# How use maps are generated

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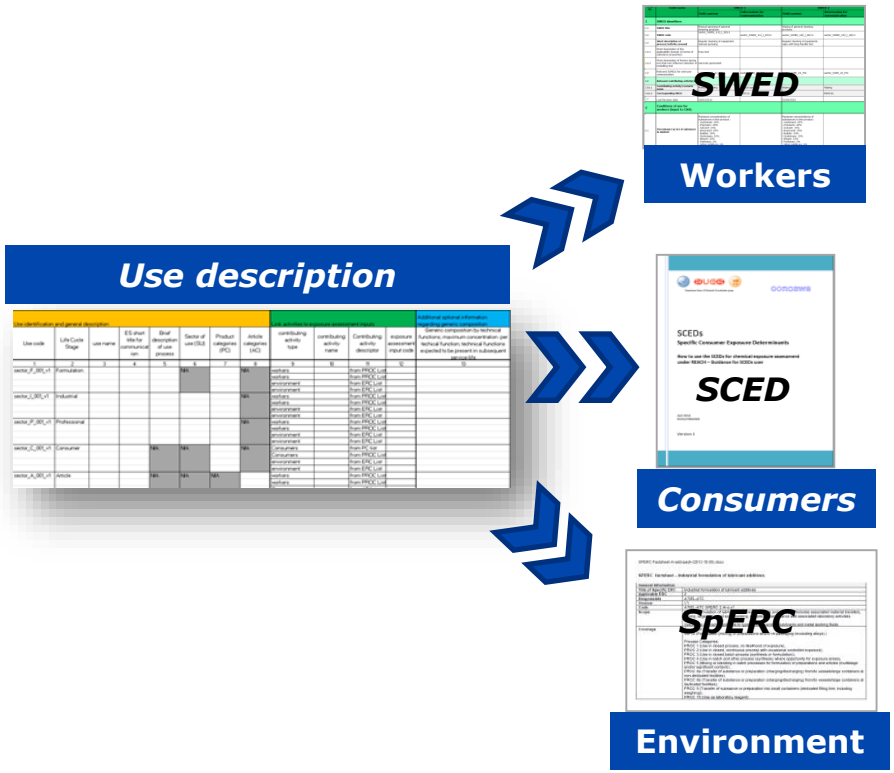
# Use maps concept

Four templates:

- ✓ One template for use description (use map format)
- ✓ Three templates for inputs to the CSA:

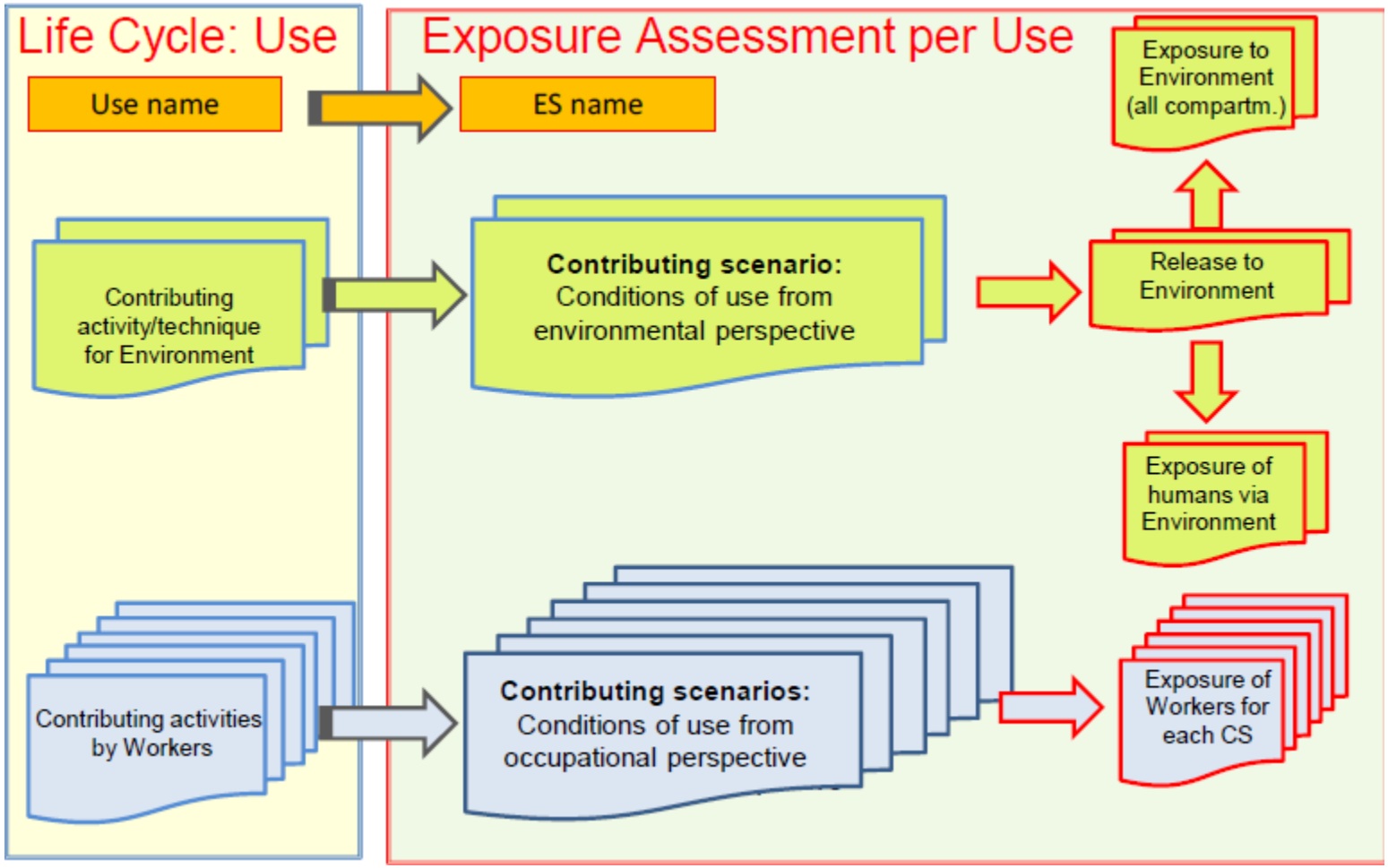



Worker/SWED: **S**ector-specific **W**orker **E**xposure **D**escription

Consumer/SCED: **S**pecific **C**onsumer **E**xposure **D**eterminant

Environment/SpERC: **Sp**ecific **E**nvironmental **R**elease **C**ategory

# Life cycle stage – Use – Contributing activity



# Use map format

ECHA
EUROPEAN CHEMICALS AGENCY

CSR/ES Roadmap

# Use map format

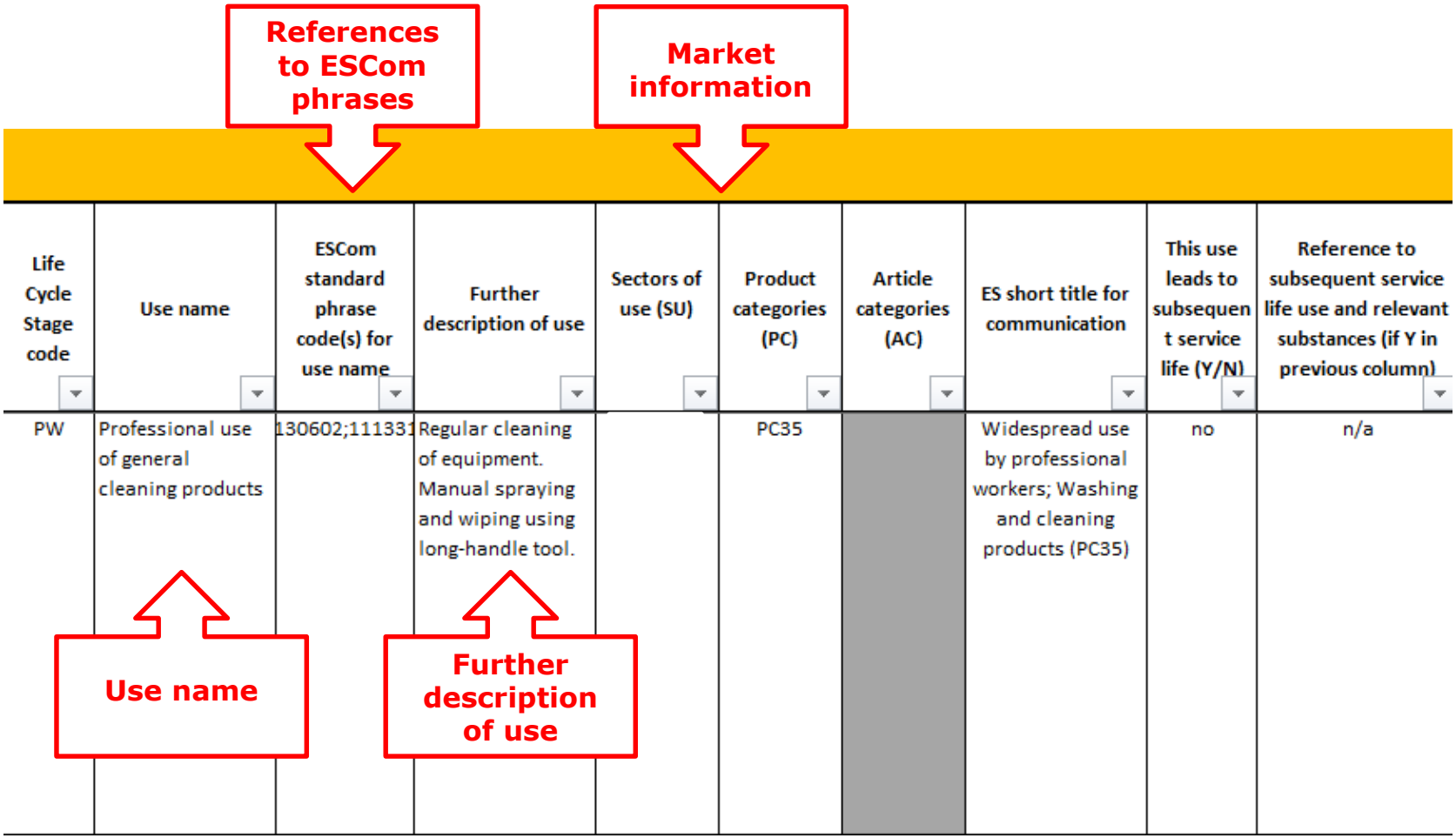
| Use identification and general description | | | | | | | | | | | | | Link activities to exposure assessment inputs | | | | | Additional information (optional) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Use code | Link to entry in previous use maps | Life Cycle Stage | Life Cycle Stage code | Use name | ESCom standard phrase code(s) for use name | Further description of use | Sectors of use (SU) | Product categories (PC) | Article categories (AC) | ES short title for communication | This use leads to subsequent service life | Reference to subsequent service life use and relevant substances (if Y in previous column) | Contributing activity (CA) type | CA name | ESCom standard phrase code(s) for CA name | CA descriptor | Exposure assessment input code for this CA | Generic composition by technical functions; maximum concentration per technical function; tonnage information; other |
| 1 | 1a | 2 | 2a | 3 | 3a | 4 | 5 | 6 | 7 | 8 | 9 | 9a | 10 | 11 | 11a | 12 | 13 | 14 |
| sector_M_001_v1 | | Manufacture | M | | | | N/A | N/A | N/A | | N/A | N/A | workers | | | from PROC List | | |
| | | | | | | | | | | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_F_001_v1 | | Formulation or re-packing | F | | | | N/A | | N/A | | N/A | N/A | workers | | | from PROC List | | |
| | | | | | | | | | | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_IS_001_v1 | | Use at industrial sites | IS | | | | | | N/A | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_PW_001_v1 | | Widespread use by professional workers | PW | | | | | | N/A | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_C_001_v1 | | Consumer use | C | | | | N/A | | N/A | | | | Consumers | | | from PC list | | |
| | | | | | | | | | | | | | Consumers | | | from PC list | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_SLw_001_v1 | | Service life - workers | SLw | | | | N/A | N/A | | | N/A | N/A | workers | | | from PROC List | | |
| | | | | | | | | | | | | | workers | | | from PROC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| | | | | | | | | | | | | | environment | | | from ERC List | | |
| sector_SLc_001_v1 | | Service life - consumers | SLc | | | | N/A | N/A | | | N/A | N/A | Consumers | | | from AC list | | |
| | | | | | | | | | | | | | Consumers | | | from AC list | | |

Use information
(grouped per Life cycle stage)

Additional information
(optional)

Contributing activities
per use + link to exposure
assessment inputs

# Example




| Life Cycle Stage code | Use name | EScom standard phrase code(s) for use name | Further description of use | Sectors of use (SU) | Product categories (PC) | Article categories (AC) | ES short title for communication | This use leads to subsequent service life (Y/N) | Reference to subsequent service life use and relevant substances (if Y in previous column) |
|---|---|---|---|---|---|---|---|---|---|
| PW | Professional use of general cleaning products | 130602;111331 | Regular cleaning of equipment. Manual spraying and wiping using long-handle tool. | | PC35 | | Widespread use by professional workers; Washing and cleaning products (PC35) | no | n/a |

# Example

References to ESCom phrases

References to exp.ass.inputs

| Link activities to exposure assessment inputs | | | | | Additional information (optional) |
|---|---|---|---|---|---|
| Contributing activity (CA) type | CA name | ESCom standard phrase code(s) for CA name | CA descriptor | Exposure assessment input code for this CA | Generic composition by technical functions; maximum concentration per technical function; tonnage information; other |
| Workers | Manual spraying | 0163;1113 | PROC11 - N | sector_SWED_11(i_l_III)v1 | Maximum concentrations of substances in this product :<br>- surfactant: 20%<br>- Polymeric: 20%<br>- Solvent: 15%<br>- Base/acid: 20%<br>- Builder: 24%<br>- Hydrotope: 10%<br>- Bleach: 10%<br>- Perfumes: 2%<br>- Other Additives: 2%<br><br>Indicative volume of cleaning products marketed for professional use in the EU is |
| Workers | Wiping | 013322459 | PROC10 - R | sector_SWED_10(i_l_III)v1 | |
| Environment | Indoor use - solvent-borne or water-borne products; | 013322021 | ERC8a - Wi | sector_SPERC_8a a1.v1 | |

Contributing activities

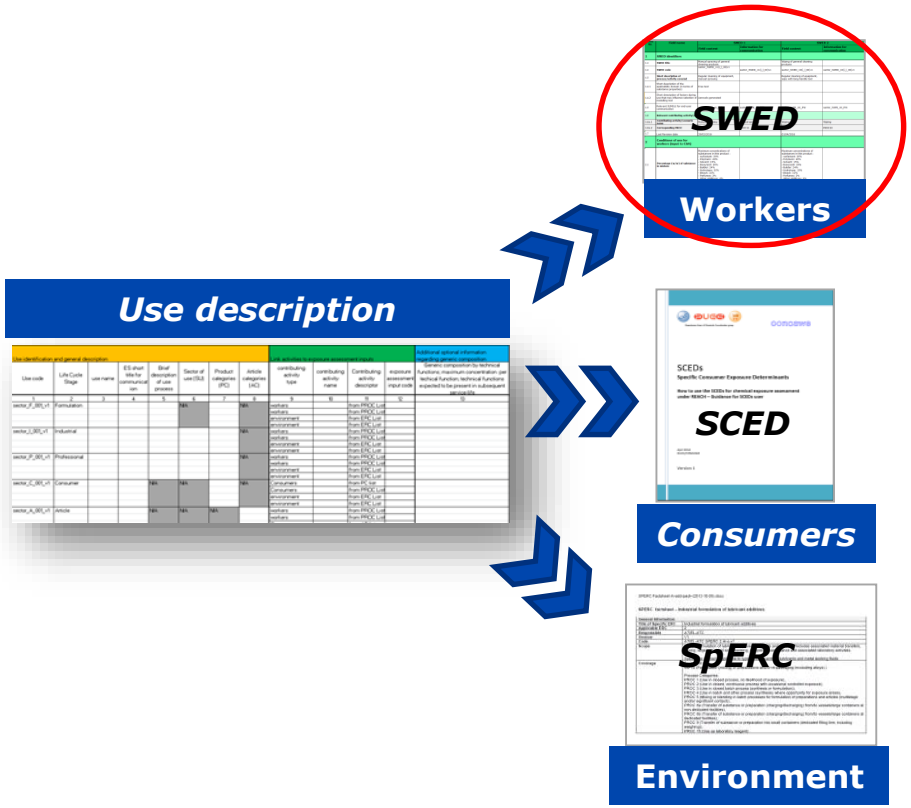
Use descriptor

Additional information

# SWEDs

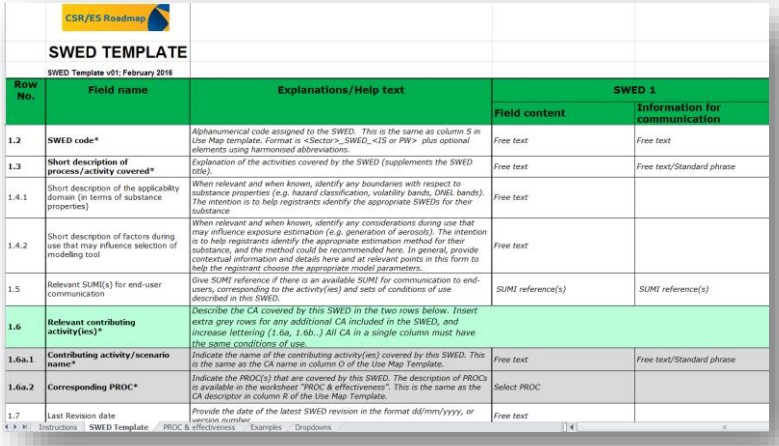
# What are SWEDs?

**S**ector-specific **W**orker **E**xposure **D**escription




- Describes operational conditions and risk management measures for typical workers' contributing activities
- Can be readily incorporated by registrant into CSR (fields aligned with IUCLID6)
- Ensures assessments are realistic and relevant
- Further explained in ECHA Guidance on CSA R.14

# SWED data structure


CSR/ES Roadmap

SWED TEMPLATE

SWED Template v01: February 2016

| Row No. | Field name | Explanations/Help text | SWED 1 | |
|---|---|---|---|---|
| | | | Field content | Information for communication |
| 1.2 | SWED code* | Alphanumerical code assigned to the SWED. This is the same as column S in Use Map template. Format is <Sector>_SWED_<IS or PW> plus optional elements using harmonised abbreviations. | Free text | Free text |
| 1.3 | Short description of process/activity covered* | Explanation of the activities covered by the SWED (supplements the SWED title). | Free text | Free text/Standard phrase |
| 1.4.1 | Short description of the applicability domain (in terms of substance properties) | When relevant and when known, identify any boundaries with respect to substance properties (e.g. hazard classification, volatility bands, DNEL bands). The intention is to help registrants identify the appropriate SWEDs for their substance | Free text | |
| 1.4.2 | Short description of factors during use that may influence selection of modelling tool | When relevant and when known, identify any considerations during use that may influence exposure estimation (e.g. generation of aerosols). The intention is to help registrants identify the appropriate estimation method for their substance, and the method could be recommended here. In general, provide contextual information and details here and at relevant points in this form to help the registrant choose the appropriate model parameters. | Free text | |
| 1.5 | Relevant SUMI(s) for end-user communication | Give SUMI reference if there is an available SUMI for communication to end-users, corresponding to the activity(ies) and sets of conditions of use described in this SWED. | SUMI reference(s) | SUMI reference(s) |
| 1.6 | Relevant contributing activity(ies)* | Describe the CA covered by this SWED in the two rows below. Insert extra grey rows for any additional CA included in the SWED, and increase lettering (1.6a, 1.6b..) All CA in a single column must have the same conditions of use. | | |
| 1.6a.1 | Contributing activity/scenario name* | Indicate the name of the contributing activity(ies) covered by this SWED. This is the same as the CA name in column O of the Use Map Template. | Free text | Free text/Standard phrase |
| 1.6a.2 | Corresponding PROC* | Indicate the PROC(s) that are covered by this SWED. The description of PROCs is available in the worksheet "PROC & effectiveness". This is the same as the CA descriptor in column R of the Use Map Template. | Select PROC | |
| 1.7 | Last Revision date | Provide the date of the latest SWED revision in the format dd/mm/yyyy, or version number | Free text | |

Instructions | SWED Template | PROC & effectiveness | Examples | Dropdowns

**SWED template available on ECHA website**

The **SWED template** includes:

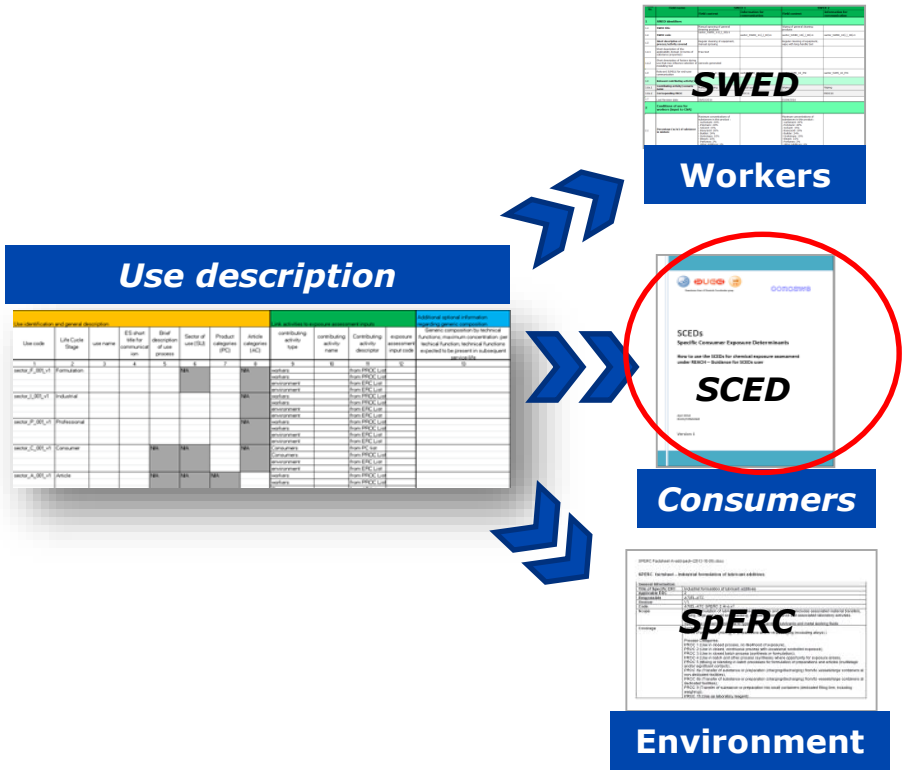
- Data structure:
  1. Identifiers
  2. Conditions of use (TRA-based)
     *e.g. place of use indoor/outdoor*
  3. Other conditions of use (other tools)
  4. Indication of rigorous containment if applicable
  5. Measured data if available
  5. Additional good practice advice

- Options to provide 'details on…' the conditions of use
- References to ESCom phrases for communication
- Examples and field-by-field explanations

# SCEDs

# What are SCEDs?

**S**pecific **C**onsumer **E**xposure **D**eterminant




- Sets of values for exposure determinants for product(s) defined by an industry sector to be used as input in a consumers' exposure assessment.
- Document typical conditions of use of consumer products, expressed in a form that can be fed into the commonly applied exposure assessment tools (e.g. quantity of product used, frequency of use, place of use…).
- Initially foreseen for use under ECETOC TRA and Chesar, but intention to use the SCED information in other REACH consumer models (such as CONSEXPO).
- Further explained in ECHA Guidance on CSA R.15

# SCED data structure (1)

***Specific Consumer Exposure Determinants ("SCEDS")***

**Products/activities covered by the SCED:**
Optional information provided to help the user to select the right SCED.

**Applicability of the SCED (depending on substances properties):**
Optional information provided to help the user to select the right SCED. If the SCED is dependent on substance properties, the limitations will be described here.

| Exposure Determinants or Descriptors | Value[1] and [ESCOM phrase Code][2] |
|---|---|
| **SCED characteristics** | |
| **Name of the SCEDs** | Title from each association |
| **PC/AC descriptor** | PC/AC number |
| **SCED code** | <sector><SCED><PC / AC Code><number><letter><version> |
| **Code of other related SCED** | n.a./<sector><SCED><PC / AC Code><number><letter><version> |
| **Author** | Association name |
| **Source of SCED** | Association website where the SCED can be found |
| **Physical form of the products** | Choose an item. |
| **User characteristics** | |
| **Adult/child assumed** | Product used by adult (defaults based upon adult exposure factors) |
| **Common Determinants** | |
| **Concentration of substance in mixture (g/g)** | Numerical (Default maximum 1) |
| **Explanations** | (Substance specific information)<br>Free text |
| **Frequency of use over a day (event/day)** | Numerical |
| **Rationale** | Free text |
| **Frequency of use over a year** | Choose an item. |
| **Rationale** | Free text |

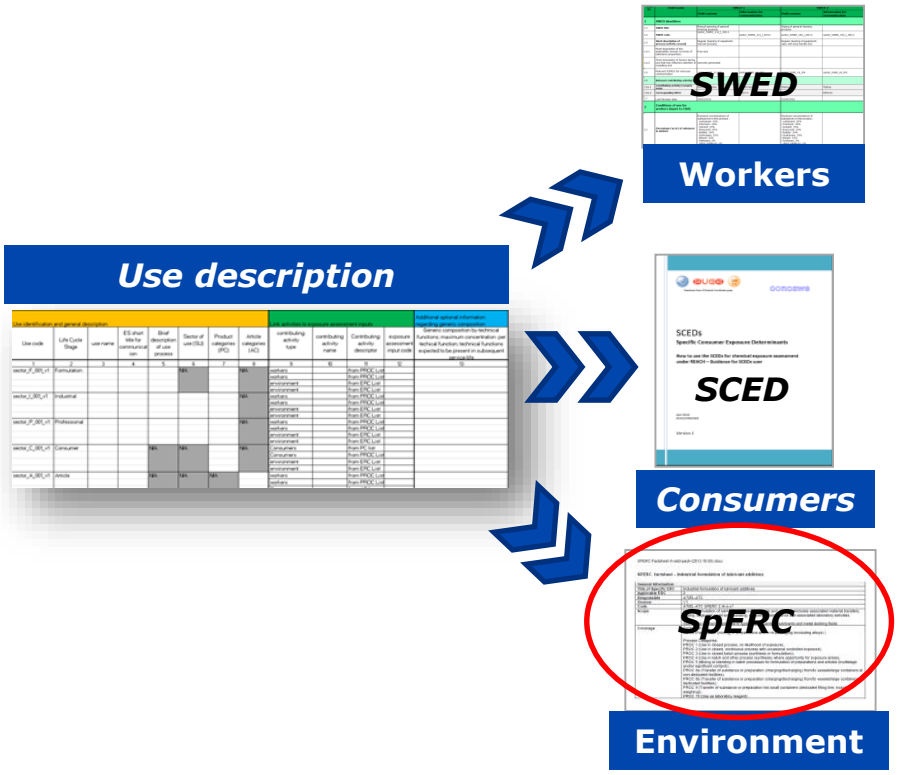
# SCED data structure (2)

| | |
|---|---|
| **Dermal Specific Determinants** | |
| **Exposure via dermal route** | Choose an item. |
| **Rationale** | Free text |
| **Skin Contact Area** | Choose an item. |
| **Rationale** | Free text |
| **Dermal transfer factor** | Numerical – (default 1) |
| **Rationale** | Free text |
| **Inhalation Specific Determinants** | |
| **Exposure via inhalation route** | Choose an item. |
| **Rationale** | Free text |
| **Spray application?** | Choose an item. |
| **Amount of Product used per application (g/event)** | Numerical |
| **Rationale** | Free text |
| **Exposure Time per event (h)** | Numerical |
| **Rationale** | Free text |
| **Inhalation transfer factor** | Numerical – (default 1) |
| **Rationale** | Free text |
| **Place of use** | Choose an item. |
| **Oral Specific Determinants** | |
| **Exposure via oral route** | Choose an item. |
| **Rationale** | Free text |
| **Volume swallowed ($cm^3$)** | Numerical |
| **Rationale** | Free text |
| **Oral transfer Factor** | Numerical – (default 1) |
| **Rationale** | Free text |

# SPERCs

# What are SPERCs?

**Sp**ecific **E**nvironmental **R**elease **C**ategory




- A set of information defined by industry sectors describing (for a use):
  - ✓ **A set of conditions of use** with regard to the environment
  - ✓ **Related release factors** (including explanations on their origin)
- SPERC development started in 2008 and continues under the CSR/ES roadmap = Cefic SPERC group + ECHA
- Chesar supports the use of SPERCs
- Further explained in ECHA Guidance on CSA R.16

# SPERC information structure (1)

- One SPERC refers to one or more contributing activities, and one or more substance property profiles (different sectors with different approaches)

- **SPERC factsheet** includes:
  - ✓ Name of the SPERC and scope/applicability domain
  - ✓ the "facts" for the CSR and for the exposure scenario for communication
  - ✓ Explanation, justification and reference to source of information for the CSR, where needed

- **Background document:**
  - ✓ explains in more detail the products/processes covered;
  - ✓ explains how the release factors were derived.

# SPERC data structure

The **SPERC factsheet** includes:

- Identifiers (Title and scope)
- Pre-defined operational conditions
  *e.g. water contact during use*
- Further operational conditions impacting on environmental release
- Waste handling and disposal
- Obligatory RMMs onsite
- Substance use rate and emission days
- Release factors to air, water, soil, waste (with justification);
  - Potentially various sets of release factors for different substance profiles in same application
- Field-by-field explanations
- Flag on the destination of information (CSR or exposure scenario for communication)

| FS Section | Content field | Explanation of content | CSR | eSDS |
|---|---|---|---|---|
| 1. Title | **1.1 Title of SPERC.** freetext | | Y | Y |
| | **1.2 SPERC code:** picklist (select one)* | | Y | Y |
| 2. Scope | **2.1 Substance/Product Domain** | | | |
| | **Substance types / functions / properties included or excluded:** freetext | | Y | N |
| | **Additional specification of product types covered:** freetext | | | |
| | **Inclusion of sub-SPERCs:** y/n | | Y | N |
| | **2.2 Process domain** | | | |
| | **Description of activities/processes:** freetext | | Y | N |
| | **2.3 List of applicable UDs** | | | |
| | **LCS:** picklist (select one)* | | Y | Y |
| | **SU:** picklist (multi-select)* | | Y | Y |
| | **PC:** picklist (multi-select)* | | Y | Y |
| 3. Operational conditions | **3.1 Conditions of use** | | | |

**Draft SPERC Factsheet format**

# Use maps: status

- Templates and support published on ECHA's website: http://echa.europa.eu/csr-es-roadmap/use-maps
- Still a variety of approaches depending on sectors
- More sectors to develop use maps
- Workshop held on 12 May to exchange among active sectors (material and report to be published soon)
- ECHA to host available use maps on its website
- Pilot under development

# Tips for sectors

**Collect information from the sector through questionnaires**. Associations can then support and coordinate this exercise including linking to registrants.

*Fertilisers Europe*

Downstream users have a better overview of their markets and realistic conditions of use. **Open and transparent communications between registrants and downstream users** need to be there from the beginning.

*Erwin Annys, Cefic*

**Reserve enough time**, this is not a one-day or one-week exercise. Identify knowledgeable companies or people that can participate, and document all what is done.

*Yara*

# Thank you!

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