description</b>                       |   | Image upload<br>Display: Basic                         |
| <b>Additional details on genetic modifications</b> |   | Text (2,000 char.)<br>Display: Detailed                |
| <b>AMR genes</b>                                   |   | Header 3   |
| <b>AMR genes detected</b>                          |   | List (picklist)<br>Display: Basic                      |
| <b>List of genes</b>                               |   | Block of fields (repeatable)<br>Start                  |
| <b>Gene name</b>                                   |   | Text (255 char.)<br>Display: Detailed                  |
| <b>Accession number</b>                            |   | Text (255 char.)<br>Display: Detailed                  |
| <b>Database</b>                                    |   | Text (255 char.)                                       |



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|--|---|---|
|  |   | Display:<br>Detailed                                    |
| <b>Function</b>  |   | Text (255 char.)<br><br>Display:<br>Detailed            |
| <b>% identity</b>  |   | Numeric (decimal)<br><br>Display: Basic                 |
| <b>% length covered</b>  |   | Numeric (decimal)<br><br>Display: Basic                 |
| <b>Gene mobile</b>   | Indicate if there is a correlation with mobile genetic elements and provide a justification in the remarks field. | List sup. (picklist with remarks)<br><br>Display: Basic |
| <b>List of genes</b>   |   | Block of fields (repeatable)<br>End                     |
| <b>Dendrogram</b>  | Link here a dendrogram with related species or strains for which the presence of AMR is known.                    | Image upload<br><br>Display: Basic                      |
| <b>Additional details on AMR genes</b>                         |   | Text (2,000 char.)<br><br>Display:<br>Detailed          |
| <b>Toxigenicity and pathogenicity</b>                          |   | Header 3  |
| <b>Genes linked to toxigenicity and pathogenicity detected</b> |   | List (picklist)<br><br>Display: Basic                   |
| <b>List of genes</b>   |   | Block of fields (repeatable)<br>Start                   |
| <b>Gene cluster</b>  | Indicate if the gene belongs to any specific cluster, group of category e.g. for secondary metabolites            | Text (255 char.)<br><br>Display:<br>Detailed            |
| <b>Gene name</b>   |   | Text (255 char.)<br><br>Display:<br>Detailed            |



|   |   |   |
|---|---|---|
| <b>Accession number</b>   |   | Text (255 char.)<br>Display: Detailed   |
| <b>Database</b>   |   | Text (255 char.)<br>Display: Detailed   |
| <b>Function</b>   |   | Text (255 char.)<br>Display: Detailed   |
| <b>% identity</b>   |   | Numeric (decimal)<br>Display: Basic     |
| <b>% length covered</b>   |   | Numeric (decimal)<br>Display: Basic     |
| <b>List of genes</b>  |   | Block of fields (repeatable)<br>End     |
| <b>Dendrogram</b>   | Link here a dendrogram with related species or strains for which the toxigenicity and pathogenicity are known.  | Image upload<br>Display: Basic          |
| <b>Additional details on genes linked to toxigenicity and pathogenicity</b> |   | Text (2,000 char.)<br>Display: Detailed |
| <b>Any other information on results incl. tables</b>                        | <a href="#">Any other information on results incl. tables – common block</a>  | Header 2                                |
| <b>Overall remarks, attachments</b>   | <a href="#">Overall remarks, attachments – common block</a><br>The form in Appendix A of EFSA, 2021 ( <a href="https://doi.org/10.2903/j.efsa.2021.6506">https://doi.org/10.2903/j.efsa.2021.6506</a> ) should be duly completed and signed by the applicants at the time of submission, and attached to this document. | Header 1                                |
| <b>Applicant's summary and conclusion</b>                                   | <a href="#">Applicant's summary and conclusion – common block</a>   | Header 1                                |

**Link to Supporting material:**

European Food Safety Authority (EFSA), 2021. EFSA statement on the requirements for whole genome sequence analysis of micro-organisms intentionally used in the food chain <https://doi.org/10.2903/j.efsa.2021.6506>



## Analytical profile of batches – Flexible Summary

### Section 1.4.3 – Analytical profile of batches

#### Purpose

At least five representative batches from recent and current production of the micro-organism shall be analysed. All of the representative batches shall bear a date within the last five years of manufacture. Manufacturing dates of the representative batches and batch size shall be reported. Where the active substance is produced in different manufacturing plants, the information required under this point shall be provided for each of the plants separately. Where the information provided relates to a pilot manufacturing plant production system, the information required shall again be provided once industrial scale production methods and procedures have stabilised. Where available, industrial scale data shall be provided before approval under Regulation (EC) No 1107/2009. Where data on industrial scale production are not available, a justification shall be provided.

| <b>FLEXIBLE_SUMMARY.AnalyticalProfileOfBatches</b> |   |   |
|--|---|---|
| <b>Name</b>  | <b>Instructions</b>   | <b>Data type</b>  |
| <b>Administrative data</b>                         |   | Header 1  |
|  | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> .  | Confidentiality<br><br>Display: Basic                   |
| <b>5-batch Analysis</b>                            | Use this repeatable block to provide the 5-batch analysis report and select the 5 substance composition records which describe the batches. If 5-batch data are provided for more than one manufacturing plants (sources) create a row for each manufacturing plant (source) clearly indicating its name. | Block of fields (repeatable)<br>Start                   |
| <b>Manufacturing site</b>                          | Link here the site entity corresponding to the manufacturing site where the 5-batch analysis and QC has been performed.   | Link to entity (single)<br><br>Display: Basic           |
| <b>Reference</b>                                   | Data source (Literature Reference) – common block   | Link to lit. reference (multiple)<br><br>Display: Basic |
| <b>Data access</b>                                 |   | List sup. (picklist with remarks)<br><br>Display: Basic |
| <b>Data protection claimed</b>                     |   | List sup. (picklist with remarks)<br><br>Display: Basic |
| <b>Cross-reference</b>                             | The cross-reference feature can be used to refer to related information that is provided in another record of the dataset. This can be done either by entering just free text in the 'Remarks' field or by creating a link to the relevant record. The field 'Reason / purpose' allows for                | Block of fields (repeatable)                            |



|   |   |  |
|---|---|--|
|   | selecting a standard reason from the picklist and optionally to add free text explanation in the related supplementary text field. Refer to the relevant legislation-specific guidance document as to the recommended use of cross-references.  |  |
| <b>Reason purpose / for cross-reference</b> | <p>Select the appropriate reason of the cross-reference, i.e.:</p> <ul style="list-style-type: none"> <li>- adverse outcome pathway (AOP) (in case the information is related to a key event that is part of an AOP). Consult the AOP wiki at: <a href="https://aopwiki.org">https://aopwiki.org</a>) and provide the reference in the remarks field</li> <li>- assessment report (for referring to a record that contains an assessment report as attachment)</li> <li>- data waiving: supporting information (for referring to a record containing relevant endpoint information that is used to justify a data waiver)</li> <li>- defined approach for combining with results from another methods (<i>in vitro</i>, <i>in chimico</i>, <i>in silico</i>)</li> <li>- exposure-related information (for referring to a record containing exposure-related information that is used for instance to justify a data waiver)</li> <li>- read-across source (for linking to another study summary used for read-across. This can be useful in cases where results are derived from one or several read-across sources and recorded in a separate (target) study summary.)</li> <li>- read-across supporting information (for linking to another record which contains read-across justification that applies also for the current study summary)</li> <li>- (Q)SAR model reporting (QMRF) (for referring to a record containing the relevant model description. Note: The (Q)SAR prediction should be reported specifically for each endpoint in the field 'Justification for type of information'.)</li> <li>- reference to other assay used for intermediate effect derivation (for optional indication in a study summarising 'intermediate effects' if reference is made to the outcome of another assay)</li> <li>- reference to same study (e.g. if different species were tested and the results recorded in different records),</li> <li>- reference to other study (e.g. if another study is considered relevant in the interpretation of the test results),</li> <li>- other: (to be specified).</li> </ul> | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p> |
| <b>Related information</b>                  | As appropriate, select the record containing the related information, thus creating a link.   | <p>Link to endpoint (single)</p> <p>Display: Basic</p>         |
| <b>Remarks</b>                              | This field can be used for including any remarks.   | <p>Text (32,768 char.)</p> <p>Display: Basic</p>               |





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|---------------------------------------|--|---|
| <b>Substance composition analysis</b> | Select the 5 substance composition documents that contain the batch data described in the report.  | Link to endpoint (multiple)<br>Display: Basic |
| <b>Quality control</b>                |  | Block of fields (repeatable)                  |
| <b>Number of batches</b>              | Indicate the number of batches analysed for quality control.   | Numeric (integer)<br>Display: Basic           |
| <b>Date</b>                           |  | Date<br>Display: Basic                        |
| <b>Units</b>                          | Indicate the units in which QC data are reported in the table below.   | List (picklist)<br>Display: Basic             |
| <b>QC data</b>                        |  | Block of fields (repeatable)                  |
|                                       | Set confidentiality and regulatory programme flags.  | Confidentiality<br>Display: Basic             |
| <b>Component</b>                      | Assign here the reference substance that identifies the component.   | Link to entity (single)<br>Display: Basic     |
| <b>Avg</b>                            | Indicate the average concentration of the component in the batches analysed.<br><br>The units should be consistent for all components in the block, and correspond to the selection in the "Units" field above.                    | Numeric (decimal)<br>Display: Basic           |
| <b>Min</b>                            | Indicate the minimum concentration of the component in the batches analysed.<br><br>The units should be consistent for all components in the block, and correspond to the selection in the "Units" field above.                    | Numeric (decimal)<br>Display: Basic           |
| <b>Max</b>                            | Indicate the maximum concentration of the component in the batches analysed.<br><br>The units should be consistent for all components in the block, and correspond to the selection in the "Units" field above.                    | Numeric (decimal)<br>Display: Basic           |
| <b>SD</b>                             | Indicate the standard deviation for the concentration of the component in the batches analysed.<br><br>The units should be consistent for all components in the block, and correspond to the selection in the "Units" field above. | Numeric (decimal)<br>Display: Basic           |
| <b>Remarks</b>                        | As appropriate, include remarks, e.g. a short description of the batch analysis included in this table, quality control, dates when analysis were performed.   | Text (255 char.)<br>Display: Basic            |



|  |   |  |
|--|---|--|
| <b>Description of key information</b>                |   | Header 1   |
| <b>Description of key information</b>                | <p>Report the minimum purity (using of the active substance as manufactured based on the results for the 5 – batch analysis and indicate if supporting data were provided to further justify the technical specification. If the active substance is manufactured as technical concentrate (TK), the minimum and maximum content of the pure active substance shall be given, along with its content in the theoretical dry weight material (<u>published</u>).</p> <p>NB. For micro-organisms the content shall be expressed in appropriate microbial unit that most accurately reflects plant protection action, such as number of active units, colony forming units, or international units per volume or weight or any other manner that is relevant to the risk assessment on the micro-organism.</p> | <p>Text (rich-text area)</p> <p>Display: Basic</p>     |
| <b>Description of key information (confidential)</b> | <p>Summarise the results for the analysis of batches and indicate if supporting data were provided to further justify the technical specification. If the active substance is manufactured as technical concentrate (TK), a summary of the results should be provided for the TK and for the theoretical dry weight material (<u>not published</u>).</p>  | <p>Text (rich-text area)</p> <p>Display: Basic</p>     |
| <b>Technical specification</b>                       |   | <p>Link to endpoint (single)</p> <p>Display: Basic</p> |
| <b>Additional information</b>                        | <a href="#">Additional information – common block</a>   | Header 1   |

## Biological properties of the micro-organism – Flexible Record

### Section 2 – Biological properties of the micro-organism

#### Purpose

Use this document to provide information on:

- Origin and isolation source
- Occurrence
- History of use
- Ecology and life cycle of the micro-organism
- Mode of action on the target organism and host range (see Section 3.1 Function and target organism)
- Growth requirements
- Infectivity to the target organism
- Relationship to known human pathogens and to pathogens to non-target organisms
- Genetic stability and factors affecting it
- Information on metabolites of concern
- Presence of transferable antimicrobial resistance genes



| <b>FLEXIBLE_RECORD.BioPropertiesMicro</b>          |   |   |
|--|---|---|
| <b>Name</b>  | <b>Instructions</b>   | <b>Data type</b>  |
| <b>Administrative data</b>                         |   | Header 1  |
|  | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a>                                   | Confidentiality<br>Display: Basic                                 |
| <b>Biological properties of the micro-organism</b> |   | Header 1  |
| <b>General information on the micro-organism</b>   |   | Header 2  |
|  | Familiarity (availability of relevant knowledge) of the microorganism not covered by the sections below.<br>If the micro-organism is genetically modified, the type of modification should be provided.   | Text template<br>Display: Basic                                   |
| <b>Type of micro-organisms</b>                     |   | List (picklist)<br>Display: Basic                                 |
| <b>Strain characteristics</b>                      |   | List multi. (multi-select list with remarks)<br>Display: Basic    |
| <b>Reference</b>                                   | <a href="#">Data source (Literature reference) – common block</a><br>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.<br>See also <a href="#">Literature search</a> at the end of the table. | Link to lit. reference (multiple)<br>Display: Basic               |
| <b>Historical background</b>                       | Not relevant for PPP dossiers – see next section History of uses  | Header 3  |
|  | Historical background of the wild type. Provide information at the most relevant taxonomic level (e.g. strain, species, genus).   | Text template<br>Display: Basic                                   |
| <b>Taxonomic level</b>                             | Select the taxonomic level of the information provided above and provide a justification of the choice of taxonomic level in the remarks field.   | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Reference</b>                                   | <a href="#">Data source (Literature reference) – common block</a><br>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.<br>See also <a href="#">Literature search</a> at the end of the table. | Link to lit. reference (multiple)<br>Display: Basic               |



|   |   |  |
|---|---|--|
| <b>Historical uses</b>  |   | Header 3   |
|   | <p><u>2.1.3 History of use</u></p> <p>Previous and current known uses of the micro-organism (e.g. research, commercial, uses evaluated for recommending the Qualified Presumption of Safety status). Include both plant protection and other uses (e.g. uses and/or assessments under other regulatory frameworks, bioremediation, uses in food and feed).</p> <p>Provide information at the most relevant taxonomic level (e.g. strain, species, genus), and according to the valid and accepted taxonomic criteria applicable at the time of the submission of the application.</p>   | <p>Text template</p> <p>Display: Basic</p>                                   |
| <b>Taxonomic level</b>  | <p>Select the taxonomic level of the information provided above and provide a justification of the choice of taxonomic level in the remarks field</p>   | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p> |
| <b>QPS status</b>   | <p>Select the Qualified Presumption of Safety Status <a href="https://doi.org/10.5281/zenodo.1146566">https://doi.org/10.5281/zenodo.1146566</a>.</p> <p>Qualifications from in the QPS list can be reported in the remarks</p>   | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p> |
| <b>Reference</b>  | <p><u><a href="#">Data source (Literature reference) – common block</a></u></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>   | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>               |
| <b>Origin, natural occurrence and geographical distribution</b> |   | Header 3   |
|   | <p><u>2.1.1 Origin and isolation source</u></p> <p><u>2.1.2 Occurrence</u></p> <p>The geographical location and environmental compartment (e.g. substrate, host organisms), from which the micro-organism was isolated, shall be stated. The method of isolation and the selection procedure of the microorganism shall be reported.</p> <p>The geographical distribution of the micro-organism shall be described.</p> <p>The environmental compartment(s) where the micro-organism is already expected to occur shall be described (e.g. soil, water, rhizosphere, phyllosphere, host organism).</p> <p>When relevant, food or feed commodities where the micro-organism is already expected to occur shall be described.</p> | <p>Text template</p> <p>Display: Basic</p>                                   |



|                                     |  |   |
|-------------------------------------|--|---|
|                                     | The information referred to in this point shall be provided at the most relevant highest taxonomic level (e.g. strain, species, genus), and the choice of the relevant highest taxonomic level shall be justified.   |   |
| <b>Occurrence in water</b>          | <p>Indicate the occurrence in water selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>          | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Occurrence in soil</b>           | <p>Indicate the occurrence in soil selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>           | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Occurrence in rhizosphere</b>    | <p>Indicate the occurrence in rhizosphere selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>    | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Occurrence in phyllosphere</b>   | <p>Indicate the occurrence in phyllosphere selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>   | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Occurrence in host organisms</b> | <p>Indicate the occurrence in host organisms selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul> | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Occurrence in food or feed</b>   | <p>Indicate the occurrence in food or feed selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- In strain under evaluation</li> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>   | <p>List sup. (picklist with remarks)</p> <p>Display: Basic</p>            |
| <b>Food or feed matrix</b>          | When relevant, food or feed commodities where the micro-organism is already expected to occur shall be described.  | <p>List multi. (multi-select list with remarks)</p> <p>Display: Basic</p> |
| <b>Reference</b>                    | <a href="#">Data source (Literature reference) – common block</a>  | Link to lit. reference (multiple)   |



|  |   |   |
|--|---|---|
|  | <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>   | <p>Display: Basic</p>   |
| <b>Development stages / life cycle of the microorganism</b>      |   | <p>Header 2</p>   |
|  | <p><u>2.2 Ecology and life cycle of the micro-organism</u></p> <p>The known life cycle(s) of the micro-organism, its lifestyle(s) (e.g. parasitic, saprophytic, endophytic, pathogenic) and its ecological niche(s) shall be described, along with all forms that may occur and the type of reproduction.</p> <p>For <b>bacteriophages</b>, information shall be provided on, if applicable, lysogenic and lytic properties.</p> <p>For <b>fungi</b> and <b>bacteria</b>, information shall be provided, if applicable, on:</p> <ul style="list-style-type: none"> <li>- external conditions for resting stages, information on resistance of spores against adverse environmental conditions, survival time of the spores and conditions for germination, and/or</li> <li>- formation of biofilm.</li> </ul> | <p>Text template</p> <p>Display: Basic</p>                                |
| <b>Life cycle</b>  |   | <p>List multi. (multi-select list with remarks)</p> <p>Display: Basic</p> |
| <b>Reference</b>   | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>  | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>            |
| <b>Relationships to known plant or animal or human pathogens</b> |   | <p>Header 2</p>   |
|  | <p><u>2.6 Relationship to known human pathogens and to pathogens to non-target organisms</u></p> <p>Where the microorganism is closely related to any known pathogens to humans, animals, crops or other non- target species, the applicant shall:</p> <ul style="list-style-type: none"> <li>- list the pathogens and the type of known diseases caused,</li> <li>- describe the known virulence factors belonging to the pathogens,</li> <li>- describe the known virulence factors belonging to the micro-organism, which is the active substance,</li> </ul>  | <p>Text template</p> <p>Display: Basic</p>                                |



|   |  |   |
|---|--|---|
|   | <ul style="list-style-type: none"> <li>- describe the phylogenetic relationship between the micro-organism and the related pathogens identified,</li> <li>- describe the way or means to distinguish the active micro-organism from pathogenic species.</li> </ul>   |   |
| <b>Related to known pathogens</b>                 | <p>Indicate relationship to known plant or human or animal pathogens selecting the appropriate value from the picklist:</p> <ul style="list-style-type: none"> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>   | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p>  |
| <b>Phylogenetic tree</b>                          | <p>Upload a picture of the phylogenetic tree of the microorganism.</p> <p>The scale of the phylogenetic tree shall be selected to include relevant strains and species (e.g. in case of use of read-across among related strains or species to address data requirements). Superseded names of included micro-organisms or taxonomic groupings may be indicated in the phylogenetic tree.</p>  | <p>Image upload</p> <p>Display: Basic</p>                                     |
| <b>Reference</b>                                  | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>   | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>                |
| <b>Genetic stability and factors affecting it</b> |  | Header 2  |
|   | <p><u><a href="#">2.7. Genetic stability and factors affecting it</a></u></p> <p>Where the micro-organism is a non-virulent variant of a plant pathogen virus, the likelihood of regaining virulence through mutation after application under the proposed conditions of use shall be reported, including the information on measures that can be taken to reduce the likelihood of this occurrence and the effectiveness of such measures.</p>        | <p>Text template</p> <p>Display: Basic</p>                                    |
| <b>Non-virulent virus variant</b>                 | <p>[Relevant for viruses only]</p> <p>Select yes if the micro-organism is a non-virulent variant of a plant pathogen.</p> <p>If yes is selected, the likelihood of regaining virulence through mutation after application under the proposed conditions of use shall be reported, including the information on measures that can be taken to reduce the likelihood of this occurrence and the effectiveness of such measures in the remarks field.</p> | <p>List sup. (picklist with remarks - 32,000 char.)</p> <p>Display: Basic</p> |
| <b>Reference</b>                                  | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>   | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>                |



|  |   |   |
|--|---|---|
| <b>Information on the production of relevant metabolites and toxins</b>        | Instructions on how to report information on metabolites of (potential) concern are reported in the introduction of this manual, subsection ' <b>Information on secondary metabolites</b> '.  | Header 2  |
|  | <p><u><a href="#">2.8 Information on metabolites of concern</a></u></p> <p>A summary and conclusion of the assessment performed by the applicant on the secondary metabolites must be included in this field.</p> <p>The applicant shall identify under this point the <b>metabolites of concern</b> produced by the micro-organism, including a summary of the information submitted under data requirements points 5.5.1, 8.8.1, 6.1, 7.2.1 and 7.2.2 used to identify or to exclude metabolites as being of concern.</p> <p>All metabolites of potential concern should be listed in the Flexible Summary Metabolites in the in the Section 1.4.1 of the product dataset.</p> <p>The evidence for exclusion of metabolite production should be reported in this field.</p> | Text template<br>Display: Basic                                   |
| <b>Absence of genes for secondary metabolite production</b>                    | <p>Indicate (Y/N) the absence of gene(s) required for the production of the identified metabolite(s) of potential concern.</p> <p>Where genomic sequence data is available this should be reported in Section '1.3 Identity, taxonomy and phylogeny of the microorganism' of the active substance dataset</p>   | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Metabolites of potential concern identified</b>                             | <p>Indicate whether metabolites of potential concern were identified selecting the appropriate entry from the picklist:</p> <ul style="list-style-type: none"> <li>- in strain under evaluation</li> <li>- in closely related species</li> <li>- in organisms of the same genus</li> <li>- no</li> </ul>  | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Reference</b>   | <p><u><a href="#">Data source (Literature reference) – common block</a></u></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <u><a href="#">Literature search</a></u> at the end of the table.</p>  | Link to lit. reference (multiple)<br>Display: Basic               |
| <b>Production and resistance to antibiotics and other antimicrobial agents</b> |   | Header 2  |
|  | <p><u><a href="#">2.9 Presence of transferable antimicrobial resistance genes</a></u></p> <p>Where the micro-organism is a bacterium, information on any resistance to relevant antimicrobial agents shall be reported at strain level.</p>   | Text template<br>Display: Basic                                   |





|   |  |  |
|---|--|--|
|   | <p>Information on whether the antimicrobial resistance genes are acquired, transferable and functional shall be reported.</p> <p>Where genomic sequence data is available this should be reported in section 1.3 Identity, taxonomy and phylogeny of the micro-organism</p>        |  |
| <b>Presence of antimicrobial resistance genes</b>               |  | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p> |
| <b>Presence of transferrable antimicrobial resistance genes</b> | <p>The information provided shall be sufficient to perform an evaluation as to the risks for human and animal health due to a possible transfer of relevant antimicrobial resistance genes.</p>  | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p> |
| <b>Reference</b>  | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p> | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>               |
| <b>Robustness to environmental factors</b>                      |  | Header 2   |
|   | <p><u>2.4 Growth requirements</u></p> <p>The conditions required for growth and proliferation of the micro-organism shall be described (e.g. host, nutrients, pH, osmotic potential, humidity).</p>  | <p>Text template</p> <p>Display: Basic</p>                                   |
| <b>Temperature range for growth (°C)</b>                        | <p>The minimum, optimum and maximum temperature required for growth and proliferation shall be reported.</p>   | <p>Numeric range (decimal)</p> <p>Display: Basic</p>                         |
| <b>Generation time</b>  | <p>Report the generation time under favourable growth conditions</p>   | <p>Numeric range (decimal with picklist)</p> <p>Display: Basic</p>           |
| <b>Reference</b>  | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p> | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p>               |
| <b>Further information on the microorganism</b>                 |  | Header 2   |



|  |  |   |
|--|--|---|
|  | Any further relevant information.  | Text template<br>Display: Basic                                   |
| <b>Taxonomic level</b>   | Select the taxonomic level of the information provided above and provide a justification of the choice of taxonomic level in the remarks field   | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Reference</b>   | <a href="#">Data source (Literature reference) – common block</a><br>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.<br>See also <a href="#">Literature search</a> at the end of the table.  | Link to lit. reference (multiple)<br>Display: Basic               |
| <b>Effectiveness against target organisms</b>                                  | Not relevant for PPP dossiers – This information should be reported in section 3.1 Function and target organism  | Header 1  |
| <b>Infectiveness, dispersal and colonisation ability</b>                       | Not relevant for PPP dossiers  | Header 2  |
|  |  | Text template<br>Display: Basic                                   |
| <b>Infectivity to the target organism</b>                                      | <a href="#">2.5 Infectivity to the target organism</a><br>In case any pathogenic mode(s) of action on the target organism is described in <b>Section 3.1</b> [ <i>Mode of action on the target organism and host range</i> ], virulence factors and (if applicable) environmental factors affecting them shall be indicated and described.<br><br>The results of any relevant experimental studies and/or data/information from the existing literature at the relevant taxonomic level shall be reported. | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Reference</b>   | <a href="#">Data source (Literature reference) – common block</a><br>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.<br>See also <a href="#">Literature search</a> at the end of the table.  | Link to lit. reference (multiple)<br>Display: Basic               |
| <b>Methods to prevent loss of virulence of seed stock of the microorganism</b> | Not relevant for PPP dossiers  | Header 2  |
|  |  | Text (rich-text area)<br>Display: Basic                           |
| <b>Reference</b>   | <a href="#">Data source (Literature reference) – common block</a>  | Link to lit. reference  |



|  |  |  |
|--|--|--|
|  | <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p>  | <p>(multiple)</p> <p>Display: Basic</p>                        |
| <p><b>Measures necessary to protect humans, animals and the environment</b></p>                                      | <p>Not relevant for PPP dossiers</p> <p>Information on Precautions and Methods in case of accidents should be reported in Section 4.1 Procedures doe cleaning and decontaminating of application equipment</p>   | <p>Header 1</p>  |
| <p><b>Monitoring plan to be used for the active microorganism including handling, storage, transport and use</b></p> | <p>Not relevant for PPP dossiers</p>   | <p>Header 2</p>  |
|  |  | <p>Text (rich-text area)</p> <p>Display: Basic</p>             |
| <p><b>Reference</b></p>  | <p><a href="#">Data source (Literature reference) – common block</a></p> <p>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.</p> <p>See also <a href="#">Literature search</a> at the end of the table.</p> | <p>Link to lit. reference (multiple)</p> <p>Display: Basic</p> |
| <p><b>Classification &amp; Labelling of the micro-organism (for biocidal products)</b></p>                           | <p>Not relevant for PPP dossiers</p>   | <p>Header 1</p>  |
| <p><b>Relevant risk group specified in Article 2 of Directive 2000/54/EC</b></p>                                     |  | <p>Header 2</p>  |
|  |  | <p>List (picklist)</p> <p>Display: Basic</p>                   |
| <p><b>Biological properties of the micro-organism in the biocidal product</b></p>                                    | <p>Not relevant for PPP dossiers</p>   | <p>Header 1</p>  |



|   |  |   |
|---|--|---|
|   |  | Text template<br>Display: Basic                     |
| <b>Reference</b>                                    | <a href="#">Data source (Literature reference) – common block</a><br>Link to relevant Literature Reference entities to support the descriptions of the biological properties reported above.<br>See also <a href="#">Literature search</a> at the end of the table.  | Link to lit. reference (multiple)<br>Display: Basic |
| <b>Supporting literature searches (if relevant)</b> |  | Block of fields (repeatable)<br>Start               |
| <b>Literature search</b>                            | When collecting evidence for specific biological properties the method for searching, retrieving, and assessing studies for relevance and reliability should be presented.<br><b>Note:</b> For each biological properties section a literature search document should be completed, the literature search document should be named according to the section where the literature references were cited | Link to endpoint (single)<br>Display: Basic         |
| <b>Remarks</b>                                      | Provide any additional remarks on the literature search, i.e. which section(s) of biological properties is addressed by the literature search  | Text (2,000 char.)<br>Display: Basic                |
| <b>Supporting literature searches (if relevant)</b> |  | Block of fields (repeatable)<br>End                 |

### Links to supporting material:

Directive 2000/54/EC of the European Parliament and of the Council of 18 September 2000 on the protection of workers from risks related to exposure to biological agents at work (seventh individual directive within the meaning of Article 16(1) of Directive 89/391/EEC) <http://data.europa.eu/eli/dir/2000/54/2020-06-24>

Guidance on the Risk Assessment Of Metabolites Produced by Microorganisms Used As Plant Protection Active Substances. SANCO/2020/12258 [https://food.ec.europa.eu/system/files/2020-11/pesticides\\_ppp\\_app\\_proc\\_guide\\_180653\\_microorganism-metabolites-concern\\_202011.pdf](https://food.ec.europa.eu/system/files/2020-11/pesticides_ppp_app_proc_guide_180653_microorganism-metabolites-concern_202011.pdf)

Application of systematic review methodology to food and feed safety assessments to support decision making <https://www.efsa.europa.eu/en/efsajournal/pub/1637>

EFSA Qualified presumption of safety (QPS)

<https://www.efsa.europa.eu/en/topics/topic/qualified-presumption-safety-qps>



## Literature Search – Flexible Record

### Section 3.5 – Literature data

#### Purpose

Description of the methodology used for the search for all relevant data from scientific peer reviewed open literature. List of all relevant studies retrieved.

In accordance with Art 8(5) of Regulation (EC) No 1107/2009, the summary dossier shall include “Scientific peer-reviewed open literature, as determined by the Authority, on the active substance and its relevant metabolites dealing with side-effects on health, the environment and non-target species and published within the last 10 years before the date of submission of the dossier shall be added by the applicant to the dossier” (both in case of chemical and microbial active substance).

Link to all Literature Reference entities that were retrieved from the literature search and are considered relevant and reliable after the full text screening step should be included in the field “Link to relevant studies”. An appropriate Endpoint Study Record should be completed for each relevant study and the literature reference included in the data source section).

| FLEXIBLE_RECORD.LiteratureSearch                |  |                           |
|---|--|---------------------------|
| Name  | Instructions   | Data Type                 |
| <b>Administrative data</b>                      |  | Header 1                  |
|   | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br><br>“User Guide: submission of confidentiality requests” available under the <a href="#">IUCLID software section of the Toolkit page</a> .   | Confidentiality           |
| <b>Link to relevant studies</b>                 | Link to all Literature Reference entities that were retrieved from the literature search and are considered relevant and reliable after the full text screening step.<br><br>An appropriate Endpoint Study Record should be completed for each relevant study and the literature reference included in the data source section.      | Header 1                  |
| <b>Literature reference(s)</b>                  |  | Literature reference list |
| <b>Description of key information</b>           | Summary of all relevant data from the scientific peer reviewed open literature on the active substance, metabolites and breakdown or reaction products and plant protection products containing the active substance and dealing with side-effects on health, the environment and non-target species                                 | Rich text area            |
| <b>Overall summary of the literature search</b> | Summary of the methodology used to retrieve relevant studies on side-effects on health, the environment and non-target species.<br><br>Report the criteria used to classify the references as being clearly non-relevant (e.g. not related to pesticides).<br><br>Report the criteria used to assess the reliability of the studies. | Rich text area            |
| <b>Search strategy</b>                          | Indicate how the literature search was carried out.  | Header 1                  |



|   |  |                          |
|---|--|--------------------------|
| <b>Bibliographic databases used in the literature review and search results</b> | A description each of the search strategies used in the literature review  |                          |
| <b>Online search service</b>  | Select the database/source where the search was performed. Use other to indicate a database/source that is not included in the list. The remarks field should contain the justification for selecting the database/source. More information on databases/sources is provided in the supporting materials below | Open list with remarks   |
| <b>Date of search</b>   | Provide the date when the search was performed using the database.   | Date                     |
| <b>Time window of the literature search</b>                                     | The period covered in the literature search e.g. 2010 to 2020  | Text                     |
| <b>Search string(s) used</b>  | The search strings used to retrieve the records e.g.<br>1. ts= (Beauveria bassiana OR B. bassiana)<br>2. ts=(Beauveria bassiana OR B. bassiana) AND (secondary metabolite* OR toxin*)<br>3. ts=(Beauveria bassiana OR B. bassiana) AND (Antimicrobial resist*)   | Multi-line text          |
| <b>Filters</b>  | Indicate if filters were applied in the search. If yes is selected the filters applied must be described   | Closed list with remarks |
| <b>Limits</b>   | Indicate if any limits were applied in the search, for example only studies in English. If yes is the limits applied must be described   | Closed list with remarks |
| <b>Number of hits</b>   | The number of hits for the search in each database/source  | Integer                  |
| <b>Number of hits after refinement</b>  | The number of hits after refinement, if applicable   | Integer                  |
| <b>Number of hits after duplicate removal</b>                                   | The number of hits after duplicate removal   | Integer                  |
| <b>Bibliographic databases used in the literature review and search results</b> |  |                          |
| <b>Evaluation of the review</b>   |  | Header 1                 |
| <b>Records retrieved</b>  | The number of records retrieved when the results for the searches above were combined  | Integer                  |
| <b>Records after removal of duplicates</b>                                      | Total number of summary records retrieved after removing duplicates from all database searches   | Integer                  |



|  |  |                           |
|--|--|---------------------------|
| <b>Records after rapid assessment</b>  | Report the number of records retained after title/abstract screening   | Integer                   |
| <b>Records after detailed assessment</b>   | Report the number of records retained after full text screening  | Integer                   |
| <b>Reliable studies</b>  | Report the number of records retained after the reliability assessment   | Integer                   |
| <b>Evaluated studies</b>   | Number of studies included in the dossier, reported in an endpoint study record and used as supporting information. These studies should be listed in the Literature reference(s) field and the number should be the same. | Integer                   |
| <b>Publications excluded from the risk assessment after detailed assessment of full-text documents</b> | For each of the studies excluded on the basis of relevance or reliability link to the Literature Reference entity and describe the reason for exclusion  |                           |
| <b>Literature reference</b>  | Link a reference to the excluded publication.  | Literature reference list |
| <b>Exclusion reason</b>  | Reason for not including publication in dossier (based on relevance and reliability criteria).   | Multi-line text           |
| <b>Publications excluded from the risk assessment after detailed assessment of full-text documents</b> | For each of the studies excluded on the basis of relevance or reliability link to the Literature Reference entity and describe the reason for exclusion  |                           |
| <b>Additional information</b>  |  | <b>Header 1</b>           |
| <b>Additional information</b>  | Any other information needed to interpret the results for the literature research  | Rich text area            |
| <b>Attached background material</b>  | Upload supporting files e.g. bibliographic metadata  |                           |
| <b>Attached document</b>   | Upload file by clicking the upload icon. The bibliographic results of literature searches can be uploaded here in RIS format or as an Excel table containing bibliographic information.                                    | Single file attachment    |
| <b>Remarks</b>   | Indicate the source of the contents of the file and the format type.   | Text                      |
| <b>Attached background material</b>  |  |                           |



**Link to supporting material:**

[Submission of scientific peer-reviewed open literature for the approval of pesticide active substances under Regulation \(EC\) No 1107/2009](#)

[Further guidance on performing and presenting the literature search](#)

Inventory of Sources of Scientific Evidence Relevant to EFSA’s Risk [Technical Manual for Performing Electronic Literature Searches in Food and Feed Safety](#)

**Additional considerations:**

The applicant must ensure that terms and conditions asserted by any copyright holder of publications or information submitted to EFSA are fully satisfied. The applicant should consult with copyright licensing authorities (i.e. at national level) for guidance on purchasing copyright licenses to reproduce any publications provided to EFSA. The applicant remains solely responsible and liable for obtaining all necessary authorizations and rights to use, reproduce and share the publications provided to EFSA.

**Assessment on potential infectivity and pathogenicity of the microorganism to human – Flexible summary**

**Section 5.2 - Assessment on potential infectivity and pathogenicity of the microorganism to humans**

**Purpose**

Summary to conclude on the absence of infectivity and pathogenicity of the microorganism to humans, including links to relevant toxicological studies and literature search and using weight of evidence (WoE) approach as described in [EFSA Scientific Committee, 2017](#).

| <b>FLEXIBLE_SUMMARY.PathogenicityInfectivityHumans</b>                                      |  |                                       |
|---|--|---------------------------------------|
| <b>Name</b>   | <b>Instructions</b>  | <b>Data type</b>                      |
| <b>Administrative data</b>  |  | Header 1                              |
|   | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> .   | Confidentiality<br><br>Display: Basic |
| <b>Assessment of potential infectivity and pathogenicity of the microorganism to humans</b> | Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments.<br><br>EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Noteborn, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S, Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017 EFSA Journal 2017;15(8):4971, 69 pp.<br><br>First published: 03 August 2017<br><a href="https://doi.org/10.2903/j.efsa.2017.4971">https://doi.org/10.2903/j.efsa.2017.4971</a> | Header 1                              |





|  |   |   |
|--|---|---|
|  | Conclude on potential infectivity and pathogenicity based on the lines of evidence presented below. | Text (rich-text area)<br><br>Display: Basic                           |
| <b>Assembling evidence</b>                         | Link to any literature searches for evidence on pathogenicity of infectivity.                       | Link to endpoint (multiple)<br><br>Display: Basic                     |
| <b>Weighing evidence</b>                           |   | Block of fields (repeatable) Start                                    |
| <b>Description of key conclusion for the study</b> | Include consideration of the relevance and reliability of the study                                 | Text (32,768 char.)<br><br>Display: Basic                             |
| <b>Identified uncertainties</b>                    |   | Text (32,768 char.)<br><br>Display: Basic                             |
| <b>Link to relevant study record</b>               | Link to the endpoint study describing the supporting evidence.                                      | Link to endpoint (single)<br><br>Display: Basic                       |
| <b>Weighing evidence</b>                           |   | Block of fields (repeatable) End                                      |
| <b>Integrating evidence</b>                        |   | Header 2  |
| <b>Opportunistic infection</b>                     | Indicate whether there is evidence of opportunistic infection in immunocompromised persons          | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |
| <b>Absence of infectivity</b>                      |   | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |



|                                 |   |   |
|---------------------------------|---|---|
| <b>Absence of pathogenicity</b> |   | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |
| <b>Additional information</b>   | <a href="#">Additional information – common block</a> | Header 1  |

### Links to supporting material:

EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Noteborn, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S, Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017. Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments. EFSA Journal 2017;15(8):4971, 69 pp. <https://doi.org/10.2903/j.efsa.2017.4971>

## Information on metabolites of toxicological concern – Flexible Summary

### Section 5.5.1 - Information and toxicity of metabolites

#### Purpose

Summary to conclude on the toxicity of metabolites based on literature search in order to identify metabolites of concern for human and animal health and/or to conclude on exclusion of metabolites as being of concern.

All the metabolites of potential concern should be listed, providing further information to demonstrate whether they are of concern or not.

Identified metabolites of concern to be reported in *Flexible\_Summary.Metabolites & Other Substance for Assessment* dataset (see instructions above).

| <b>FLEXIBLE.SUMMARY_InformationToxicityMetabolites</b> |   |                                       |
|--|---|---------------------------------------|
| <b>Name</b>  | <b>Instructions</b>   | <b>Data type</b>                      |
| <b>Administrative data</b>                             |   | Header 1                              |
|  | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> .  | Confidentiality<br><br>Display: Basic |
| <b>Description of key information</b>                  | This document is for Metabolites of Concern for Human Health<br><br>See SANCO/2020/12258 Guidance on the risk assessment of metabolites produced by micro-organisms used as plant protection active substances.<br><br>Stage 1 and Stage 2 the collection of basic information from literature should be reported in the Biological | Header 1                              |



|   |   |  |
|---|---|--|
|   | <p>Properties document (Section 2 of the active substance dataset).</p> <p>This document should be used to report the results of targeted literature searches for all metabolites of potential concern in order to identify 'Metabolites of Concern'.</p> <p>If the identity is known, a complete list of metabolites of potential concern should be listed in the 'Information on Metabolites' document and for the metabolites of concern the experimental data should be provided in the linked datasets.</p> <p>Provide additional information from the metabolite specific literature searches which cannot be reported in the repeatable block below.</p> |  |
|   |   | <p>Text (rich-text area)</p> <p>Display: Basic</p>                           |
| <b>Metabolites</b>  |   | <p>Block of fields (repeatable) Start</p>                                    |
| <b>Link to metabolite</b>                                 |   | <p>Link to entity (single)</p> <p>Display: Basic</p>                         |
| <b>Link to Literature Search</b>                          |   | <p>Link to endpoint (single)</p> <p>Display: Basic</p>                       |
| <b>Hazardous effect observed in toxicological studies</b> | <p>If the picklist value 'no' is selected provide the justification in the remarks field. No further information is required in this table.</p> <p>If the picklist value 'yes' is selected complete all the information required in the table.</p>  | <p>List sup. (picklist with remarks - 2,000 char.)</p> <p>Display: Basic</p> |
| <b>Conditions</b>   | Describe the conditions under which the microorganism produces the metabolite.  | <p>Text (2,000 char.)</p> <p>Display: Basic</p>                              |
| <b>LOQ of method</b>                                      | Any available information about the LOQ of the method used to determine/quantify the metabolite.  | <p>Numeric range (decimal with picklist)</p>                                 |



|  |   |  |
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|  |   | Display:<br>Basic  |
| <b>Expected quantities</b>   | 4.1 Any available information about the expected quantities.  | Numeric range (decimal with picklist)<br><br>Display:<br>Basic           |
| <b>Regulation mechanism</b>  | Any available information on the mechanism by which the microorganism regulates the production of the metabolite shall be provided.   | Text (2,000 char.)<br><br>Display:<br>Basic                              |
| <b>Mode of action</b>  | Any available information on the influence of the produced metabolites on the micro-organism's mode of action against the target organism(s) shall be provided.   | Text (2,000 char.)<br><br>Display:<br>Basic                              |
| <b>Sufficient body of knowledge</b>                                      | Is there enough published literature to assume that a literature search would provide sufficient information on metabolite production?<br><br>Make reference to the literature search included in the 'Link to Literature Search' in the table when justifying the selection of 'yes' or 'no' in the remarks field.   | List sup. (picklist with remarks - 2,000 char.)<br><br>Display:<br>Basic |
| <b>Remarks</b>   | Provide any other information to support the classification of this metabolite as 'of concern'.   | Text (2,000 char.)<br><br>Display:<br>Basic                              |
| <b>Metabolites</b>   |   | Block of fields (repeatable)<br>End                                      |
| <b>Step 5: Is the genus of the strain under evaluation well studied?</b> | Literature data. Is the microorganism well studied? (see step 5.1 of SANCO/2020/12258)<br><br>Provide a further an evaluation of the body of knowledge from the scientific literatures presented above. Is there sufficient information to conclude on the metabolites of concern?<br><br>As a matter of principle, it is highly recommended to the applicant to conduct the search beyond the normally requested period of 10 years before the application, in order to gather all the possible relevant scientific literature to support the risk assessment. | Header 2   |
|  | Provide additional information related to the endpoint, for example: <ul style="list-style-type: none"> <li>- information on the potential data gaps</li> <li>- relevance of the results for the risk assessment</li> <li>- the rationale for the choice of the key study(ies) and the choice for the key value that characterises the endpoint</li> </ul>  | Text (rich-text area)<br><br>Display:<br>Basic                           |



|                               |  |          |
|-------------------------------|--|----------|
|                               | <ul style="list-style-type: none"> <li>- the rationale for any user-derived values for the sake of transparency</li> </ul> <p>The possible reasons for differentiating results when several studies were identified to be relevant for the assessment.</p> <p>If there is no additional information to be reported this field may be left empty.</p> |          |
| <b>Additional information</b> | <a href="#">Additional information – common block</a>  | Header 1 |

### Link to supporting material:

Guidance on the risk assessment of metabolites produced by micro-organisms used as plant protection active substances. SANCO/2020/12258

[https://food.ec.europa.eu/system/files/2023-06/pesticides\\_ppp\\_app-proc\\_guide\\_180653\\_microorganism-metabolites-concern.pdf](https://food.ec.europa.eu/system/files/2023-06/pesticides_ppp_app-proc_guide_180653_microorganism-metabolites-concern.pdf)

## Environment Qualitative Exposure Assessment – Flexible Summary

### Section 7.1.3 - Qualitative exposure assessment of the microorganism

#### Purpose

Summary to record environmental qualitative exposure assessment, including links to relevant environmental and ecotoxicological studies and using weight of evidence (WoE) approach as described in [EFSA Scientific Committee, 2017](#).

| <b>FLEXIBLE_SUMMARY.EnvironmentQualitativeExposureAssessment</b> |  |                                   |
|--|--|-----------------------------------|
| <b>Name</b>  | <b>Instructions</b>  | <b>Data type</b>                  |
| <b>Administrative data</b>                                       |  | Header 1                          |
|  | <p>Use this field to set flags for confidentiality and regulatory purpose(s).</p> <p>For further information see:</p> <p>“User Guide: submission of confidentiality requests” available under the <a href="#">IUCLID software section of the Toolkit page</a>.</p>   | Confidentiality<br>Display: Basic |
| <b>Qualitative exposure assessment of the microorganism</b>      | <p>Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments.</p> <p>EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Noteborn, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S, Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017 EFSA Journal 2017; 15(8):4971, 69 pp.</p> | Header 1                          |



|   |  |   |
|---|--|---|
|   | First published: 03 August 2017<br><a href="https://doi.org/10.2903/j.efsa.2017.4971">https://doi.org/10.2903/j.efsa.2017.4971</a> |   |
|   | Conclude on environmental exposure based on the lines of evidence presented below.   | Text (rich-text area)<br><br>Display: Basic                           |
| <b>Assembling evidence</b>                                | Link to any literature searches for evidence to support the qualitative exposure assessment in the environment.                    | Link to endpoint (multiple)<br><br>Display: Basic                     |
| <b>Weighing evidence</b>                                  |  | Block of fields (repeatable)<br>Start                                 |
| <b>Description of key conclusion for the study</b>        | Include consideration of the relevance and reliability of the study  | Text (32,768 char.)<br><br>Display: Basic                             |
| <b>Identified uncertainties</b>                           |  | Text (32,768 char.)<br><br>Display: Basic                             |
| <b>Link to relevant study record</b>                      | Link to the endpoint study describing the supporting evidence.   | Link to endpoint (single)<br><br>Display: Basic                       |
| <b>Weighing evidence</b>                                  |  | Block of fields (repeatable)<br>End                                   |
| <b>Integrating evidence</b>                               |  | Header 2  |
| <b>Potential risk identified for non-target organisms</b> | Indicate whether there is evidence of risk for non-target organisms  | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |
| <b>Non-target organisms</b>                               | Where effects on non-target organisms are observed indicate the species group  | List multi. (multi-select list)<br><br>Display: Basic                 |
| <b>Additional information</b>                             | <a href="#">Additional information – common block</a>  | Header 1  |

### Links to supporting material:

EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Noteborn, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S, Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017. Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments. EFSA Journal 2017;15(8):4971, 69 pp. <https://doi.org/10.2903/j.efsa.2017.4971>



## Expression in Soil – Endpoint Summary

### Section 7.1.4.1 Experimental exposure data soil

#### Purpose

Summarise experimental data on density of micro-organisms in the soil.

If under consideration of the information provided under points 7.1.1, 7.1.2, 7.1.3 and 7.2 of Commission Regulation (EU) 1439/2022 a potential risk is identified for humans or non-target organism(s) or information is not sufficient to conclude about it, the population density of the microorganism shall be determined in relevant environmental compartment(s) (e.g. soil, water, plant surfaces).

| <b>ENDPOINT_SUMMARY.ExpressionInSoil</b> |   |   |
|--|---|---|
| <b>Name</b>                              | <b>Instructions</b>   | <b>Data type</b>                                  |
| <b>Administrative data</b>               | Use the Confidentiality flag and/or the Regulatory purpose flag to filter out data in subsequent operations such as exporting, printing or dossier creation. A justification is required when the confidentiality flag is set.  | Header 1  |
|  | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br><br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page.</a>   | Confidentiality<br><br>Display: Basic             |
| <b>Link to relevant study record(s)</b>  |   | Header 1  |
| <b>Link to relevant study record(s)</b>  | Provide here the link(s) to the study record(s) supporting the choice of the key value for assessment.<br><br>The study(ies) giving rise to the highest concern should be chosen. The following factors, among others, should be taken into account when the study record is selected: quality of the study (e.g. Klimisch score), type of study (e.g. duration, experimental design, observed effects), whether or not the study is GLP. Please provide your rationale for the selection of the relevant study record in the field "Additional information". | Link to endpoint (multiple)<br><br>Display: Basic |
| <b>Description of key information</b>    |   | Header 1  |
|  | If all key information is provided in the linked study records, this field can be left empty. In case there is no linked study record, or in case you want to point to specific information in the linked study record, provide a summary of the key information related to the studies here.<br><br>The summary could include, for example: <ul style="list-style-type: none"> <li>- the test type</li> <li>- the test guideline used (and any deviations from it)</li> <li>- the test organism</li> <li>- the exposure duration</li> </ul>                  | Text (rich-text area)<br><br>Display: Basic       |



|                               |   |          |
|-------------------------------|---|----------|
|                               | - other contextual information on the origin of the key value |          |
| <b>Additional information</b> | <a href="#">Additional information – common block</a>         | Header 1 |

## Expression in a Terrestrial Environment – Endpoint Study Record

### Section 7.1.4.1 Experimental exposure data soil

#### Purpose

Report experimental data on density of micro-organisms in the soil.

If under consideration of the information provided under points 7.1.1, 7.1.2, 7.1.3 and 7.2 of Commission Regulation (EU) 1439/2022 a potential risk is identified for humans or non-target organism(s) or information is not sufficient to conclude about it, the population density of the microorganism shall be determined in relevant environmental compartment(s) (e.g. soil, water, plant surfaces).

| ENDPOINT_STUDY_RECORD.ExpressionInATerrestrialEnvironment |   |   |
|---|---|---|
| Name  | Instructions  | Data type                                     |
| <b>Administrative data</b>                                | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">Administrative data – common block</a><br><a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a> | Header 1                                      |
| <b>Data source</b>  | <a href="#">Data source – common block</a>  | Header 1                                      |
| <b>Materials and methods</b>                              | <a href="#">Material and methods – common block</a>   | Header 1                                      |
| <b>Test material</b>                                      | <a href="#">Test material – common block</a>  | Header 2                                      |
| <b>Study design</b>                                       |   | Header 2                                      |
| <b>Soil properties</b>                                    | Repeat this block of fields for each different soil used as indicated by the Soil No. Enter soil type as cited in the study report and the respective soil properties.  | Block of fields (repeatable)<br>Start         |
| <b>Soil no.</b>   | Select a consecutive soil number from drop-down list if more than one soil types were used.   | List (picklist)<br><br>Display: Basic         |
| <b>Soil type</b>  | Select from drop-down list.   | List (picklist)<br><br>Display: Basic         |
| <b>% Clay</b>   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | Numeric range (decimal)<br><br>Display: Basic |
| <b>% Silt</b>   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | Numeric range (decimal)<br><br>Display: Basic |
| <b>% Sand</b>   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second  | Numeric range (decimal)                       |





|   |  |   |
|---|--|---|
|   | numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | Display: Basic  |
| <b>% Org. C</b>                             | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal)<br>Display: Basic               |
| <b>pH</b>                                   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal)<br>Display: Basic               |
| <b>CEC</b>                                  | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal with picklist)<br>Display: Basic |
| <b>Bulk density (g/cm<sup>3</sup>)</b>      | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal)<br>Display: Basic               |
| <b>% Moisture content</b>                   | Moisture content of the soil (at pF 2 or at Maximum Water Holding Capacity). Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable. | Numeric range (decimal)<br>Display: Basic               |
| <b>Soil properties</b>                      |  | Block of fields (repeatable)<br>End                     |
| <b>Duration of test (contact time)</b>      | Specify duration of test in terms of contact time. Repeat block for each soil type. If different test runs have different durations, enter lower and upper value in respective subfields.  | Block of fields (repeatable)<br>Start                   |
| <b>Soil No.</b>                             | Select a consecutive soil number from drop-down list if more than one soil types were used.  | List (picklist)<br>Display: Basic                       |
| <b>Duration</b>                             | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal with picklist)<br>Display: Basic |
| <b>Duration of test (contact time)</b>      |  | Block of fields (repeatable)<br>End                     |
| <b>Initial test substance concentration</b> | Specify the initial test concentration applied. If different concentrations were used in different test runs, copy this block of fields accordingly. If a range of concentrations is reported, include the lower and upper values in the numeric range field.<br><br>If appropriate copy this block of fields for indicating                       | Block of fields (repeatable)<br>Start                   |



|  |  |   |
|--|--|---|
|  | different parameters, the initial concentration is based on (e.g. COD and test substance).   |   |
| <b>Soil No.</b>  | Select a consecutive soil number from drop-down list if more than one soil types were used.  | List (picklist)<br>Display: Basic                       |
| <b>Initial conc.</b>   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal with picklist)<br>Display: Basic |
| <b>Based on</b>  | From drop-down list, select the parameter on which the initial concentration is based.   | List sup. (picklist with remarks)<br>Display: Basic     |
| <b>Initial test substance concentration</b>                        |  | Block of fields (repeatable)<br>End                     |
| <b>Any other information on materials and methods incl. tables</b> |  | Header 2  |
|  | In this field, you can enter any information on materials and methods, for which no distinct field is available, or transfer free text from other databases. You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing or spreadsheet document, provided it was converted to the HTML format. You can also upload any htm or html document.<br><br>Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry. | Text (rich-text area)<br>Display: Basic                 |
| <b>Results and discussion</b>                                      |  | Header 1  |
| <b>Detection of microorganism</b>                                  | For each soil/sediment type, indicate the microorganism detection levels for each time point.  | Block of fields (repeatable)<br>Start                   |
| <b>Key result</b>  | Set this flag for identifying the key information which is of potential relevance for hazard/risk assessment or classification purpose.<br><br>Consult any programme-specific guidance (e.g. OECD Programme, Pesticides NAFTA or EU REACH) on how to use this field.   | Check box<br>Display: Basic                             |
| <b>Test system no.</b>   | Select a consecutive soil/sediment number from drop-down list if more than one soil types were used.   | List (picklist)<br>Display: Basic                       |



|  |   |   |
|--|---|---|
| <b>Sampling date</b>                                 |   | Date<br>Display: Basic  |
| <b>Microorganism detected</b>                        |   | List (picklist)<br>Display: Basic                                 |
| <b>Quantification</b>                                | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | Numeric range (decimal)<br>Display: Basic                         |
| <b>St. dev.</b>                                      | Enter numeric value.  | Numeric (decimal)<br>Display: Basic                               |
| <b>Sampling time</b>                                 | Enter numeric value.  | Numeric (decimal including unit)<br>Display: Basic                |
| <b>Remarks on result</b>                             | This field can be used for: <ul style="list-style-type: none"> <li>- giving a qualitative description of results in addition to or if no numeric value(s) were derived;</li> <li>- giving a pre-defined reason why no numeric value is provided, e.g. by selecting 'not determinable' and entering free text explanation in the supplementary remarks field; or</li> <li>- entering any additional information by selecting 'other:'</li> </ul> | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Detection of microorganism</b>                    |   | Block of fields (repeatable)<br>End                               |
| <b>Any other information on results incl. tables</b> | <a href="#">Any other information on results incl. tables – common block</a>  | Header 2  |
| <b>Overall remarks, attachments</b>                  | <a href="#">Overall remarks, attachments – common block</a>   | Header 1  |
| <b>Applicant's summary and conclusion</b>            | <a href="#">Applicant's summary and conclusion – common block</a>   | Header 1  |

## Expression in Water – Endpoint Summary

### Section 7.1.4.2 Experimental exposure data water

#### Purpose

Summarise the experimental data on density of micro-organisms in water.

If under consideration of the information provided under points 7.1.1, 7.1.2, 7.1.3 and 7.2 of Part B of the Annex to Reg 283/2013 a potential risk is identified for humans or non-target



organism(s) or information is not sufficient to conclude about it, the population density of the microorganism shall be determined in relevant environmental compartment(s) (e.g. soil, water, plant surfaces).

| <b>ENDPOINT_SUMMARY.ExpressionInWater</b> |   |   |
|---|---|---|
| <b>Name</b>                               | <b>Instructions</b>   | <b>Data type</b>                                  |
| <b>Administrative data</b>                | Use the Confidentiality flag and/or the Regulatory purpose flag to filter out data in subsequent operations such as exporting, printing or dossier creation. A justification is required when the confidentiality flag is set.  | Header 1  |
|   | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br><br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> .  | Confidentiality<br><br>Display: Basic             |
| <b>Link to relevant study record(s)</b>   |   | Header 1  |
| <b>Link to relevant study record(s)</b>   | Provide here the link(s) to the study record(s) supporting the choice of the key value for assessment.<br><br>The study(ies) giving rise to the highest concern should be chosen. The following factors, among others, should be taken into account when the study record is selected: quality of the study (e.g. Klimisch score), type of study (e.g. duration, experimental design, observed effects), whether or not the study is GLP. Please provide your rationale for the selection of the relevant study record in the field "Additional information".   | Link to endpoint (multiple)<br><br>Display: Basic |
| <b>Description of key information</b>     |   | Header 1  |
|   | If all key information is provided in the linked study records, this field can be left empty. In case there is no linked study record, or in case you want to point to specific information in the linked study record, provide a summary of the key information related to the studies here.<br><br>The summary could include, for example: <ul style="list-style-type: none"> <li>- the test type</li> <li>- the test guideline used (and any deviations from it)</li> <li>- the test organism</li> <li>- the exposure duration</li> <li>- other contextual information on the origin of the key value</li> </ul> | Text (rich-text area)<br><br>Display: Basic       |
| <b>Additional information</b>             | <a href="#">Additional information – common block</a>   | Header 1  |



## Expression in a Freshwater Environment – Endpoint Study Record

### Section 7.1.4.2 Experimental exposure data water

#### Purpose

Report experimental data on density of micro-organisms in water.

If under consideration of the information provided under points 7.1.1, 7.1.2, 7.1.3 and 7.2 of Part B of the Annex to Reg 283/2013 a potential risk is identified for humans or non-target organism(s) or information is not sufficient to conclude about it, the population density of the microorganism shall be determined in relevant environmental compartment(s) (e.g. soil, water, plant surfaces).

| ENDPOINT_STUDY_RECORD.ExpressionInAFreshwaterEnvironment |   |   |
|--|---|---|
| Name   | Instructions  | Data type   |
| <b>Administrative data</b>                               | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">Administrative data – common block</a><br><a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a> | Header 1  |
| <b>Data source</b>                                       | <a href="#">Data source – common block</a>  | Header 1  |
| <b>Materials and methods</b>                             | <a href="#">Material and methods – common block</a>   | Header 1  |
| <b>Test material</b>                                     | <a href="#">Test material – common block</a>  | Header 2  |
| <b>Study design</b>                                      |   | Header 2  |
| <b>Test system properties</b>                            | Repeat this block of fields for each different water/sediment used as indicated by the water/sediment sample number. Enter water/sediment type as cited in the study report and the respective water/sediment properties.   | Block of fields (repeatable)<br>Start                   |
| <b>Test system no.</b>                                   | Select a consecutive water/sediment sample number from drop-down list if more than one water/sediment types were used.  | List (picklist)<br>Display: Basic                       |
| <b>Test system</b>                                       | Select from drop-down list.   | List (picklist)<br>Display: Basic                       |
| <b>Temperature (°C)</b>                                  | Report the temperature in degrees Centigrade.<br><br>Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal)<br><br>Display: Basic           |
| <b>Oxygen conditions</b>                                 | Indicate whether test was performed under aerobic or anaerobic conditions. Include any explanations in the supplementary remarks field as appropriate.  | List sup. (picklist with remarks)<br><br>Display: Basic |
| <b>pH</b>  | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | Numeric range (decimal)<br><br>Display: Basic           |



|   |  |   |
|---|--|---|
| <b>Nutrients</b>                            | Indicate any nutrients detected or added to the water / sediment.  | Text (2,000 char.)<br>Display: Basic                    |
| <b>Sunlight</b>                             | Indicate if the test system was exposed to sunlight.   | List (picklist)<br>Display: Basic                       |
| <b>Hardness</b>                             | Report the hardness to the water in the test system.   | Numeric range (decimal)<br>Display: Basic               |
| <b>Test system properties</b>               |  | Block of fields (repeatable)<br>End                     |
| <b>Duration of test (contact time)</b>      | Specify duration of test in terms of contact time. Repeat block for each water/sediment type. If different test runs have different durations, enter lower and upper value in respective subfields.  | Block of fields (repeatable)<br>Start                   |
| <b>Test system no.</b>                      | Select a consecutive water/sediment number from drop-down list if more than one soil types were used.  | List (picklist)<br>Display: Basic                       |
| <b>Duration</b>                             | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal with picklist)<br>Display: Basic |
| <b>Duration of test (contact time)</b>      |  | Block of fields (repeatable)<br>End                     |
| <b>Initial test substance concentration</b> | Specify the initial test concentration applied. If different concentrations were used in different test runs, copy this block of fields accordingly. If a range of concentrations is reported, include the lower and upper values in the numeric range field.<br><br>If appropriate copy this block of fields for indicating different parameters the initial concentration is based on (e.g. COD and test substance). | Block of fields (repeatable)<br>Start                   |
| <b>Test system no.</b>                      | Select a consecutive soil number from drop-down list if more than one soil types were used.  | List (picklist)<br>Display: Basic                       |
| <b>Initial conc.</b>                        | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric range (decimal with picklist)<br>Display: Basic |
| <b>Based on</b>                             | From drop-down list, select the parameter on which the initial concentration is based.   | List sup. (picklist with remarks)                       |



|  |  |  |
|--|--|--|
|  |  | Display: Basic   |
| <b>Initial test substance concentration</b>                        |  | Block of fields (repeatable)<br>End                    |
| <b>Any other information on materials and methods incl. tables</b> |  | Header 2   |
|  | In this field, you can enter any information on materials and methods, for which no distinct field is available, or transfer free text from other databases. You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing or spreadsheet document, provided it was converted to the HTML format. You can also upload any htm or html document.<br><br>Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry. | Text (rich-text area)<br><br>Display: Basic            |
| <b>Results and discussion</b>                                      |  | Header 1   |
| <b>Detection of microorganism</b>                                  | For each water/sediment type, indicate the microorganism detection levels for each time point.   | Block of fields (repeatable)<br>Start                  |
| <b>Key result</b>  | Set this flag for identifying the key information which is of potential relevance for hazard/risk assessment or classification purpose.<br><br>Consult any programme-specific guidance (e.g. OECD Programme) on how to use this field.   | Check box<br><br>Display: Basic                        |
| <b>Test system no.</b>   | Select a consecutive water/sediment number from drop-down list if more than one soil types were used.  | List (picklist)<br><br>Display: Basic                  |
| <b>Sampling date</b>   |  | Date<br><br>Display: Basic                             |
| <b>Microorganism detected</b>                                      |  | List (picklist)<br><br>Display: Basic                  |
| <b>Quantification</b>  | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Numeric (decimal including unit)<br><br>Display: Basic |
| <b>St. dev.</b>  | Enter numeric value.   | Numeric (decimal)<br><br>Display: Basic                |



|  |  |   |
|--|--|---|
| <b>Sampling time</b>                                 | Enter numeric value.   | Numeric (decimal including unit)<br><br>Display: Basic                |
| <b>Remarks on result</b>                             | This field can be used for: <ul style="list-style-type: none"> <li>- giving a qualitative description of results in addition to or if no numeric value(s) were derived;</li> <li>- giving a pre-defined reason why no numeric value is provided, e.g. by selecting 'not determinable' and entering free text explanation in the supplementary remarks field; or</li> <li>- entering any additional information by selecting 'other'</li> </ul> | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |
| <b>Detection of microorganism</b>                    |  | Block of fields (repeatable)<br>End                                   |
| <b>Any other information on results incl. tables</b> | <a href="#">Any other information on results incl. tables – common block</a>   | Header 2  |
| <b>Overall remarks, attachments</b>                  | <a href="#">Overall remarks, attachments – common block</a>  | Header 1  |
| <b>Applicant's summary and conclusion</b>            | <a href="#">Applicant's summary and conclusion – common block</a>  | Header 1  |

## Information on metabolites of ecotoxicological concern – Flexible Summary

### Section 8.8 – Information and ecotoxicity of metabolites

#### Purpose

Summary to conclude on the toxicity of metabolites based on literature search in order to identify metabolites of concern for non-target organisms and conclude on exclusion of metabolites as being of concern.

All the metabolites of potential concern should be listed, providing further information to demonstrate whether they are of concern or not.

Identified metabolites of concern to be reported in *Flexible\_Summary.Metabolites & Other Substance for Assessment* dataset (see instructions above).

| <b>FLEXIBLE.SUMMARY_InformationEcotoxicityMetabolites</b> |  |                                       |
|---|--|---------------------------------------|
| <b>Name</b>   | <b>Instructions</b>  | <b>Data type</b>                      |
| <b>Administrative data</b>                                |  | Header 1                              |
|   | Use this field to set flags for confidentiality and regulatory purpose(s). | Confidentiality<br><br>Display: Basic |





|   |   |   |
|---|---|---|
|   | For further information see:<br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> .  |   |
| <b>Description of key information</b>                     | <p>This document is for Metabolites of Concern for Non-Target Organisms</p> <p>See SANCO/2020/12258 Guidance on the risk assessment of metabolites produced by micro-organisms used as plant protection active substances.</p> <p>Stage 1 and Stage 2 the collection of basic information from literature should be reported in the Biological Properties document.</p> <p>This document should be used to report the results of targeted literature searches for all metabolites of potential concern in order to identify 'Metabolites of Concern'.</p> <p>If the identity is known, complete list of metabolites of potential concern should be listed in the 'Information on Metabolites' document and for the metabolites of concern the experimental data should be provided in the linked datasets.</p> <p>Provide additional information from the metabolite specific literature searches which cannot be reported in the repeatable block below.</p> | Header 1  |
|   |   | Text (rich-text area)<br>Display: Basic                           |
| <b>Metabolites</b>  |   | Block of fields (repeatable) Start                                |
| <b>Link to metabolite</b>                                 |   | Link to entity (single)<br>Display: Basic                         |
| <b>Link to Literature Search</b>                          |   | Link to endpoint (single)<br>Display: Basic                       |
| <b>Hazardous effect observed in ecotoxicology studies</b> | <p>If the picklist value 'no' is selected provide the justification in the remarks field. No further information is required in this table.</p> <p>If the picklist value 'yes' is selected complete all the information required in the table.</p>  | List sup. (picklist with remarks - 2,000 char.)<br>Display: Basic |
| <b>Non-target organisms</b>                               | Where effects on non- target organisms are observed indicate the species group.   | List multi. (multi-select list)<br>Display: Basic                 |
| <b>Conditions</b>   | Describe the conditions under which the microorganism produces the metabolite.  | Text (2,000 char.)<br>Display: Basic                              |



|  |   |   |
|--|---|---|
| <b>LOQ of method</b>   | Any available information about the LOQ of the method used to determine/quantify the metabolite.  | Numeric range (decimal with picklist)<br>Display: Basic               |
| <b>Expected quantities</b>   | Any available information about the expected quantities.  | Numeric range (decimal with picklist)<br>Display: Basic               |
| <b>Regulation mechanism</b>  | Any available information on the mechanism by which the microorganism regulates the production of the metabolite shall be provided.   | Text (2,000 char.)<br>Display: Basic                                  |
| <b>Mode of action</b>  | Any available information on the influence of the produced metabolites on the micro-organism's mode of action against the target organism(s) shall be provided.   | Text (2,000 char.)<br>Display: Basic                                  |
| <b>Sufficient body of knowledge</b>                                      | Is there enough published literature to assume that a literature search would provide sufficient information on metabolite production?<br><br>Make reference to the literature search included in the 'Link to Literature Search' in the table when justifying the selection of 'yes' or 'no' in the remarks field.   | List sup. (picklist with remarks - 2,000 char.)<br><br>Display: Basic |
| <b>Remarks</b>   | Provide any other information to support the classification of this metabolite as 'of concern'.   | Text (2,000 char.)<br>Display: Basic                                  |
| <b>Metabolites</b>   |   | Block of fields (repeatable) End                                      |
| <b>Step 5: Is the genus of the strain under evaluation well studied?</b> | Literature data. Is the microorganism well studied? (see step 5.1 of SANCO/2020/12258)<br><br>Provide a further evaluation of the body of knowledge that includes the history of safe use, the ecology of a micro-organism in the agro-food chain or in other sectors, the scientific literature, clinical observations and reports (e.g. like infections in immunocompromised people where the microorganism has been isolated), industrial and/or medicinal applications, and other factors as considered appropriate.<br><br>As a matter of principle, it is highly recommended to the applicant to conduct the search beyond the normally requested period of 10 years before the application, in order to gather all the possible relevant scientific literature to support the risk assessment. | Header 2  |
|  | Provide additional information related to the endpoint, for example:<br><ul style="list-style-type: none"><li>- information on the potential data gaps</li><li>- relevance of the results for the risk assessment</li><li>- the rationale for the choice of the key study(ies) and the choice for the key value that characterises the endpoint</li></ul>   | Text (rich-text area)<br>Display: Basic                               |



|                               |  |          |
|-------------------------------|--|----------|
|                               | <ul style="list-style-type: none"> <li>- the rationale for any user-derived values for the sake of transparency</li> <li>- the possible reasons for differentiating results when several studies were identified to be relevant for the assessment.</li> </ul> <p>If there is no additional information to be reported this field may be left empty.</p> |          |
| <b>Additional information</b> | <a href="#">Additional information – common block</a>  | Header 1 |

**Links to supporting material:**

[https://food.ec.europa.eu/system/files/2023-06/pesticides\\_ppp\\_app-proc\\_guide\\_180653\\_microorganism-metabolites-concern.pdf](https://food.ec.europa.eu/system/files/2023-06/pesticides_ppp_app-proc_guide_180653_microorganism-metabolites-concern.pdf)

**EU PPP MICROORGANISMS - ACTIVE SUBSTANCE APPLICATION WORKING CONTEXT – PRODUCT DATASET**

**Information on metabolites – Flexible summary**

**Section 1.4.1 - Information on metabolites**

**Purpose**

This document should be used to compile the list required for Stage 2: Collecting a basic set of information on metabolites, resulting in a list of metabolites of potential concern.

Any information on potentially harmful effects of metabolites on human and animal health, the environment or on groundwater shall be included in the dossier.

Chemical name in accordance with IUPAC and CA nomenclature, CAS-number, EC number, molecular and structural formula, molar mass should be reported.

| <b>FLEXIBLE_SUMMARY.Metabolites</b>     |  |                        |
|---|--|------------------------|
| <b>Name</b>                             | <b>Instructions</b>  | <b>Data type</b>       |
| <b>Metabolites information</b>          |  | Header 1               |
| <b>Metabolites information overview</b> | Description of the metabolites included in the dossier.  | Rich text area         |
| <b>Parent metabolites of</b>            | Not applicable to micro-organisms  | Entity reference field |
| <b>List metabolites of</b>              |  | Header 1               |
| <b>Metabolites</b>                      |  |                        |
|   | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a>              | Confidentiality        |
| <b>Link metabolite dataset to</b>       | <p>A metabolite dataset is required where further studies have been performed using a metabolite as the test material.</p> <p>The link must be made using a substance to create a dataset. In the dataset linked to the substance endpoint</p> | Entity reference field |



|                               |   |                 |
|-------------------------------|---|-----------------|
|                               | <p>study records and endpoint summaries can be completed in the relevant sections e.g. Toxicological and metabolism studies, Fate and behavior in the environment, Ecotoxicological studies. The Table of Contents for a metabolite is the 'Other substance' dataset.</p> <p>Where a metabolite is detected and reported in an endpoint study record and the test material is the active substance only a link to a reference substance is required.</p> <p>In both cases the IUPAC and CA nomenclature, CAS-number EC number, molecular and structural formula, molar mass should be reported in the reference substance document. SMILES and InChi are recommended.</p> |                 |
| <b>Remarks</b>                | <p>Use this field to report the wording:</p> <ul style="list-style-type: none"> <li>• 'MoC', in case of metabolites identified as being of concern.</li> <li>• 'MoPC', in case of metabolites identified as being of potential concern.</li> <li>• 'MoNC', in case of metabolites identified as being of no concern</li> </ul>  | Multi-line text |
| <b>Metabolites</b>            |   |                 |
| <b>Additional information</b> | <a href="#">Additional information – common block</a>   | Header 1        |

### Links to supporting material:

Guidance on the risk assessment of metabolites produced by microorganisms used as plant protection active substances in accordance with article 77 of Regulation (EC) No 1107/2009. SANCO/2020/12258 [https://food.ec.europa.eu/system/files/2023-06/pesticides\\_ppp\\_app\\_proc\\_guide\\_180653\\_microorganism-metabolites-concern.pdf](https://food.ec.europa.eu/system/files/2023-06/pesticides_ppp_app_proc_guide_180653_microorganism-metabolites-concern.pdf)

| List of metabolites |   |  |         |
|---------------------|---|--|---------|
| #                   | Link to metabolite d...   | Remarks  | Actions |
| 1                   | EFSATender: SecMetA   | MoNC: SecMet A is not present in the MPCP. Not a metabolite of concern.  |         |
| 2                   | EFSATender: SecMetB (Metabolite of concern)   EFSATender: SecMetB   SecMetB | MoPC: SecMetB is present in the MPCP. Please refer to MA Section 6/ MP Section 7 for the risk assessment.  |         |
| 3                   | EFSATender: SecMetC   | MoPC: SecMetC is known to be produced by this species. However, whole genome analysis shows that the strain MAS123 cannot produce this secondary metabolite. |         |



## Efficacy Data - Endpoint Study Record

### Section 6 - Efficacy data

#### Purpose

Information to evaluate the nature and extent of benefits that accrue following use of the plant protection product, in comparison to an untreated control and where they exist in comparison to suitable reference products and damage thresholds, and to define its conditions of use.

Sufficient data shall be submitted to confirm that patterns of use of the plant protection product tested are representative of the regions and the range of conditions likely to be encountered in the regions concerned, for which its use is intended.

The performance of the active substance against target organisms, representative for the proposed uses at the proposed dose, as well as observations on undesirable or unintended side-effects and information on the development of resistance should be presented by the applicant in the dossier, as part of study summaries for all field trials, and where appropriate, in tabular format.

Description of **Compatibility in plant protection programmes**, as requested in point 6.7 of Commission Regulation (EU) 2022/1440.

| ENDPOINT_STUDY_RECORD.EfficacyData                  |   |                                   |
|---|---|-----------------------------------|
| Field name  | Instructions  | Data type                         |
| <b>Administrative data</b>                          | <a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">Administrative data – common block</a><br><a href="https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf">https://www.efsa.europa.eu/sites/default/files/2022-03/user-guide-submission-confidentiality-requests.pdf</a>   | Header 1                          |
| <b>Data source</b>                                  | <a href="#">Data source – common block</a>  | Header 1                          |
| <b>Materials and methods</b>                        | <a href="#">Material and methods – common block</a>   | Header 1                          |
| <b>Test material</b>                                | <a href="#">Test material – common block</a>  | Header 2                          |
| <b>Deviations</b>                                   | In case a test guideline or other standardised method was used, indicate if there are any deviations. Briefly state relevant deviations in the supplementary remarks field (e.g. 'other test system used', 'different exposure duration'); details should be described in the respective fields of the section MATERIALS AND METHODS.   | Display: Basic                    |
| <b>Principles of method if other than guideline</b> | If no guideline was followed, include a description of the principles of the test protocol or estimated method used in the study. As appropriate, use either of the pre-defined freetext template options for 'Method of non-guideline study'. Delete / add elements and edit text set in square brackets [...] as appropriate.<br><br>For a non-guideline experimental study a high-level freetext template can be used for summarising the principle of test, test conditions and parameters analysed / observed.<br><br>Details should be entered in appropriate distinct fields of section MATERIALS AND METHODS if available. Also provide a justification for using this method if appropriate. | List sup. (picklist with remarks) |



|   |   |                                   |
|---|---|-----------------------------------|
| <b>GLP compliance</b>                             | Indicate whether the study was conducted following Good Laboratory Practice or not. In case 'yes' is selected, a Quality Assurance (QA) statement must be provided with the report. You can give an explanation in the supplementary remarks field, e.g. for explaining why GLP was not complied with or for specifying which (national) GLP was followed.  |                                   |
| <b>Compliance with quality standards</b>          | <p><b>Indicate whether the efficacy data were generated according to GEP (Good Experimental Practice)</b> or by an officially recognised organisation. If this is not the case, enter 'no', 'no data' or 'not required' as applicable. Refer to programme-specific guidance as to the required adherence to official recognition, GEP or other quality assurance standards.</p> <p>In the supplementary remarks field, you can add explanations as appropriate, e.g. provide a certificate number. If required, attach any (signed and dated) certificate or quality assurance statement in field 'Attached background material'.</p>   | Display: Basic                    |
| <b>Test material</b>                              | <a href="#">Test material – common block</a>  | List sup. (picklist with remarks) |
| <b>Formulation type</b>                           | <p>Indicate the type of formulation used in the study. If not listed, select 'other' and specify.</p> <p>Any remarks can be entered in the supplementary remarks field, for instance any code for the formulation type, if required, according to programme-specific guidance.</p>  |                                   |
| <b>Analytical monitoring</b>                      | Indicate whether the active substance was monitored during the test.  | Display: Basic                    |
| <b>Details on sampling and analytical methods</b> | If the amount of test material exposed to the organisms was monitored, provide details on sampling and analytical methods used.   | List (picklist)                   |
| <b>Pest / target organisms to be controlled</b>   |   |                                   |
| <b>Test / target organisms</b>                    | Specify the test / target organism(s) used in the study. Repeat this block of fields for specifying all organisms covered by this record. Due to the great number of possible test organisms this picklist is not exhaustive. If the species name is not listed, choose an appropriate superior term (e.g. 'Acaridae:') and specify by entering free text in the related field. If organism is not listed at all, choose 'other:' and enter the name or several names in a row in the related text field. If this template is used to summarise several efficacy studies (e.g. by attaching summary tables as described in the instructions for field 'Background information'), this block of fields can be left empty. However, if the number of different species is reasonable, you should also specify them here in addition to the summary tables. This will allow searching. | Display: Basic                    |



|  |   |                |
|--|---|----------------|
| <b>Scientific name</b>                     | <p>Select appropriate scientific name from picklist. If not listed, select 'other' and specify. The EPPO database can be consulted to retrieve the scientific names of target organisms. If not given/known, select 'no data'. See also instructions on this block of fields.</p> <p>Any remarks can be entered in the supplementary remarks field, for instance any code for target organism if required so according to programme-specific guidance.</p>  | Check box      |
| <b>Common name</b>                         | <p>Select appropriate common name from picklist. If not listed, select 'other' and specify; if necessary, consult the EPPO database. If not given/known, select 'no data'. See also instructions on this block of fields.</p> <p>Any remarks can be entered in the supplementary remarks field.</p>   |                |
| <b>Developmental stage of target pest</b>  | <p>Indicate the developmental stage of the target organism. If not listed, select 'other' and specify. If not given/known, select 'no data'. If not applicable, leave field empty.</p>  | Display: Basic |
| <b>Developmental stage of target plant</b> | <p>Indicate the developmental stage of the target organism. If not listed, select 'other' and specify. If not given/known, select 'no data'. If not applicable, leave field empty. For herbicide uses, indicate the developmental stage of the target plant.</p> <p>In the picklist BBCH codes have been implemented. Although these codes have been developed for describing the development stages of crops, they used in analogy for the target plants.</p>  | Check box      |
| <b>Details on test / target organisms</b>  | <p>Freetext template:</p> <p>Option 1 For single species test</p> <ul style="list-style-type: none"> <li>- Strain:</li> <li>- Source:</li> <li>- Wild type: [yes/no]</li> <li>- Any selection pressure (sensitivity, resistance):</li> <li>- Pre-conditioning / rearing conditions:</li> <li>- Weight at study initiation:</li> <li>- Age (of the stadium) at study initiation: [mixed age population / ...]</li> <li>- Numbers used in the test:</li> <li>- Sex of those used in the test (where appropriate):</li> <li>- Other (specify):</li> </ul> <p>Option 2 For test with microbial population / inoculum</p> <ul style="list-style-type: none"> <li>- Nature:</li> <li>- Origin:</li> <li>- Collection / storage of samples:</li> </ul> |                |



|   |   |                |
|---|---|----------------|
|   | <ul style="list-style-type: none"> <li>- Preparation of inoculum for exposure:</li> <li>- Pretreatment:</li> <li>- Initial biomass / density / numbers in test system:</li> <li>- Other (specify):</li> </ul>   |                |
| <b>Products (materials), organisms or objects to be protected / under study</b> |   | Display: Basic |
| <b>Organisms (to be protected) or treated materials</b>                         | If applicable, describe and specify the organism(s) or materials(s) / object(s) to be protected as addressed by these efficacy data.  | Check box      |
| <b>Study design</b>   |   |                |
| <b>Total exposure duration (contact time)</b>                                   | If applicable, enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.  | Display: Basic |
| <b>Remarks</b>  | Enter any remarks related to the total exposure duration.   | Date           |
| <b>Mode of efficacy assessment</b>  | <p>Freetext template:</p> <ul style="list-style-type: none"> <li>- Effects investigated:</li> <li>- Method for recording / scoring effects:</li> <li>- Intervals of examination:</li> <li>- Post monitoring of test organisms</li> </ul> <p>Describe the parameter(s) measured for assessing efficacy and the intervals of measurements, together with the scoring or assessment system used. Where appropriate, describe the duration of post monitoring of test organisms.</p> <p>Use freetext template and delete/add elements as appropriate. Enter any details that could be relevant for evaluating this study summary.</p> |                |
| <b>Method of application</b>  | <p>Indicate the method of application. If not listed, select 'other' and specify.</p> <p>Any remarks can be entered in the supplementary remarks field.</p>   | Display: Basic |
| <b>Details on study design</b>  | <p>Option 1 Optional items for laboratory studies</p> <p>FURTHER DETAILS ON APPLICATION</p> <ul style="list-style-type: none"> <li>- Application/dosage and dilution rates (incl. dose justification):</li> <li>- Adjuvans/vehicle/carrier:</li> <li>- Presence of interfering substances:</li> </ul>   | Date           |





|  |  |  |
|--|--|--|
|  | <ul style="list-style-type: none"> <li>- Other (specify)</li> </ul> <p>MONITORING OF TEST SUBSTANCE</p> <ul style="list-style-type: none"> <li>- Monitoring of active substance concentration:</li> <li>- Method of analysis:</li> </ul> <p>TEST CHAMBER / DEVICE</p> <ul style="list-style-type: none"> <li>- Type and design of test chamber / device:</li> <li>- Other (specify)</li> </ul> <p>SURFACE TYPES</p> <ul style="list-style-type: none"> <li>- Type: [porous, non-porous]</li> </ul> <p>TEST CONDITIONS</p> <ul style="list-style-type: none"> <li>- Temperature:</li> <li>- Rel. humidity:</li> <li>- Aeration:</li> <li>- Light cycles during test:</li> <li>- pH:</li> <li>- Water hardness:</li> <li>- Soil type:</li> <li>- Nutrient supply conditions:</li> <li>- Any additions or alterations to the test environment during the study:</li> <li>- Other (specify)</li> </ul> <p>INITIAL DENSITY/NUMBERS OF TARGET ORGANISMS</p> <ul style="list-style-type: none"> <li>- Initial density / numbers in test system:</li> <li>- Frequency or level of infestation / infection:</li> </ul> <p>REPLICATES</p> <ul style="list-style-type: none"> <li>- Number of replicates:</li> </ul> <p>CONTROLS</p> <ul style="list-style-type: none"> <li>- Untreated controls:</li> <li>- Positive controls (reference substance):</li> </ul> <p>OTHER (specify):</p> <p>Option 2 Optional items for field and use tests</p> <p>APPLICATION</p> <ul style="list-style-type: none"> <li>- Type/method of application:</li> <li>- Code of application type (if any):</li> <li>- Application rates: More than one application rate can be needed. Number and timing of applications have to be stated. The water volume/ha should also be stated.</li> <li>- Application/dosage and dilution rates (incl. dose justification):</li> </ul> |  |
|--|--|--|



|  |  |                  |
|--|--|------------------|
|  | <ul style="list-style-type: none"> <li>- Adjuvans/vehicle/carrier:</li> <li>- Other (specify)</li> </ul> <p>EXPERIMENTAL DESIGN</p> <p>-</p> <p>GEOGRAPHICAL LOCATION</p> <ul style="list-style-type: none"> <li>- For efficacy evaluation the EPPO climatic zones should be mentioned</li> </ul> <p>TEST CONDITIONS / METEOROLOGICAL INFORMATION</p> <p>INITIAL DENSITY/NUMBERS OF TARGET ORGANISMS</p> <ul style="list-style-type: none"> <li>- Initial density / numbers in test system:</li> <li>- Frequency or level of infestation / infection:</li> </ul> <p>REPLICATES</p> <ul style="list-style-type: none"> <li>- Number of replicates:</li> </ul> <p>CONTROLS</p> <ul style="list-style-type: none"> <li>- Untreated controls:</li> <li>- Positive controls (reference substance):</li> </ul> <p>OTHER (specify):</p> |                  |
| <b>Any other information on materials and methods incl. tables</b> | In this field, you can enter any information on materials and methods, for which no distinct field is available, or transfer free text from other databases. You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing or spreadsheet document, provided it was converted to the HTML format. You can also upload any htm or html document. Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry.  |                  |
| <b>Results and discussion</b>                                      |  | Display: Basic   |
| <b>Efficacy / performance assessment</b>                           | <p>If possible, indicate the percentage of efficacy in terms of control, reduction, damage of target organisms or reduction of disease caused by pest organisms. Copy this field block for entering more than one efficacy level (e.g. based on other exposure duration, dose or endpoint) if necessary.</p> <p>Note: It may be appropriate to record, in this block of fields, only the mean level of effect or control. If the effect level relates to several test runs (i.e. test conditions), give ranges.</p>  | Text (255 char.) |
| <b>Efficacy parameter</b>  | Indicate the efficacy / performance parameter (e.g. % kill/cidal activity) to which the index entered in the next field refers to.   |                  |
| <b>Efficacy (in %)</b>   | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'.  | Display: Basic   |



|                               |   |  |
|-------------------------------|---|--|
|                               | Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   |  |
| <b>Time to produce effect</b> | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | List (picklist)                                  |
| <b>Treatment</b>              | If efficacy results are recorded for different treatment conditions (by repeating this block of fields), briefly indicate the type of treatment/application the results refer to. Specify dose, application rate, duration, etc.  |  |
| <b>Interfering substances</b> | Indicate if interfering substances were present. If 'yes' is selected, briefly specify in the supplementary remarks field.  | Display: Basic                                   |
| <b>Remarks on result</b>      | <ul style="list-style-type: none"> <li>- not determinable</li> <li>- not determinable because of methodological limitations</li> <li>- not measured/tested</li> <li>- other:</li> </ul> This field can be used for: <ul style="list-style-type: none"> <li>- giving a qualitative description of results in addition to or if no numeric value(s) were derived;</li> <li>- giving a pre-defined reason why no numeric value is provided, e.g. by selecting 'not determinable' and entering free text explanation in the supplementary remarks field; or</li> <li>- entering any remarks by selecting 'other:'.</li> </ul> | List sup. (picklist with remarks - 32,000 char.) |
| <b>Minimum effective dose</b> | If determined, provide the minimum effective dose, i.e. the dose or concentration considered the minimum necessary to achieve sufficient efficacy against the target organism(s) studied under the treatment conditions indicated. Copy this field block for recording values based on different treatment conditions if necessary  |  |
| <b>Minimum effective dose</b> | Enter minimum effective dose.   | Display: Basic                                   |
| <b>Time to produce effect</b> | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable.   | List (picklist)                                  |
| <b>Treatment</b>              | If efficacy results are recorded for different treatment conditions (by repeating this block of fields), briefly indicate the type of treatment/application the results refer to. Specify dose, application rate, duration, etc.  |  |
| <b>Interfering substances</b> | Indicate if interfering substances were present. If 'yes' is selected, briefly specify in the supplementary remarks field.  | Display: Basic                                   |



|   |   |  |
|---|---|--|
| <p><b>Remarks result</b></p>                | <p><b>on</b></p> <ul style="list-style-type: none"> <li>- not determinable</li> <li>- not determinable because of methodological limitations</li> <li>- not measured/tested</li> <li>- other:</li> </ul> <p>This field can be used for:</p> <ul style="list-style-type: none"> <li>- giving a qualitative description of results in addition to or if no numeric value(s) were derived;</li> <li>- giving a pre-defined reason why no numeric value is provided, e.g. by selecting 'not determinable' and entering free text explanation in the supplementary remarks field; or</li> <li>- entering any remarks by selecting 'other:'.</li> </ul>   | <p>List multi. (multi-select list with remarks - 32,000 char.)</p> |
| <p><b>Details results</b></p>               | <p><b>on</b></p> <p>RESULTS</p> <ul style="list-style-type: none"> <li>- Effects observed:</li> <li>- Dose/concentration dependence of effects:</li> <li>- Begin and duration of effectiveness:</li> <li>- Observed effects in post-monitoring phase:</li> <li>- Reinvasion/reinfestation:</li> <li>- Existence of threshold concentration:</li> <li>- Other:</li> </ul> <p>REPORTED STATISTICS:</p> <p>REFERENCE SUBSTANCE</p> <ul style="list-style-type: none"> <li>- Results with reference substance:</li> <li>- Results with reference substance valid</li> </ul> <p>Summarise any relevant results. Use freetext template and delete/add elements as appropriate. As an option you may include an excerpt from the study report, upload predefined table(s) in the rich text field 'Any other information on results incl. tables' or attach graphs in field 'Attached background material'.</p> <p>Note: Observed limitations on efficacy in terms of resistance, undesirable or unintended side effects, or other limitations should be described in the corresponding fields below.</p> |  |
| <p><b>Observed limitations efficacy</b></p> | <p><b>on</b></p>  | <p>Display: Basic</p>  |
| <p><b>Indication resistance</b></p>         | <p><b>of</b></p> <p>Indicate whether any development of resistance was observed or not. In below field 'Details on development of resistance', give details or provide any further explanation, e.g. stating that effects were observed, but considered negligible.</p> <p>Select 'not examined' or 'no data' as applicable.</p>  | <p>Text template</p>   |



|  |   |                                    |
|--|---|------------------------------------|
| <b>Details on development of resistance</b>              | Provide details on the development of resistance as observed in the efficacy study(ies), including any evidence of cross-resistance.  |                                    |
| <b>Undesirable or unintended side effects</b>            | Indicate whether any undesirable or unintended side effects were observed or not. In below field 'Details on undesirable or unintended side effects', give details or provide any further explanation, e.g. stating that effects were observed, but considered negligible.<br><br>Select 'not examined' or 'no data' as applicable.   | Display: Basic                     |
| <b>Details on undesirable or unintended side effects</b> | Provide details on undesirable or unintended side effects as observed in the efficacy study(ies).<br><br>Where appropriate or required by the relevant legislation, insert subheadings, e.g.:<br><br>-Adverse effects on plants<br><br>- Adverse effects on health of host animals<br><br>- Adverse effects on site of application (e.g. discoloration, corrosion, etc.)<br><br>- Adverse effects on beneficial and other non-target organisms<br><br>- Adverse effects on objects to be protected:             | Block of fields (repeatable) Start |
| <b>Other limitations observed</b>                        | Where there is evidence of other possible limitations as derived from the study results, describe the relevant factors that can possibly reduce the efficacy, e.g. certain climatic or edaphic conditions.  | Attachment (single)                |
| <b>Compatibility in plant protection programmes</b>      | Where the use conditions include other plant protection products in tank mix, spray sequences or other relevant types of applications<br><br>- Indicate potential effects on the activity of the product after mixing, spraying in sequence<br><br>- Possible loss of efficacy due to interaction in tank mix, spray sequences<br><br>- Intervals between applications to avoid negative effects<br><br>- Potential adverse effects on natural enemies, non-target arthropods, conservation biological control. | Text                               |
| <b>Relevance of study results</b>                        | For laboratory studies, provide arguments for performing such studies instead of a field test. If a study was conducted in a reduced scale, the dimension should be given as compared to the actual scale of the product (e.g. 'Test was reduced to a scale of 1:100').<br><br>If the study or studies summarised in this record were conducted with another formulation type or application method, provide a justification for this read-across through either the provision of a                             | Display: Basic                     |



|  |  |                                   |
|--|--|-----------------------------------|
|  | <p>reasoned case based on data or through bridging arguments.</p> <p>Use freetext template and delete/add elements as appropriate.</p> |                                   |
| <b>Any other information on results incl. tables</b> | <a href="#">Any other information on results incl. tables – common block</a>   | List sup. (picklist with remarks) |
| <b>Overall remarks, attachments</b>                  | <a href="#">Overall remarks, attachments – common block</a>  |                                   |
| <b>Applicant's summary and conclusion</b>            | <a href="#">Applicant's summary and conclusion – common block</a>  | Display: Basic                    |

### Links to supporting materials:

<https://www.julius-kuehn.de/en/jki-publication-series/bbch-scale/>

EPPO standard series PP1: Efficacy evaluation of plant protection products <https://pp1.eppo.int/>

EPPO global database: Scientific names and EPPO codes for target organisms <https://gd.eppo.int/taxon/>

## Assessment of potential toxicity – Flexible summary

### Section 7.2 - Assessment of potential toxicity of the plant protection product

#### Purpose

Summary to conclude on the absence of toxicity of the plant protection product to humans, including links to relevant toxicological studies and literature search and using weight of evidence (WoE) approach as described in [EFSA Scientific Committee, 2017](#).

| <b>FLEXIBLE_SUMMARY.AssessmentOfPotentialToxicity</b> |   |  |
|---|---|--|
| <b>Name</b>   | <b>Instructions</b>   | <b>Data type</b>                             |
| <b>Administrative data</b>                            |   | Header 1                                     |
|   | <p>Use this field to set flags for confidentiality and regulatory purpose(s).</p> <p>For further information see:</p> <p>“User Guide: submission of confidentiality requests” available under the <a href="#">IUCLID software section of the Toolkit page</a>.</p>  | <p>Confidentiality</p> <p>Display: Basic</p> |
| <b>Assessment of potential toxicity</b>               | <p>Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments.</p> <p>EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Nøtveit, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S,</p> | Header 1                                     |



|   |  |   |
|---|--|---|
|   | Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017 EFSA Journal 2017;15(8):4971, 69 pp.<br><br>First published: 03 August 2017<br><a href="https://doi.org/10.2903/j.efsa.2017.4971">https://doi.org/10.2903/j.efsa.2017.4971</a>   |   |
|   | Conclude on potential toxicity of the plant protection product based on the lines of evidence presented below.   | Text (rich-text area)<br><br>Display: Basic             |
| <b>Assembling evidence</b>                            | Link to any literature searches for evidence on toxicity.  | Link to endpoint (multiple)<br><br>Display: Basic       |
| <b>Weighing evidence</b>                              |  | Block of fields (repeatable)<br>Start                   |
| <b>Description of key conclusion for the study</b>    | Include consideration of the relevance and reliability of the study.   | Text (32,768 char.)<br><br>Display: Basic               |
| <b>Identified uncertainties</b>                       |  | Text (32,768 char.)<br><br>Display: Basic               |
| <b>Link to relevant study record</b>                  | Link to the endpoint study describing the supporting evidence.   | Link to endpoint (single)<br><br>Display: Basic         |
| <b>Weighing evidence</b>                              |  | Block of fields (repeatable)<br>End                     |
| <b>Integrating evidence</b>                           |  | Header 2  |
| <b>Sufficient information to classify the product</b> | Based on the evidence presented above conclude on whether or not sufficient information is available to classify the plant protection product in accordance with Regulation (EC) No 1272/2008 with regard to toxicity to humans and whether or not acute toxicity studies on animals are needed. | List sup. (picklist with remarks)<br><br>Display: Basic |
| <b>Additional information</b>                         | <a href="#">Additional information – common block</a>  | Header 1  |

### Links to supporting material:

EFSA Scientific Committee, Hardy, A, Benford, D, Halldorsson, T, Jeger, MJ, Knutsen, HK, More, S, Naegeli, H, Noteborn, H, Ockleford, C, Ricci, A, Rychen, G, Schlatter, JR, Silano, V, Solecki, R, Turck, D, Benfenati, E, Chaudhry, QM, Craig, P, Frampton, G, Greiner, M, Hart, A, Hogstrand, C, Lambre, C, Luttik, R, Makowski, D, Siani, A, Wahlstroem, H, Aguilera, J, Dorne, J-L, Fernandez Dumont, A, Hempen, M, Valtueña Martínez, S, Martino, L, Smeraldi, C, Terron, A, Georgiadis, N and Younes, M, 2017. Scientific Opinion on the guidance on the use of the weight of evidence approach in scientific assessments. EFSA Journal 2017;15(8):4971, 69 pp. <https://doi.org/10.2903/j.efsa.2017.4971>



## Literature Search – Flexible record

### Section 13 - Literature Data

See instructions [above](#) in the **active substance dataset**.

## REFERENCED ENTITIES AND COMMON BLOCKS

### Reference substance

#### Purpose

A 'Reference substance' entity enables you to store identification information on a given substance or a given constituent of a substance, such as chemical names (EC name, CAS name, IUPAC name, synonyms, etc.), identity codes (EC number, CAS number), molecular and structural information.

**Chemicals:** Identity of the active substance – ISO common name and synonyms, Chemical name in accordance with IUPAC and CA nomenclature, CAS Reg number EC number, molecular and structural formula, molar mass.

**Microorganisms:** Identity of the microorganism – Name, taxonomy, species description and strain characterisation.

The Reference substance inventory gives the possibility to use the same information for the same chemical/microorganism identity avoiding duplicate data entry and to ensure that the data is centrally managed and updated. Each reference substance can be linked to an unlimited number of substance or mixture datasets. Reference substance/s can be exported and shared from the Reference substance entity manager.

| Name                            | Instructions  | Data Type       |
|---------------------------------|---|-----------------|
|                                 | <p>Use this field to set flags for confidentiality and regulatory purpose(s).</p> <p>For further information see "Confidentiality of dossiers submitted via IUCLID - practical instructions for applicant".</p> <p><b>Important:</b> Setting this flag ensures that substance identity is not published in any IUCLID document where a link to the reference substance is used.</p> <p>This should be used for confidential substances included mixture or substance composition documents.</p> | Confidentiality |
| <b>Reference substance name</b> | <p>Indicate name of substance, microorganism, metabolite, residue, impurity or other substance included in the dossier.</p> <p>For the active substances the ISO common name or proposed ISO name should be reported.</p>   | Multi-line text |
| <b>IUPAC name</b>               | <p>IUPAC name (Note that, if a name following the IUPAC nomenclature cannot be derived, you should still provide a name defining the chemical nature of the substance).</p> <p>For <b>micro-organisms</b> the scientific name (species and strain) should be reported in this field.</p>  | Multi-line text |





|   |  |                        |
|---|--|------------------------|
| <b>Description</b>  | <p>Specify any additional information relevant for the description of the reference substance in this field</p> <p>For <b>micro-organisms</b> the taxonomic information family, genus, species, strain, serotype, pathovar or any other denomination relevant to the micro-organism should be reported.</p> <p>In addition it should be indicated whether the microorganism</p> <ul style="list-style-type: none"> <li>- is indigenous or non-indigenous at the species level to the intended area of application</li> <li>- is a wild type</li> <li>- is a spontaneous or induced mutant</li> <li>- has been modified using techniques described in Part 2 of Annex IA and in Annex IB to Directive 2001/18/EC (*) of the European Parliament and of the Council</li> </ul> | Text template          |
| <b>Inventory</b>  |  | Header 1               |
| <b>Inventory number</b>                                   | This field can be used to select existing substances with pre-assigned EC numbers.   | Entity reference list  |
| <b>No inventory information available - Justification</b> | Not relevant for EU PPP  | Open list with remarks |
| <b>CAS number</b>   | Indicate CAS Registry Number   | Text                   |
| <b>CAS name</b>   | Indicate CAS name  | Multi-line text        |
| <b>CIPAC number</b>                                       | Indicate CIPAC number  |                        |
| <b>Synonyms</b>   |  | Header 1               |
| <b>Synonyms</b>   | <p>Provide in this table synonym identifiers of the reference substance, as appropriate.</p> <p>For <b>microorganisms</b> alternative names should be added in the table and the accession number/s from internationally recognised culture collections.</p> <p>EFSA paramCode should be added in the table.</p>   |                        |
|   | <p>Use this field to set flags for confidentiality and regulatory purpose(s).</p> <p>For further information see "Confidentiality of dossiers submitted via IUCLID - practical instructions for applicant".</p>  | Confidentiality        |
| <b>Identifier</b>   | Select the type of identifier you wish to provide using the picklist. If none of pre-defined items apply, select 'other:'. A text field is then activated next to the list field in which you can specify the type of identifier you wish to provide.  | Open list              |
| <b>Identity</b>   | Enter here the identity (name, number, code) corresponding to the identifier type selected.  | Text area              |
| <b>Remarks</b>  | Provide additional information if relevant   | Text                   |



|   |   |                        |
|---|---|------------------------|
| <b>Molecular and structural information</b> |   | Header 1               |
|   | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see "Confidentiality of dossiers submitted via IUCLID - practical instructions for applicant".      | Confidentiality        |
| <b>Molecular formula</b>                    | Molecular formula (if a molecular formula cannot be derived from the reference substance, a justification should be indicated in the Remarks field at the bottom of the section)                              | Multi-line text        |
| <b>Molecular weight</b>                     | Molecular weight should be reported as a single numeric value   | Range (Decimal)        |
| <b>SMILES notation</b>                      | The SMILES notation should be in the canonical form <a href="https://cactus.nci.nih.gov">https://cactus.nci.nih.gov</a> or generated by ChemSketch or ChemDraw  | Multi-line text        |
| <b>InChI</b>                                | The IUPAC international chemical identifier <a href="https://cactus.nci.nih.gov">https://cactus.nci.nih.gov</a> or generated by ChemSketch or ChemDraw  | Multi-line text        |
| <b>Structural formula</b>                   | The structural formula for the active substance <a href="https://chem.nlm.nih.gov/chemidplus/structure3D/viewer/">https://chem.nlm.nih.gov/chemidplus/structure3D/viewer/</a><br><br>ChemSketch, ChemDraw     | Image                  |
| <b>Remarks</b>                              | Provide additional information if relevant. Such information may for example include an explanation to why molecular and structural information could not be provided due to the nature of the substance.     | Text area              |
| <b>Chemical structure files</b>             | Upload chemical structures files (both machine readable and an image file)<br><br>For machine readable files the format should be .sk2 or .cdx or .mol<br><br>For image files the format should be jpg or png |                        |
| <b>Structure file</b>                       | Select file to be attached  | Single file attachment |
| <b>Remarks on structure file</b>            | Provide additional information if relevant.   | Text                   |
| <b>Related substances</b>                   | Not relevant for EU PPP   | Header 1               |
| <b>Identifier</b>                           | Not relevant for EU PPP   | Open list              |
| <b>Identity</b>                             | Not relevant for EU PPP   | Text area              |
| <b>Remarks</b>                              | Not relevant for EU PPP   | Text                   |
| <b>Relation</b>                             | Not relevant for EU PPP   | Open list              |
| <b>Group / category information</b>         | Insert information about chemical groups and categories the substance belongs to.   | Multi-line text        |



**Links to supporting material:**

- [CIPAC number: https://cipac.org/index.php/code-numbers/navigate-code-numbers](https://cipac.org/index.php/code-numbers/navigate-code-numbers)  
<https://www.cas.org/support/documentation/chemical-substances>  
<http://doi.org/10.5281/zenodo.3243215> - European Food Safety Authority. (2020). Harmonized terminology for scientific research [Data set]. Zenodo.  
<https://iupac.org/who-we-are/divisions/division-details/inchi/>  
<https://www.iso.org/committee/50160/x/catalogue/>  
[http://www.alanwood.net/pesticides/index\\_cn\\_frame.html](http://www.alanwood.net/pesticides/index_cn_frame.html)  
<https://cactus.nci.nih.gov/chemical/structure/>  
<https://iuclid6.echa.europa.eu/inventories-iuclid>

**Legal entity**

**Purpose**

Submissions require a Legal entity which must be defined including contact details prior to submission. A Legal Entity (LE) may represent anything between a complex business structure and a simple organised business, for example, a corporation, a company, or a single person. LEs are identified by their name, universally unique identifier (UUID), address, country, and general contact information. You can create a LEO via ECHA accounts.

A legal entity should identify in an unambiguous manner a company or organisation with a role in the submission of dossiers. The submissions attributed to a specific company/applicant should all have the same legal entity. The same applies to third party consultants, they should also maintain a unique legal entity that can be included in the 'Third Party' field.

Information provided in the Legal entity should be similar to that provided in a publicly accessible company register. It should contain the address and contact details, including fax and phone number as well as e-mail address, of the legal person.

Note: information provided in the Legal Entity is published. Hence, no personal information relating to natural persons should be provided under these fields.

Note that information regarding the Contact person is to be managed in the Contact entity manager. The information provided in the Contact entity is by default not published.

If you are installing a local version of IUCLID, a LEO will have been created during the installation of the client version of IUCLID. You can then export it from IUCLID and import it to you ECHA account. If you have an ECHA account and define a LEO there, you can export the LEO and import it to your own local IUCLID installation.

You can add more legal entities within the IUCLID application via the inventory.

| Name                       | Instructions   | Data Type       |
|----------------------------|--|-----------------|
| <b>General information</b> |  | Tab             |
| <b>Legal Entity name</b>   | Indicate name of the legal entity i.e. Company name  | Text            |
| <b>Legal entity type</b>   | Select one legal entity type from the dropdown menu. If other, please include an explanation in the free text field below. | List (picklist) |
| <b>Remarks</b>             | Add any additional information on the legal entity, if relevant  | Text            |
| <b>Other names</b>         |  | Block of fields |



|                                 |   |                 |
|---------------------------------|---|-----------------|
|                                 |   | (repeatable )   |
| <b>Name</b>                     | Other names can be specified and if needed these names can be marked as confidential  |                 |
| <b>Address</b>                  |   | Header 1        |
|                                 | See Confidentiality Requests  | Confidentiality |
| <b>Address 1</b>                | Street address of the legal entity  | Text            |
| <b>Address 2</b>                | Secondary address, if relevant  | Text            |
| <b>Postal Code</b>              | Postal code of the legal entity   | Text            |
| <b>Town</b>                     | Town of the legal entity  | Text            |
| <b>Region/State</b>             | Region/State of the legal entity  | Text            |
| <b>Country</b>                  | Select the country in which the legal entity is located from the dropdown menu. If other, enter the appropriate country information in the free text field below.   | List (picklist) |
| <b>Phone</b>                    | Phone number of the legal entity (this field must not contain personal data, therefore e.g. the number of a switchboard should be provided)   | Text            |
| <b>Fax</b>                      | Fax number of the legal entity (this field must not contain personal data)  | Text            |
| <b>Email</b>                    | Email address of the legal entity (this field must not contain personal data, therefore e.g. the email address of a functional mailbox should be provided)  | Text            |
| <b>Website</b>                  | Legal entity website  | Text            |
| <b>Legal entity identifiers</b> | Optional: Other identifiers can be reported. Legal entity identifiers, Regulatory programme identifiers, and Other IT system identifiers. Each type contains a menu from which relevant sub-types of identifier can be selected. For example, Legal entity has an option for DUNS (Data Universal Numbering System for identification of a Legal Entity.<br><br>Click on New Item and set values. See Confidentiality Requests. | Tab             |
| <b>Contact information</b>      | See instructions reported below under "Contact entity" common block   | Tab             |

#### Links to supporting material:

<https://echa.europa.eu/support-echa-accounts-and-eu-login>

[https://iuclid6.echa.europa.eu/documents/21812392/22308501/iuclid\\_functionalities\\_html\\_en.pdf/9d01cb53-902d-dbb6-fb00-fa141688c395](https://iuclid6.echa.europa.eu/documents/21812392/22308501/iuclid_functionalities_html_en.pdf/9d01cb53-902d-dbb6-fb00-fa141688c395)

[https://echa.europa.eu/documents/10162/21721613/echa\\_accounts\\_en.pdf](https://echa.europa.eu/documents/10162/21721613/echa_accounts_en.pdf)

<https://www.youtube.com/watch?v=4JGsQUbGYqw>



### **Contact entity**

Note: contact entities must never be claimed confidential (using the confidentiality flags in the documents where they are referenced) because they are not published by default.

| <b>Name</b>                | <b>Instructions</b>   | <b>Data Type</b> |
|----------------------------|---|------------------|
| <b>General information</b> |   | Header 1         |
| <b>Contact type</b>        | Select one contact type from the dropdown menu. If other, enter the appropriate contact type in the free text field below.  | Open list        |
| <b>Last name</b>           | Last name of the contact person. Note that this field is mandatory  | Text             |
| <b>First name</b>          | First name of the contact person.   | Text             |
| <b>Organisation</b>        | Name of the Organisation. Note that this field is mandatory   | Text             |
| <b>Department</b>          | e.g. scientific department.   | Text             |
| <b>Title</b>               | Title of the contact person (e.g. Mr.).   | Text             |
| <b>Phone</b>               | Phone number of the contact person.   | Text             |
| <b>Mobile</b>              | Mobile phone number of the contact person.  | Text             |
| <b>Fax</b>                 | Fax number of the contact person.   | Text             |
| <b>Email</b>               | Email address of the contact person.  | Text             |
| <b>Address 1</b>           | Street address of the contact person.   | Text             |
| <b>Address 2</b>           | Secondary address, if relevant  | Text             |
| <b>Postal code</b>         | Postal code of the street address of the contact person.  | Text             |
| <b>Town</b>                | Town of the contact person.   | Text             |
| <b>Region / state</b>      | Region/State of the contact person.   | Text             |
| <b>Country</b>             | Select the country in which the contact person is located from the dropdown menu. If other, enter the appropriate country information in the free text field below. | Open list        |
| <b>Remarks</b>             | Any additional information, if relevant.  | Text area        |

### **Literature reference**

#### **Purpose**

The literature Reference entity should be used for storage of bibliographic metadata with attached documents including full study reports and published scientific papers and for linking studies to the Notification of Studies Database.

It is important to create a Literature reference for all studies used as evidence in the dossier. This would also include all relevant studies selected for full-text assessment identified from a literature search (when required). The literature Reference entity should always be linked in the "data source" section of Endpoint Study Records.

#### **Additional considerations**

The applicant must ensure that terms and conditions asserted by any rightsholder of studies, information or data submitted to EFSA are fully satisfied. The applicant may consult with copyright licensing authorities (i.e. at national level) for guidance on purchasing the appropriate



licenses to provide studies, information or data to EFSA, taking into account the proactive disclosure requirements as detailed in the relevant section of this manual. For publications already available to the public upon payment of fees (e.g. studies published in scientific journals) for which the applicant does not have or cannot obtain IPRs for the purposes of the proactive public disclosure requirements, the applicant must provide (a) a copy of the relevant publications along with the relevant bibliographic references/ citations for scientific assessment purposes only, in the confidential version of its application and (b) these relevant bibliographic references/citations where these publications are available to the public in the non-confidential version of its application for public dissemination on the OpenEFSA portal.

| Name                        | Instructions   | Data Type       |
|-----------------------------|--|-----------------|
| <b>General information</b>  |  | Header 1        |
| <b>Reference Type</b>       | <p>Select 'study report' for a full study report used as a data source for an endpoint study record.</p> <p>Select 'publication' for relevant studies identified from a literature search to address data requirements.</p> <p>Select 'other company data' to characterise any unpublished information from a company other than a study report.</p> <p>For any other select 'other:' and specify.</p> <p><b>Only</b> in case of a publication already available to the public (studies published in scientific journals or similar publications) but subject to access restrictions (e.g. upon payment of a fee) for which the applicant does not have or cannot obtain IPRs for the purposes of the proactive public disclosure requirements, select 'publication (copyright not owned for reproduction)'.</p> | Open list       |
| <b>Title</b>                | Report title of the study report, publication or other report type   | Text            |
| <b>Author</b>               | Report author names for the study. These will be redacted from the published dossier for unpublished toxicology studies.   | Multi-line text |
| <b>Year</b>                 | The year the report must be reported (this is used for sorting and filtering)  | Integer         |
| <b>Bibliographic source</b> | For published studies information on the journal and edition should be completed. This should include the DOI (Digital Object Identifier)  | Text            |
| <b>Testing facility</b>     | For study reports information on the testing facility should be completed. This information will not be published for studies involving tests on vertebrate animals.   | Text            |
| <b>Report date</b>          | Report date or publication date in full. For study reports this must be after the date the study was notified in the notification of studies database  | Date            |
| <b>Report number</b>        | Specify the report number allocated by the testing laboratory. This information will not be published for studies involving tests on vertebrate animals.   | Text            |
| <b>Study sponsor</b>        | Information on the source of funding of the study can be provided  | Text            |



|                                  |  |           |
|----------------------------------|--|-----------|
| <b>Study number</b>              | Report the company identifier, if it differs from the laboratory report number   | Text      |
| <b>Other study identifier(s)</b> | Applies to study reports.<br>When other study identifiers are available e.g. NOS number or MAP number, click on 'New item' and compile relevant fields accordingly.  |           |
| <b>Study ID type</b>             | For all studies carried out or commissioned after March 2021 for which the study notification requirement applies:<br><br>- Select 'Notification of studies (NoS) ID and report the NoS ID in the 'Study ID' field below.<br><br>For studies carried out or commissioned before March 2021 Select 'Notification of studies (NoS) ID and provide a justification for not providing a NoS ID in the 'Remarks' field e.g. "Study was commissioned before 27 March 2021".<br><br>For rat/plant/livestock metabolism studies:<br><br>- if a MSS/DER composer file is already available in the existing collections of maps (and therefore is not attached to the dossier), select 'other' and specify "Unique Individual MetaPath File Number (MAP-number/card number)" in the free text field. Optionally, if a Master Record Identification (MRID) is available for the existing MSS/DER composer file, create an additional item and select "Master Record Identification (MRID)".<br><br>- If a MSS/DER composer file is not available in the collection of maps and is submitted within the dossier, leave this field empty. | Open list |
| <b>Study ID</b>                  | Report the relevant identification number (e.g. the NoS ID generated from the NoS database).   | Text      |
| <b>Remarks</b>                   | If the study was not notified provide a justification to explain why the study is included in the dossier to meet the data requirements but was not included in the Notification of Studies database. Example 'Study commissioned before 27 March 2021'.   | Text area |
| <b>Attachments</b>               |  | Header 1  |
| <b>Attachment type</b>           | Select 'full study report' to identify the original study report. Only one set of attachments (original and sanitised) can be set to 'full study report'.  | Open list |



|  |   |                               |
|--|---|-------------------------------|
|  | <p>Use 'other' to indicate the type of content of the other sets of attachments e.g. addendum.</p> <p>For rat/plant/livestock metabolism studies:</p> <ul style="list-style-type: none"> <li>- if a MSS/DER composer file is newly created for this dossier (because it was not available in the existing collections of maps), select "other" and specify "MSS composer file" or "DER composer file".</li> <li>- if a MSS/DER composer file is already available in the existing collections of maps, only the reference to the Individual MetaPath File Number (MAP-number) is required (cf. above instructions in "Other study identifier(s)").</li> </ul>   |                               |
| <p><b>Attached confidential document</b></p> | <p>If the applicant has selected the option "publication (copyright not owned for reproduction)" from the drop-down list pertaining to the field "GeneralInfo.ReferenceType",</p> <p>a full copy of the relevant publication in PDF format needs to be provided under the field "Attached confidential document". For the purposes of proactive publication, it is sufficient to provide the following bibliographic metadata in the literature reference entry enabling the retrieval of the published literature online: title, author, year and bibliographic source . No public version of the published literature must be provided.</p> <p>If the applicant has not selected the option "publication (copyright not owned for reproduction)" from the drop-down list pertaining to the field "GeneralInfo.ReferenceType", the original file only needs to be attached here if the non-confidential file uploaded under "Attached (sanitised) documents for publication" contains redactions. If a file is uploaded under this field, (a) confidentiality claim(s) must be submitted for each part of the file considered confidential via the related endpoint record and the information claimed confidential must be clearly boxed or earmarked consistently with the redactions applied in the corresponding non-confidential file. This file will not be published.</p> <p>For rat/plant/livestock metabolism studies:</p> <ul style="list-style-type: none"> <li>- if a MSS/DER composer file is newly created for the dossier (because it was not available in the existing collections of maps) the newly created MSS/DER composer file should be attached here.</li> <li>- if a MSS/DER composer file is already available in the existing collections of maps it is not required to be attached here.</li> </ul> | <p>Single file attachment</p> |






|   |   |                               |
|---|---|-------------------------------|
| <p><b>Attached (sanitised) document publication for</b></p> | <p>The applicant has selected the option “publication (copyright not owned for reproduction)” from the drop-down list pertaining to the field “GeneralInfo.ReferenceType”:</p> <p>Only a citation including the abstract of the relevant publication should be uploaded in this field. The uploaded attachment will be included in the published dossier.</p> <p>The applicant has not selected the option “publication (copyright not owned for reproduction)” from the drop-down list pertaining to the field “GeneralInfo.ReferenceType”:</p> <p>any document uploaded here must be uploaded in their public (non-confidential) version. The public version will be published once the dossier has been considered valid/admissible. All elements therein claimed confidential should be sanitised. Save for the elements blackened, if applicable, content and layout-wise the public version must be fully identical with the confidential version. Upon conclusion of the confidentiality assessment, if applicable, a revised public version removing the redactions relating to confidentiality requests that were rejected in part or in full must be uploaded here.</p> <p>Other supporting documentation e.g. addendum can be uploaded.</p> <p>For rat/plant/livestock metabolism studies:</p> <ul style="list-style-type: none"> <li>- if a MSS/DER composer file is newly created for the dossier (because it was not available in the existing collections of maps) and confidentiality requests are made on the MSS.xml /DER.xml file (regarding confidential business information (CBI) or personal data (PD), a sanitised pdf version of the word report generated from the MSS/DER render function, where the items for which a confidentiality request has been submitted are blackened, must be attached here (in case no confidentiality requests are submitted with regard to the MSS.xml /DER.xml file a pdf version without blackening for proactive publication must be attached here).</li> <li>- if a MSS/DER composer file is already available in the existing collections of maps it is not required to be attached it here.</li> </ul> | <p>Single file attachment</p> |
| <p><b>Remarks</b></p>                                       | <p>Additional remarks on the uploaded literature reference content can be added here.</p> <p><b>Note:</b> if an applicant provides a sanitised/public attachment which contains personal data (and this is not an issue because the document is already publicly available), this should be mentioned in the Remarks field to avoid misunderstanding.</p>   | <p>Text</p>                   |



**Links to supporting material:**

Practical arrangement for Notification of studies:  
<https://www.efsa.europa.eu/en/stakeholders/transparency-regulation-implementation>

UUID: b7a08e40-7dbd-4591-9d54-fec23c7bda03 

**General information**

**Reference Type**  
study report

**Title\***  
An avian oral pathogenicity and toxicity study in the bobwhite

**Author**  
An author

**Year**  
1993

**Bibliographic source**  
None




**Testing facility**  
Laboratory A, Country B

**Report date**  
1993-06-23




**Report number**  
None

**Study sponsor**  
Study sponsor

**Study number**  
xxxxx123456

**Other study identifier(s)**  New item  Import file 

| # | Study ID type                    | Study ID                  | Remarks |
|---|----------------------------------|---------------------------|---------|
| 1 | Notification of Studies (NoS) ID | EFSA_2021_793478584756987 | NOS_ID  |

**Attachments**  New item  Import file 

| # | Attachment type   | Attached confidential document | Attached (sanitised) documen... |
|---|-------------------|--------------------------------|---------------------------------|
| 1 | other: Raw data   | None                           | BirdMeasuredEndpoints.csv       |
| 2 | full study report | Full original study report.pdf | Sanitised Study Report.pdf      |

**Remarks**  
None



## **Test material**

### **Purpose**

For the **product**: A detailed description of the composition used shall be provided.

**Chemicals**: The test material used should be essentially the same, for the purposes of toxicological, ecotoxicological, environmental and residue testing and assessment. In the case of studies in which dosing extends over a period (for example repeated dose studies), dosing shall be done using a single batch of active substance if stability permits. When tests shall be conducted using purified active substance the purity must be ( $\geq 980$  g/kg) of stated specification otherwise a justification shall be provided in cases where the degree of purity achieved is less than 980 g/kg.

In case of renewals, if the new (proposed) representative formulation for the renewal is different to the former (reference) formulation, it should be demonstrated by the applicant that differences are minor for the different sections (ecotox, tox...) in case that data from the former (reference) formulation should also be used for the assessment of the new (proposed) formulation.

Test material must clearly identify the batches used as test material in the different studies included in the dossier.

To facilitate the assessment of the compliance of the batches used in the (eco)toxicological studies with the technical specification (Template 1.1)

**Micro-organisms**: Where studies are conducted using micro-organisms produced in the laboratory or in a pilot plant production system, the studies must be repeated using micro-organisms as manufactured, unless it can be demonstrated that the test material used is essentially the same for the purposes of the testing and assessment

| <b>Name</b>                                    | <b>Instructions</b>   | <b>Data Type</b>               |
|--|---|--------------------------------|
| <b>Name</b>                                    | Indicate number of the batch  | Multi-line text                |
| <b>Composition</b>                             |   | Header 1                       |
| <b>Type</b>                                    | Indicate for each component if it is a constituent, impurity or additive.   | Closed list                    |
| <b>Reference substance</b>                     | Link to the reference substance for the component.  | Entity reference field         |
| <b>Concentration</b>                           | Indicate concentration of the component. For the chemical active substance and impurities this should be in g/kg.   | Range with open list (Decimal) |
| <b>Remarks</b>                                 | Specific remarks related to the concentration of the component can be reported in this field.   | Multi-line text                |
| <b>Composition / purity: other information</b> | 'analytical grade' or 'technical grade' can be used to provide a qualitative indication of the purity for active substances where quantification is not technically possible. | Open list with remarks         |
| <b>Other characteristics</b>                   |   | Header 2                       |
| <b>Test material form</b>                      | Select the form of the test material.   | Open list with remarks (2000)  |
| <b>Details on test material</b>                | Provide the expiry date.<br>Differences between non-radio labelled and radio labelled can be indicated in this field.   | Text template                  |



|  |  |               |
|--|--|---------------|
| <b>Confidential details on test material</b> | The percent difference in concentration from the reference specification can be indicated for the active substance and impurities. | Text template |
|--|--|---------------|

**Links to supporting material:**

[https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides\\_guidance\\_equivalence-chemical-substances\\_en.pdf](https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_guidance_equivalence-chemical-substances_en.pdf)

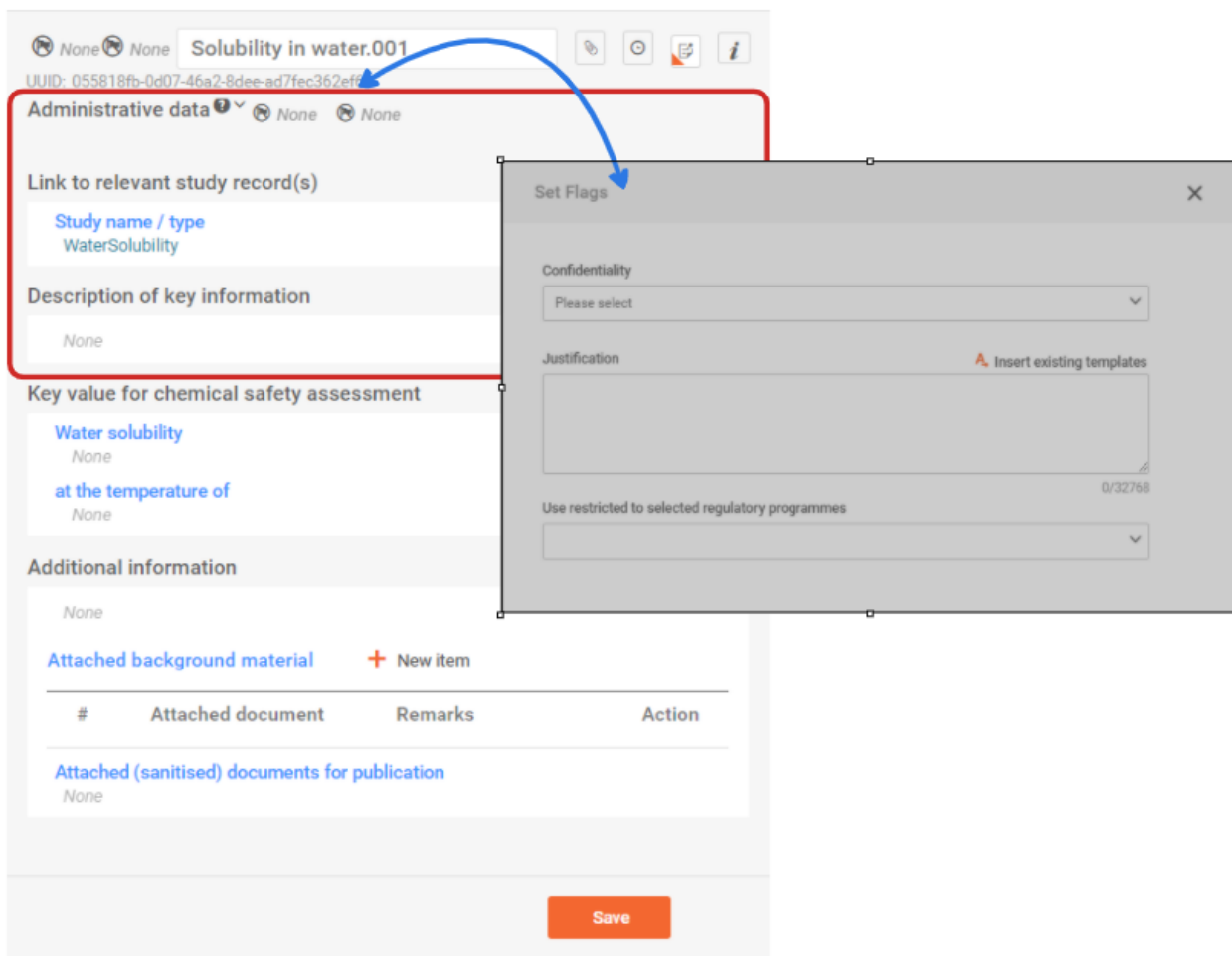
Template 1.1- Template for presentation the assessment for the equivalence of batches (<https://doi.org/10.5281/zenodo.4557366>)



## Endpoint Summaries – Common blocks

### Administrative data

| Name                                    | Instructions  | Data Type   |
|---|---|---|
| <b>Administrative data</b>              |   | Header 1  |
|   | Use this field to set flags for confidentiality and regulatory purpose(s).<br><br>For further information see:<br><br>"User Guide: submission of confidentiality requests" available under the <a href="#">IUCLID software section of the Toolkit page</a> "  | Confidentiality   |
| <b>Link to relevant study record(s)</b> |   | Header 1  |
| <b>Link to relevant study record(s)</b> | Provide here the link(s) to the study record(s) supporting the choice of the key value for assessment.<br><br>The study(ies) giving rise to the highest concern should be chosen. The following factors, among others, should be taken into account when the study record is selected: quality of the study (e.g. Klimisch score), type of study (e.g. duration, experimental design, observed effects), whether or not the study is GLP. Please provide your rationale for the selection of the relevant study record in the field "Additional information".   | Cross-reference: ENDPOINT_STUDY_RECORD. AnalyticalMethods |
| <b>Description of key information</b>   |   | Header 1  |
|   | If all key information is provided in the linked study records, this field can be left empty. In case there is no linked study record, or in case you want to point to specific information in the linked study record, provide a summary of the key information related to the studies here.<br><br>The summary could include, for example: <ul style="list-style-type: none"> <li>- the test type</li> <li>- the test guideline used (and any deviations from it)</li> <li>- the test organism</li> <li>- the exposure duration</li> <li>- other contextual information on the origin of the key value</li> </ul> | Rich text area  |



### **Additional information**

| Name                          | Instructions   | Data Type      |
|-------------------------------|--|----------------|
| <b>Additional information</b> |  | Header 1       |
|                               | <p>Provide information related to the assessment of the endpoint, for example:</p> <ul style="list-style-type: none"> <li>- any endpoint specific information relevant for the interpretation of the results</li> <li>- the rationale for the choice of the key study(ies) and the choice for the key value that characterises the endpoint</li> <li>- information on the potential data gaps and the quality of the whole database for this endpoint</li> <li>- relevance of the results for the risk assessment (e.g. in case no effects have been observed at the limit dose)</li> <li>- the rationale for any user-derived values for the key result for assessment (for example, if a corrected value or a geometric mean is reported)</li> <li>- any additional information such as epidemiological data or higher tier testing</li> </ul> | Rich text area |



|   |  |                        |
|---|--|------------------------|
|   | (e.g. mesocosm studies or field studies) when relevant<br>If there is no additional information to be reported, this field may be left empty.  |                        |
| <b>Attached background material</b>                   |  |                        |
| <b>Attached confidential document</b>                 | Provide any additional documents relevant for the assessment of the endpoint, for example, a scientific publication. Provide the original version of any document that contains confidential material. | Single file attachment |
| <b>Attached (sanitised) documents for publication</b> | If required, public (non-confidential) versions of other relevant documents can be attached. These attachments should be sanitised, if needed.   | Single File Attachment |
| <b>Remarks</b>  | As appropriate, include remarks, e.g. a short description of the content of the attached document, if the file name is not self-explanatory.   | Text                   |
| <b>Attached background material</b>                   |  |                        |

Additional information

None

[Attached background material](#)

[+ New item](#) [📄 Import file](#) [▼](#)

| # | Attached confidential docu... | Attached (sanitised) docum...             | Remarks                       |
|---|-------------------------------|---|-------------------------------|
| 1 | None                          | <a href="#">Animal model 2017 (2).xls</a> | OECD Animal burden calculator |



## Endpoint studies – Common blocks

### Administrative data

| Name                       | Instructions  | Data Type                |
|----------------------------|---|--------------------------|
| <b>Administrative data</b> |   | Header 1                 |
|                            | <p>Use this field to set flags for confidentiality and regulatory purpose(s).</p> <p>For further information see “Confidentiality of dossiers submitted via IUCLID - practical instructions for applicant”.</p>   | Confidentiality          |
| <b>Endpoint</b>            | <p>From the picklist select the relevant endpoint addressed by this study summary. An endpoint must always be selected when entering data into an Endpoint Study Record.</p> <p>In some cases, there is only one endpoint title, which may be entered automatically depending on the software application.</p> <p>If multiple study types are covered by the same data entry form, the specific study type should be selected. If none matches, select the more generic endpoint description '&lt;Generic endpoint&gt;, other' (e.g. Skin irritation / corrosion, other) and give an explanation in the adjacent text field. The generic endpoint title reflects the title of the corresponding OECD Harmonised Template (OHT).</p> <p>Please note: For (Q)SAR studies, if an 'in silico' option does not exist, the generic endpoint title should be selected, normally with no need to fill in the adjacent text field, as '(Q)SAR' needs to be indicated in field 'Type of information' and the model should be described in field 'Justification of non-standard information' or 'Attached justification'. A specific endpoint title may be used, if addressed by the (Q)SAR information, i.e. the model behind has been validated by experimental data addressing this endpoint.</p> <p>Note: For the purpose of OHTs, an 'endpoint' is defined in the rather broad sense as an observable or measurable inherent property of a chemical substance which may be specified by the relevant regulatory framework as 'information requirement' (e.g. Boiling point, Sub-chronic toxicity: oral, Fish early-life stage toxicity). In a narrower sense, the term '(eco)toxicity endpoint' refers to an outcome or effect observed in a study.</p> | Closed list with remarks |
| <b>Type information of</b> | <p>Indicate 'experimental study' or 'read-across from similar mixture/product' or 'read-across from supporting substance (structural analogue or surrogate)' or 'read-across based on grouping of substances (category approach)' unless the information is retrieved from a literature search in this case indicate 'other': 'Study from literature search'.</p>   | Open list with remarks   |





|                                 |  |             |
|---------------------------------|--|-------------|
| <b>Adequacy of study</b>        | <p>Indicate the purpose of the record selecting the adequacy in terms of usefulness for fulfilling the information requirements for the hazard/risk assessment.</p> <ul style="list-style-type: none"> <li>• A <b>key study</b> is a study that has been identified as most suitable to describe an endpoint from the perspective of quality, completeness and representativeness of data.</li> <li>• A <b>supporting study</b> provides some additional information to support the conclusions from the key study/ies or the weight of evidence approach.</li> <li>• A <b>weight of evidence</b> is selected to indicate that an endpoint study record contributes to a weight of evidence approach.</li> <li>• <b>Disregarded due to major methodological deficiencies</b> is a study that is available to the applicant but is not taken into account because of lack of reliability or because the study is obsolete.</li> <li>• <b>Other information</b> is other available information which does not directly contribute to the conclusions for the setting the endpoint.</li> </ul> <p>For each data requirement at least one 'key study' or two records identified as 'weight of evidence' is expected unless data waiving has been indicated.</p> <p>Where 'key study' or 'weight of evidence' is selected, the Validation assistant checks for document completeness.</p> | Closed list |
| <b>Robust summary study</b>     | Set this flag if relevant for the respective regulatory programme. It is used as filter for printing or exporting records flagged as 'Robust Study Summary' or in combination with 'Adequacy of study'. If not relevant, disregard this field.   | Check box   |
| <b>Used for classification</b>  | <p>Set this flag if relevant for the respective regulatory programme or if otherwise useful as filter for printing or exporting records flagged as 'Used for classification'.</p> <p>If not relevant, disregard this field.</p> <p>Not relevant for micro-organisms since they do not fall under the CLP Regulation.</p>   | Check box   |
| <b>Used for SDS</b>             | Not relevant for EU-PPP  | Check box   |
| <b>Study period: start date</b> | <p>Indicate the start date of the study.</p> <p>Note: for 'Notified' studies this should be after the date of notification.</p>  | Text        |
| <b>End date</b>                 | Indicate the end date of the study   | Text        |
| <b>Remark</b>                   | Add remarks if relevant  | Text        |
| <b>Reliability</b>              | <p>The term reliability defines the inherent quality of a test report or publication.</p> <p>In field Reliability, enter a reliability score as judged at your discretion, i.e. 1 (reliable without</p>  | Open list   |



|   |   |   |
|---|---|---|
|   | <p>restriction), 2 (reliable with restrictions), 3 (not reliable) or 4 (not assignable).</p> <p>The "other:" option may be selected if this scoring system is not used.</p> <p>Studies indicated as key study must have a reliability score of 1 or 2.</p> <p>The validation check will verify consistency between 'Adequacy of study' field and 'Reliability' field (EU_PPP_007, EU_PPP_003).</p> <p>Further explanations on the reliability assessment can be provided in the 'Rationale for reliability incl. deficiencies' field.</p> <p>In terms of 'Acceptability / Reliability'</p> <p>Key studies and weight of evidence studies are considered to have 'Acceptability / Reliability' = Yes.</p> <p>A supporting study is considered to be 'Supportive only'</p> <p>The others are considered to have 'Acceptability / Reliability' = No.</p> |   |
| <b>Rationale reliability deficiencies for incl.</b> | <p>Describe the rationale for the reliability score chosen considering the possible impact of deficiencies and/or implications on test results.</p> <p>The deviations from the guideline should be described in 'Test guideline' section but the impact of these deviations should be considered in the rationale for reliability.</p> <p>When assessing an older study against the current guideline, the current guideline can be specified in this field.</p> <p>Standard justifications from picklist may be sufficient in some cases. Otherwise select 'Other' and provide for additional explanation in the 'Remarks' field.</p>  | Open list with remarks (32000)              |
| <b>Data waiving</b>                                 | <p>If no 'key study' or 'weight of evidence' study is provided for a data requirement, then data waiving must always be completed. The validation check will flag when this field must be completed (EU_PPP_013).</p> <p>Select the reason for data waiving or other and provide a justification in 'Justification for data waiving' field.</p>   | Closed list                                 |
| <b>Justification data waiving for</b>               | <p>In addition to the more generic justification selected in the preceding field 'Data waiving', it is possible to provide here a more detailed justification.</p> <p>To this end one of the specific standard phrase(s) can be selected if it/they give an appropriate rationale of the description given in the preceding field 'Data waiving'.</p>   | Multi select open list with remarks (32000) |



|  |  |                          |
|--|--|--------------------------|
|  | <p>If you select the option 'Other' you need to indicate the type of data waiving you are submitting</p> <p>Validation check will flag incomplete compiling (EU_PPP_002).</p>  |                          |
| <b>Justification type information for of</b> | <p>This field can be used for entering free text. Please complete field only when submitting a waiving justification.</p>  | Text template            |
| <b>Attached justification</b>                |  | Header 2                 |
| <b>Attached justification</b>                | <p>A document can be uploaded to support data waiving, but it is recommended to complete in full the data waiving fields.</p> <p>Upload file by clicking the upload icon.</p>  | Single file attachment   |
| <b>Reason / purpose</b>                      | <p>Indicate the reason for / purpose of the attached document. Select the relevant item from the picklist or, if none applies, select 'justification, other:' and specify.</p>   | Closed list with remarks |
| <b>Cross-reference</b>                       | <p>In case the study has been reported for another data requirement use cross reference to link to the study to this section.</p> <p>The creation of duplicate versions of endpoint studies should be avoided.</p> <p>Cross reference should be used to link to an 'Analytical Methods' document when a specific method is used in a study. This allows an overview of methods used in different studies e.g. toxicology and ecotoxicology.</p>  |                          |
| <b>Reason / purpose for cross-reference</b>  | <p>Select the appropriate reason of the cross-reference, i.e.</p> <ul style="list-style-type: none"> <li>- adverse outcome pathway (AOP) (in case the information is related to a key event that is part of an AOP). Consult the AOP wiki at: <a href="https://aopwiki.org">https://aopwiki.org</a>) and provide the reference in the remarks field</li> <li>- assessment report (for referring to a record that contains an assessment report as attachment)</li> <li>- data waiving: supporting information (for referring to a record containing relevant endpoint information that is used to justify a data waiver)</li> <li>- defined approach for combining with results from another methods (in vitro, in chimico, in silico)</li> <li>- exposure-related information (for referring to a record containing exposure-related information that is used for instance to justify a data waiver)</li> <li>- read-across source (for linking to another study summary used for read-across. This can be useful in cases where results are derived from one or several read-across sources and recorded in a separate (target) study summary.)</li> </ul> | Open list with remarks   |



|                            |   |                          |
|----------------------------|---|--------------------------|
|                            | <ul style="list-style-type: none"> <li>- read-across supporting information (for linking to another record which contains read-across justification that applies also for the current study summary)</li> <li>- (Q)SAR model reporting (QMRF) (for referring to a record containing the relevant model description. Note: The (Q)SAR prediction should be reported specifically for each endpoint in the field 'Justification for type of information'.)</li> <li>- reference to other assay used for intermediate effect derivation (for optional indication in a study summarising 'intermediate effects' if reference is made to the outcome of another assay)</li> <li>- reference to same study (e.g. if different species were tested and the results recorded in different records),</li> <li>- reference to other study (e.g. if another study is considered relevant in the interpretation of the test results),</li> <li>- other: (to be specified).</li> </ul> |                          |
| <b>Related information</b> | As appropriate, select the record containing the related information, thus creating a link.   | Endpoint reference field |
| <b>Remarks</b>             | If relevant, add remarks  | Text area                |

#### Links to supporting material:

Appendix to: EFSA (European Food Safety Authority), 2011. Submission of scientific peer-reviewed open literature for the approval of pesticide active substances under Regulation (EC) No 1107/2009. EFSA Journal 2011;9(2):2092. 49 pp. doi:10.2903/j.efsa.2011.2092

<https://efsa.onlinelibrary.wiley.com/action/downloadSupplement?doi=10.2903%2Fj.efsa.2011.2092&file=efs22092-sup-0001-Appendix.pdf>



**Administrative data** None EU: PPP

**Endpoint**  
stability of residues in stored commodities

**Type of information**  
experimental study

**Adequacy of study**  
key study

**Robust study summary**

**Used for classification**

**Used for SDS**

**Study period**  
6. April 1993 - 27. April 1995

**Reliability**  
1 (reliable without restriction)

**Rationale for reliability incl. deficiencies**  
guideline study

**Data waiving**  
None

**Justification for data waiving**  
None

**Justification for type of information**  
None

**Reason / purpose for cross-reference**  
reference to other study  
Validation data for the analytical method(s) used in the present study

**Related information**  
 AnalyticalMethods (Endpoint Study Record) | 4.1.1 NEW\_Adolph S. (2013)

**Remarks**  
None

**Data waiving**  
other justification

**Justification for data waiving**  
 other: Study not needed due to the use described in the GAP document



**Data source**

| Name                           | Instructions  | Type                      |
|--------------------------------|---|---------------------------|
| <b>Data source</b>             |   | Header 1                  |
| <b>Reference</b>               | <p>Link to <b>Literature reference</b></p> <p>Indicate the bibliographic reference of the study report or publication the study summary is based on. Provide general information such as the Title, Author, Year, Bibliographic source, Testing Facility, Report Number, Study number, Report date etc. as requested in the core template for literature search (<a href="https://www.oecd.org/ehs/templates/General%20elements%20for%20all%20OHTs.zip">https://www.oecd.org/ehs/templates/General%20elements%20for%20all%20OHTs.zip</a>).</p> <p>Always enter the primary reference in the first block of fields or sort it to the first position, if there is more than one reference to be cited. Copy this block of fields for specifying any other references related to this record (e.g. report of a preliminary study or other documentation). If results of a study report have been published, indicate the full citation of the publication(s) in addition to the reference of the original study.</p> | Literature reference list |
| <b>Data access</b>             | <p>Select appropriate indication for data access. Enter 'Not applicable' if the summary consists of information that is commonly accessible such as guidance on safe use. Select 'data submitter has permission to refer' if the information requirement can be covered based on a permission to refer to old data as issued by the relevant regulatory agency. In addition, provide, in the adjacent free-text field, the statement according to instructions you received from the relevant regulatory authority together with the permission to refer.</p>   | Open list with remarks    |
| <b>Data protection claimed</b> | <p>Indicate as appropriate. Note: 'yes' should be selected only if 'Data submitter is data owner' or 'Data submitter has Letter of Access'. Options 'yes, but willing to share' or 'yes, but not willing to share' may be relevant for specific regulatory programmes where the submitter is requested to indicate whether he is willing to share studies conducted (e.g. with vertebrates).</p> <p>In the supplementary remarks field, include an explanation as appropriate, i.e. justification for denial of sharing the corresponding study or refer to a document attached that provides justification (e.g. 'for justification see attached document X')</p> <p>Note that this field is always published so do not put any confidential data in it.</p>   | Closed list with remarks  |



### Additional considerations:

The applicant must ensure that terms and conditions asserted by any rightsholder of studies, information or data submitted to EFSA are fully satisfied. The applicant may consult with copyright licensing authorities (i.e. at national level) for guidance on purchasing the appropriate licenses to provide studies, information or data to EFSA, taking into account the proactive disclosure requirements as detailed above. For publications already available to the public upon payment of fees (e.g. studies published in scientific journals) for which the applicant does not have or cannot obtain IPRs for the purposes of the proactive public disclosure requirements, the applicant must provide (a) a copy of the relevant publications along with the relevant bibliographic references/ citations for scientific assessment purposes only, in the confidential version of its application and (b) these relevant bibliographic references/citations where these publications are available to the public in the non-confidential version of its application for public dissemination on the OpenEFSA portal.

#### Data source

##### Reference

 study report | Flammability of solids | An Author | 2000

##### Data access

data no longer protected

##### Data protection claimed

yes

### Material and methods

| Name                  | Instructions   | Type        |
|-----------------------|--|-------------|
| <b>Test guideline</b> | Indicate according to which test guideline the study was conducted. If no test guideline was explicitly followed, but the methodology used is equivalent or similar to a specific guideline, you can indicate so in the 'Qualifier' subfield preceding the field 'Guideline'. Copy this block of fields for specifying more than one guideline (e.g. US EPA in addition to OECD guideline).  | Header      |
| <b>Qualifier</b>      | Select appropriate qualifier, i.e.: <ul style="list-style-type: none"> <li>- 'according to guideline' (if a given test guideline was followed);</li> <li>- 'equivalent or similar to guideline' (if no test guideline was explicitly followed, but the methodology is equivalent or similar to a specific guideline);</li> <li>- 'no guideline followed' (if none of above qualifiers apply. If so, fill in field 'Principles of method if other than guideline');</li> <li>- 'no guideline available' (if so, fill in field 'Principles of method if other than guideline');</li> <li>- 'no guideline required' (if so, fill in field 'Principles of method if other than guideline');</li> </ul> | Closed list |
| <b>Guideline</b>      | Select the applicable test guideline, e.g. 'OECD Guideline xxx'. If the test guideline used is not listed, choose 'other:' and specify the test guideline in the related text field. Information on the version and date of the guideline used   | Open list   |



|   |   |                          |
|---|---|--------------------------|
|   | <p>and/or any other specifics can be entered in the next field 'Version / remarks'.</p> <p>If no test guideline can be specified, this should be indicated in the preceding field 'Qualifier'. The method used should then be shortly described in the field 'Principles of method if other than guideline', while details can be given in other distinct fields. Please note: Test guidelines used for the validation of (Q)SAR models should be reported in the description of the relevant model in field 'Justification for type of information' or 'Attached justification'.</p>   |                          |
| <b>Version remarks</b> /                            | <p>In this text field, you can enter any remarks as applicable, particularly:</p> <ul style="list-style-type: none"> <li>- To include any other title of the test guideline draft used, a subtitle, another version or update number and the year of update (For instance, different titles and/or numbers may exist for a given EU test guideline);</li> <li>- To indicate if the study was performed prior to the adoption of the test guideline specified;</li> <li>- To indicate if the methodology used was based on an extension of the test guideline specified;</li> <li>- To indicate what protocol was followed for methods that allow the optional determination of more than one parameter if this cannot be indicated in a distinct field of the Materials and methods section.</li> </ul> | Multi-line text          |
| <b>Deviations</b>                                   | <p>In case a test guideline or other standardised method was used, indicate if there are any deviations. Briefly state relevant deviations in the supplementary remarks field (e.g. 'other test system used', 'different exposure duration'); details should be described in the respective fields of the section MATERIALS AND METHODS.</p>  | Closed list with remarks |
| <b>Principles of method if other than guideline</b> | <p>If no guideline was followed, include a description of the principles of the test protocol or estimated method used in the study. As appropriate use either of the pre-defined freetext template options for 'Method of non-guideline study' or '(Q)SAR'. Delete / add elements and edit text set in square brackets [...] as appropriate. For a non-guideline experimental study a high-level freetext template can be used for summarising the principle of test, test conditions and parameters analysed / observed.</p> <p>Details should be entered in appropriate distinct fields of section MATERIALS AND METHODS if available. Also provide a justification for using this method if appropriate.</p>  | Text template            |
| <b>GLP compliance</b>                               | <p>Indicate whether the study was conducted following Good Laboratory Practice or not. In case 'yes' is selected, a Quality Assurance (QA) statement must be provided with the report. You can give an explanation in the supplementary remarks field, e.g. for explaining why GLP was not complied with or for specifying which (national) GLP was followed.</p>   | Closed list with remarks |
| <b>Other quality assurance</b>                      | <p>Indicate any non-GLP quality assurance system adhered to, if any.</p>  | Open list with remarks   |





|                       |  |                          |
|-----------------------|--|--------------------------|
| <b>Type of method</b> | Indicate which type of method was used according to the options provided in the test guideline or, if no guideline was applied, according to the methodology used. | Closed list with remarks |
|-----------------------|--|--------------------------|

**Links to supporting material:**

GEP [https://www.eppo.int/ACTIVITIES/plant\\_protection\\_products/gep](https://www.eppo.int/ACTIVITIES/plant_protection_products/gep)

**Materials and methods**

[Test guideline](#) + New item 📄 Import file ▼

| # | Qualifier              | Guideline   | Version / remarks | Deviations  |
|---|------------------------|---|-------------------|-------------|
| 1 | according to guideline | OECD Guideline 407<br>(Repeated Dose 28-Day Oral Toxicity Study in Rodents) | 1981              | <i>None</i> |

[Principles of method if other than guideline](#)  
*None*

[GLP compliance](#)  
yes  
This study was carried according to GLP principles but not subjected to periodic quality assurance evaluation.

**Test material**

| Name  | Instructions  |
|---|---|
| <b>Test material</b>  | All Test Material batches should be entered in the TM entity manager and then the appropriate TM should be selected.  |
| <b>Test material information</b>                            | Select the appropriate Test material  |
| <b>Additional test material information</b>                 | Select additional Test material i entities if relevant. For example, in long term studies where more than one batch of test material has been applied or there may be differences between the labelled and unlabelled test materials.   |
| <b>Specific details on test material used for the study</b> | <p>Use this field for reporting specific details on the test material as used for the study if they differ from the starting material specified under 'Test material information'. This can include information on the pre-defined items, but not all or additional ones may be relevant.</p> <p>The determination shall also include quantities of unknown materials, if any, to account for 100% of the sample</p> <p>Use free text template and delete/add elements as appropriate. Enter any details that could be relevant for evaluating this study summary or that are requested by the respective regulatory programme. Consult the programme-specific guidance (e.g., OECD Programme, EU pesticides, Pesticides NAFTA or EU REACH) thereof.</p> <p>If applicable, relevant available information on the following items should be given:</p> |



|   |  |
|---|--|
|   | <p><b>RADIOLABELLING INFORMATION</b></p> <ul style="list-style-type: none"> <li>- Radiochemical purity</li> <li>- Specific activity</li> <li>- Locations of the label</li> <li>- Expiration date of radiochemical substance</li> </ul> <p><b>STABILITY AND STORAGE CONDITIONS OF TEST MATERIAL</b></p> <ul style="list-style-type: none"> <li>- Storage condition of test material</li> <li>- Stability under test conditions</li> <li>- Solubility and stability of the test substance in the solvent/vehicle</li> <li>- Reactivity of the test substance with the solvent/vehicle or the cell culture medium</li> </ul> <p><b>TREATMENT OF TEST MATERIAL PRIOR TO TESTING</b></p> <ul style="list-style-type: none"> <li>- Treatment of test material prior to testing (e.g., warming, grinding)</li> <li>- Preliminary purification step</li> <li>- Final dilution of a soluble solid, stock liquid, or gel (e.g., neat liquid, stock diluted liquid, or dissolved solid) to final concentration and the solvent(s) used</li> <li>- Final preparation of a solid (e.g., stock crystals ground to fine powder using a mortar and pestle)</li> </ul> <p><b>FORM AS APPLIED IN THE TEST</b> (if different from that of starting material)</p> <p>Specify the relevant form characteristics if different from those in the starting material, such as state of aggregation, shape of particles or particle size distribution.</p> <p><b>FORMULATED PRODUCT</b> (for biocides/pesticides)</p> <p>Description of the formulation, e.g., formulated product for foliar application; formulated product soil application; solution in organic solvent for soil application; formulated product seed treatment; solution in organic solvent seed treatment.</p> <p><b>OTHER SPECIFICS</b></p> <p>Provide any other relevant information needed for characterizing the tested material.</p> |
| <p><b>Specific details on test material used for the study (confidential)</b></p> | <p>Use this field for reporting specific details on the test material as used for the study if they differ from the starting material specified under 'Test material information'. This can include information on the pre-defined items, but not all or additional ones may be relevant.</p> <p>Use free text template and delete/add elements as appropriate. Enter any details that could be relevant for evaluating this study summary or that are requested by the respective regulatory programme. Consult the programme-specific guidance (e.g., OECD Programme, EU pesticides, Pesticides NAFTA or EU REACH) thereof.</p> <p>If applicable, relevant available information on the following items should be given:</p> <p><b>RADIOLABELLING INFORMATION</b></p> <ul style="list-style-type: none"> <li>- Radiochemical purity</li> <li>- Specific activity</li> <li>- Locations of the label</li> <li>- Expiration date of radiochemical substance</li> </ul>  |



|  |   |
|--|---|
|  | <p><b>STABILITY AND STORAGE CONDITIONS OF TEST MATERIAL</b></p> <ul style="list-style-type: none"> <li>- Storage condition of test material</li> <li>- Stability under test conditions</li> <li>- Solubility and stability of the test substance in the solvent/vehicle</li> <li>- Reactivity of the test substance with the solvent/vehicle or the cell culture medium</li> </ul> <p><b>TREATMENT OF TEST MATERIAL PRIOR TO TESTING</b></p> <ul style="list-style-type: none"> <li>- Treatment of test material prior to testing (e.g., warming, grinding)</li> <li>- Preliminary purification step</li> <li>- Final dilution of a soluble solid, stock liquid, or gel (e.g., neat liquid, stock diluted liquid, or dissolved solid) to final concentration and the solvent(s) used</li> <li>- Final preparation of a solid (e.g., stock crystals ground to fine powder using a mortar and pestle)</li> </ul> <p><b>FORM AS APPLIED IN THE TEST</b> (if different from that of starting material)</p> <p>Specify the relevant form characteristics if different from those in the starting material, such as state of aggregation, shape of particles or particle size distribution.</p> <p><b>FORMULATED PRODUCT</b> (for biocides/pesticides)</p> <p>Description of the formulation, e.g., formulated product for foliar application; formulated product soil application; solution in organic solvent for soil application; formulated product seed treatment; solution in organic solvent seed treatment.</p> <p><b>OTHER SPECIFICS</b></p> <p>Provide any other relevant information needed for characterizing the tested material.</p> |
|--|---|

**Test animals**

| <b>Name</b>                                   | <b>Instructions</b>   |
|---|---|
| <b>Test animals</b>                           |   |
| <b>Species</b>                                | Select species as appropriate. If not available from picklist, select 'other' and specify.  |
| <b>Strain</b>                                 | Select strain as appropriate. If not available from picklist, select 'other' and specify.   |
| <b>Details on species / strain selection</b>  | For robust study summaries or as requested by the regulatory programme, provide details explaining the choice of species and strain.  |
| <b>Sex</b>                                    | Select as appropriate. If females were used, indicate in field "Details on test animals and environmental conditions" whether nulliparous and non-pregnant.   |
| <b>Details on test animals or test system</b> | Use free text template and delete/add elements as appropriate. Enter any details that could be relevant for evaluating this study summary or that are requested by the respective regulatory programme. Consult the |



|                                     |   |
|-------------------------------------|---|
| <b>and environmental conditions</b> | <p>programme-specific guidance (e.g. OECD Programme, EU pesticides, Pesticides NAFTA or EU REACH) thereof.</p> <p>Explanations:</p> <ul style="list-style-type: none"> <li>- Diet: Describe type of diet (e.g. conventional laboratory diet / caloric restriction) and whether it was provided ad libitum.</li> <li>- Water: Describe type (e.g. drinking water) and whether it was provided ad libitum.</li> <li>- Food quality and water quality: provide analytical information on the nutrient and dietary contaminant levels. Similarly provide analytical information on the drinking water used in the study.</li> <li>- IN-LIFE DATES: If required, specify the in-life dates (i.e. the phase of a study following treatment in which the test system is alive/growing).</li> </ul> |
|-------------------------------------|---|

### Test animals

#### Species

rat

#### Strain

other: Tif RAIf

#### Sex

male/female

#### Details on test animals or test system and environmental conditions

Weight at study initiation: 166-227 g

Source: xxx

Initial age: 7-8 weeks

Husbandry: Caging in Macrolon cages type 4 (5 animals per cage) with standardized soft wood bedding. The animal room was air conditioned:

Temperature: 22+/-3°C

Relative humidity: 55+/-15%

12 hours light/day, approximately 15 air changes/h

Acclimatization period: at least 5 days

### Any other information on materials and methods incl. tables

| Name  | Instructions  | Type            |
|---|---|-----------------|
| Any other information on materials and methods incl. tables |   | Header          |
|   | In this field, you can enter any information on materials and methods, for which no distinct field is available, or transfer free text from other databases. You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing or spreadsheet document, provided it was converted to the HTML | Rich text field |



|  |   |  |
|--|---|--|
|  | <p>format. You can also upload any htm or html document.</p> <p>Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry.</p> |  |
|--|---|--|

Any other information on materials and methods incl. tables



**Results of examinations**

| Name  | Instructions   | Type        |
|---|--|-------------|
| <b>Clinical signs</b>   | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.   | Closed list |
| <b>Description (incidence and severity)</b>   | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Dermal irritation (field available only for dermal study)</b>                    | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.   | Closed list |
| <b>Description (incidence and severity) (field available only for dermal study)</b> | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table   | Text area   |



|  |   |             |
|--|---|-------------|
|  | in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.  |             |
| <b>Mortality</b>   | Indicate whether mortality was observed and whether it was treatment-related or not.  | Closed list |
| <b>Description (incidence)</b>                                 | Describe the incidence of mortality by sex and dose group.<br>An explanation should be provided when there was a need to humanely sacrifice animals in pain or showing signs of severe and enduring distress.   | Text area   |
| <b>Body weight and weight changes</b>                          | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |
| <b>Description (incidence and severity)</b>                    | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Food consumption and compound intake (if feeding study)</b> | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |
| <b>Description (incidence and severity)</b>                    | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Food efficiency</b>   | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |



|  |  |             |
|--|--|-------------|
| <b>Description (incidence and severity)</b>                            | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Water consumption and compound intake (if drinking water study)</b> | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.   | Closed list |
| <b>Description (incidence and severity)</b>                            | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Ophthalmological findings</b>                                       | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.   | Closed list |
| <b>Description (incidence and severity)</b>                            | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Haematological findings</b>   | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.   | Closed list |



|   |            |   |             |
|---|------------|---|-------------|
| <b>Description (incidence and severity)</b> | <b>and</b> | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Clinical biochemistry findings</b>       |            | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |
| <b>Description (incidence and severity)</b> | <b>and</b> | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory. | Text area   |
| <b>Endocrine findings</b>                   |            | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |
| <b>Description (incidence and severity)</b> | <b>and</b> | Describe the incidence and severity of effects by dose group. At a minimum provide a qualitative description where dose effect related observations were seen.<br><br>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).<br><br>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.  | Text area   |
| <b>Urinalysis findings</b>                  |            | Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.  | Closed list |
| <b>Description (incidence and severity)</b> | <b>and</b> | Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse   | Text area   |





|   |   |             |
|---|---|-------------|
|   | <p>or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p>   |             |
| <b>Behaviour (functional findings)</b>                            | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>                       | <p>Where relevant describe functional investigations in relation to motor activity, sensory function, grip strength or bizarre behaviour (e.g. walking backwards). Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Immunological findings</b>                                     | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>                       | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible. Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s). NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p>   | Text area   |
| <b>Organ weight findings including organ / body weight ratios</b> | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |



|   |   |             |
|---|---|-------------|
| <b>Description (incidence and severity)</b>       | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Gross pathological findings</b>                | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>       | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Neuropathological findings</b>                 | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>       | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Histopathological findings: non-neoplastic</b> | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |



|   |   |             |
|---|---|-------------|
| <b>Description (incidence and severity)</b>   | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Histopathological findings: neoplastic</b> | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>   | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Other effects</b>                          | <p>Indicate whether any effects were observed and whether they were treatment-related or not. Select 'not examined' or 'not specified' as applicable.</p>   | Closed list |
| <b>Description (incidence and severity)</b>   | <p>Describe the incidence and severity of effects by sex and dose group. At a minimum provide a qualitative description where dose effect related observations were seen, whether the effects observed are adverse or non-adverse and if the data allows, whether the effects are reversible or irreversible.</p> <p>Particularly with comprehensive data, include a table in the rich text field 'Any other information on results incl. tables'. Narrative accompanying such tabular data should mainly address the toxicological significance of the results and not repeat the details presented in the table(s).</p> <p>NOTE: Depending on the regulatory programme some form of a table(s) (predefined table) may be mandatory.</p> | Text area   |
| <b>Details on results</b>                     | <p>Provide any other relevant details if not entered in the specific "Description" fields for the examined parameters.</p>  | Text area   |



## Results and discussion

### Results of examinations

#### Clinical signs

effects observed, treatment-related

#### Description (incidence and severity)

Beginning with day 5 of treatment all male animals of group 4 (200 mg/kg) showed symptoms like apathia, ruffled fur, hunched posture, altered locomotion, ptosis, muscular weakness and in some cases salivation, ventral body position and bluish discoloration of the tail. No clinical symptoms were noted in all other treated male groups. Only one female (group 4, 200 mg/kg) showed similar symptoms like apathia, ruffled fur and hunched body position prior to death. Female number 60 (group 2, 5 mg/kg) died following misapplication by gavage.

#### Mortality

mortality observed, treatment-related

#### Description (incidence)

All treated males of group 4 (200 mg/kg bw.) died between day 7 and 10 of the treatment, while only one treatment-related death occurred in female group 4 (200 mg/kg). Female number 60 (group 2, 5 mg/kg bw.) died from causes unrelated to the treatment (misapplication) and female number 47 (control) died following blood withdrawal at scheduled sacrifice. No other deaths were registered during the course of the study.

#### Body weight and weight changes

effects observed, treatment-related

#### Description (incidence and severity)

The mean body weight of treated male group 4 (200 mg/kg) was depressed at week 1 prior to death of the animals. Further, the mean body weight of treated male group 3 (40 mg/kg) was slightly and that of female group 4 (200 mg/kg) was significantly depressed. The mean body weight of all other treated male and female groups was comparable to that of the respective controls (see Table 1)

#### Food consumption and compound intake (if feeding study)

effects observed, treatment-related

#### Description (incidence and severity)

The mean food consumption of male group 4 (200 mg/kg) was markedly reduced during the first week. Further, the mean food consumption in male group 3 (40 mg/kg) and in female group 4 (200 mg/kg) was depressed. The mean feed consumption in all other treated male and female groups was similar to that of the respective control groups during the whole experiment. No statistical analysis was performed.

## Effect levels

| Name                   | Instructions   | Type                     |
|------------------------|--|--------------------------|
| <b>Key result</b>      | Set this flag for identifying the key information which is of potential relevance for hazard/risk assessment or classification purpose. Consult any programme-specific guidance (e.g. OECD Programme, Pesticides NAFTA or EU REACH) on how to use this field.  | Check box                |
| <b>Dose descriptor</b> | Select the relevant dose descriptor, i.e. the exposure level that corresponds to a quantified level of effects, e.g. NOAEL or LOAEL. If a benchmark dose / concentration was calculated, select appropriate BMD indicator (e.g. 'BMD05' or 'BMD:' and specify in the related text field). If the critical effects at a specific dose or concentration level are reported only, select 'dose. level:' or 'conc. level:' and specify. Where no value could be achieved based on the method and boundaries used, the upper or lower dose level for the relevant dose descriptor can be reported as appropriate with relevant qualifier, e.g. NOAEL >200 mg/kg bw/day or NOAEL <200 mg/kg bw/day. An additional explanation may be given in field 'Remarks | Closed list with remarks |



|                               |   |   |
|-------------------------------|---|---|
|                               | on result', e.g. 'not determinable due to absence of adverse toxic effects'.  |   |
| <b>Effect level</b>           | Enter a single numeric value in the first numeric field if you select no qualifier or '>', '>=' or 'ca.'. Use the second numeric field if the qualifier is '<' or '<='. For a range use both numeric fields together with the appropriate qualifier(s) if applicable. The following units should only be used in the case of microbial active substances: - cells - CFU (colony-forming unit) - ITU (International Toxic Unit) - IU (International Unit) - OB (occlusion bodies) - spores   | Range with closed list (Decimal)              |
| <b>Based on</b>               | Indicate whether the concentration is based on the test material (test mat.), active ingredient (act. ingr.) or element. As appropriate the measured / addressed fraction can be specified for either of these entities by selecting the relevant item, e.g. 'element (dissolved fraction)' or 'test mat. (total fraction)'. Further information can be given in the supplementary remarks field, e.g. for specifying the type of fraction if it is not clear per se from the test material specification.<br>Select 'not specified' if the effect concentration type is not known. | Open list with remarks                        |
| <b>Sex</b>                    | Select from drop-down list.   | Closed list                                   |
| <b>Basis for effect level</b> | Indicate the parameter(s) used to establish the given effect level. Multi-selection of different pre-defined values is possible. If none is available, you can select 'other:'. Any explanations can always be entered in the related supplementary text field.   | Multi select closed list with remarks (32000) |
| <b>Remarks on result</b>      | This field can be used for:<br>- giving a qualitative description of results in addition to or if no numeric value(s) were derived;<br>- giving a pre-defined reason why no numeric value is provided, e.g. by selecting 'not determinable' and entering free text explanation in the supplementary remarks field; or<br>- entering any additional information on the effect level by selecting 'other:'  | Open list with remarks (2000)                 |

### **Target system/organ toxicity**

Record the target system(s) where toxicity was observed that is considered of biological relevance and the specific target organ(s).

Copy this block of fields for referring to different target systems, lowest effective dose(s) / concentration(s) and/or treatment relationship, dose response relationship and relevance for humans.

| <b>Name</b>       | <b>Instructions</b>   | <b>Type</b> |
|-------------------|---|-------------|
| <b>Key result</b> | Set this flag for identifying the key information which is of potential relevance for hazard/risk assessment or classification purpose. | Check box   |



|                                      |   |   |
|--------------------------------------|---|---|
|                                      | Consult any programme-specific guidance (e.g. OECD Programme, Pesticides NAFTA or EU REACH) on how to use this field.   |   |
| <b>Critical effects observed</b>     | Flag to indicate if critical effects were observed in the study within specific organs or systems.  | Closed list                             |
| <b>Lowest effective dose / conc.</b> | Enter a numeric value and select the unit in the next field for indicating the lowest dose / concentration with significant and/or severe toxic effects on the target organ(s) affected.  | Unit measure with Closed List (Decimal) |
| <b>System</b>                        | Select any specific system where toxicity was observed that is considered of biological relevance.  | Open list                               |
| <b>Organ</b>                         | Select from the multiple drop-down list the target organ(s) where toxicity was observed. This field provides context-related picklist values depending on the selection made in the preceding field 'System'.   | Multi select open list                  |
| <b>Treatment related</b>             | Flag to indicate if the effects in systems and/or organs are treatment related.   | Closed list                             |
| <b>Dose response relationship</b>    | Flag to indicate if the effects observed and reported in systems and/or organs are in a dose-response manner.   | Closed list                             |
| <b>Relevant for humans</b>           | Flag to indicate if the effects observed and reported in systems and/or organs on the basis of animal experiments are also relevant for humans. Choose "no" from the picklist if the effects in target system/organ are species specific and not relevant for humans. | Closed list                             |

Target system / organ toxicity

[+ New item](#) [📄 Import file](#) ▼

| # | Key result                          | Critical effects observ... | Lowest effective dose... | System        | Organ                                     | Treatment related | Dose response relatio... | Relevant for humans |
|---|-------------------------------------|----------------------------|--------------------------|---------------|---|-------------------|--------------------------|---------------------|
| 1 | <input checked="" type="checkbox"/> | yes                        | None                     | hepatobiliary | <input checked="" type="checkbox"/> liver | yes               | yes                      | not specified       |

### **Overall remarks, attachments**

| Name                                | Instructions  | Type           |
|-------------------------------------|---|----------------|
| <b>Overall remarks, attachments</b> |   | Header 1       |
| <b>Overall remarks</b>              | <p>In this field, you can enter any overall remarks or transfer free text from other databases. You can also open a rich text editor and create formatted text and tables or insert and edit any excerpt from a word processing document. Use this field <u>only if strictly necessary</u> i.e. when no other specific fields such as repeatable blocks exist in the document to enter the data of interest.</p> <p>Note: One rich text editor field each is provided for the MATERIALS AND METHODS and RESULTS</p> | Rich text area |



|   |  |                        |
|---|--|------------------------|
|   | <p>section. In addition, the fields 'Overall remarks' and 'Executive summary' allow rich text entry.</p>   |                        |
| <b>Attachments</b>                                    | <p>Attach any background document that cannot be inserted in any rich text editor field, particularly image files.</p> <p>Copy this block of fields for attaching more than one file.</p>  |                        |
| <b>Type</b>   | <p>Classify the type of attachment uploaded e.g 'Appendix F mammalian toxicology result'</p> <p>Full study reports should be uploaded in the Literature reference entity</p>   | Open list              |
| <b>Attached (confidential) document</b>               | <p>The original file only needs to be attached here if the non-confidential file uploaded under "Attached (sanitised) documents for publication" contains redactions. If a file is uploaded under this field (a) confidentiality claim(s) must be submitted for each part of the file considered confidential and the information claimed confidential must be clearly boxed or earmarked consistently with the redactions applied in the corresponding non-confidential file. This file will not be published.</p>  | Single file attachment |
| <b>Attached (sanitised) documents for publication</b> | <p>Provide any additional documents relevant for the submission, not already provided under the literature reference entity.</p> <p>For test guidelines that provide a reporting template (data analysis file), that file must be completed and can be uploaded here if not yet done in the results section.</p> <p>See IUCLID templates for PPP Risk Assessment Templates on EFSA Knowledge Junction (zenodo).</p> <p>Any additional background documents uploaded here must be uploaded in their public (non-confidential) version . The public version will be published once the dossier has been considered valid/admissible. All elements therein claimed confidential should be sanitised. Save for the elements blackened, if applicable, content and layout-wise the public version must be fully identical with the confidential version. Upon conclusion of the confidentiality assessment, if applicable, a revised public version removing the redactions relating to confidentiality requests that were rejected in part or in full must be uploaded here.</p> <p>Any document uploaded here must be uploaded in their public (non-confidential) version. The public version will be published once the dossier has been</p> | Single File Attachment |





|                |  |      |
|----------------|--|------|
|                | considered valid/admissible. All elements therein claimed confidential should be sanitised.  |      |
| <b>Remarks</b> | As appropriate, include remarks, e.g., a short description of the content of the attached document if the file name is not self-explanatory. | Text |

Overall remarks, attachments

Overall remarks  
None

Attachments + New item 📄 Import file ▼

| # | Type                                | Attached (confidential) do... | Attached (sanitised) docu...  | Remarks |
|---|-------------------------------------|-------------------------------|---|---------|
| 1 | other: Mammalian toxicology results | None                          | <a href="#">Template 5.1 - Template for presentation of results in tabular format for mamtox studies.docx</a> | None    |

Illustration (picture/graph)  
None

**Applicant’s summary and conclusion**

| Name                                      | Instructions  | Type                            |
|---|---|---------------------------------|
| <b>Applicant's summary and conclusion</b> |   | Header 1                        |
| <b>Interpretation of results</b>          | <p>This field is present ONLY in document 6.3 Magnitude of residues in plants” (OHT 85-5):</p> <p>Indicate overall interpretation of test results with regard to expected residues in crop commodities as given in the study report or as concluded by the submitter. You can give an explanation in the supplementary remarks field, e.g. for indicating at what plant back interval residues are taken up by rotational crop, i.e. in which crop fractions and at what levels, or for indicating if conclusions originally reported were changed by submitter. For more detailed discussion of test results, use field 'Conclusions'.</p> | Closed list with remarks (2000) |
| <b>Conclusions</b>                        | This field should be used to summarize the conclusions by the applicant and will be used in study summaries produced using report generator.  | Text area                       |
| <b>Executive summary</b>                  | If relevant for the respective regulatory programme, briefly summarize the relevant aspects of the study including the conclusions reached. If a specific format is prescribed, copy it from the corresponding document or upload it if provided as htm or html document.   | Rich text area                  |





Applicant's summary and conclusion

[Interpretation of results](#)

GHS criteria not met

[Conclusions](#)

As a conclusion, on the basis of the composition, the classification for the co-formulants and the resistance to attrition/dust, it is assumed that ARY-0711a-01 has no explosive properties.

[Executive summary](#)

None

The screenshot displays the IUCLID interface. On the left is a sidebar with a tree view of categories and their counts:

- 1 Identity of the plant protection product and applicant (6)
- 2 Physical, chemical and technical properties of the plant protection product (4)
- 3 Data on application (12)
- 4 Further information on the plant protection product (1)
- 5 Analytical methods (2)
- 6 Efficacy data (3)
- 7 Toxicological studies on the plant protection product (8)
- 8 Residues in or on treated products, food and feed
- 9 Fate and behaviour in the environment

The main panel shows details for the selected study: **2001\_Monitoring purposes\_Cereal**. The UUID is 6f6e25ca-02c7-4d38-abcd-d69119181637. The Administrative data field is set to None. The Endpoint is 'methods for post-approval control and monitoring purposes'. The Type of information is 'experimental study'. The Adequacy of study is 'key study'. The Robust study summary checkbox is checked. The Used for classification and Used for SDS checkboxes are unchecked. The Study period is '2001'. The Reliability is '1 (reliable without restriction)'.

