Chesar 3 for sector associations

Creating use maps – Including SPERCs, SWEDs, and SCEDs

Version	Date	Changes
1.0	November 2016	
1.1	December 2016	Some work arounds which had been explained related to the "skin surface exposed" have been removed as the issue has been fixed in Chesar 3.1.1. Additional explanations on the possibility to create only one Chesar SPERC with several sub-SPERCs to cover substances with different technical functions (and different ERCs) has been added. Also advise on how to report contributing activities for the environment when substances with different technical functions and different ERCs are relevant for the use has been added. All information related to uses in "rigorously contained conditions" have been grouped in a single section.
1.2	June 2017	Adaptation to Chesar 3.2 new functionalities: - New role for use map developers in Box 7 - Use map management from Box 1 - Editability of phrases for communication in the SPERCs and SWEDs Advice on how to check the use map before publication, is also available in the manual.
1.3	November 2018	Adaptation to Chesar 3.3/3.4 functionalities: - Update of section 3.3 "Creating a SCED in Chesar format" - The TRA consumers have been added to the section 4.2 "Checking that no critical information is missing" Small editions to improve the readability of the document

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Table of Contents

1.   Introduction

This manual is meant to support sectors wishing to make their use maps, including contributing scenarios with links to the relevant SPERCs, SCEDs and SWEDs, available in a Chesar format, so that registrants can directly upload the Chesar files as a starting point for their assessment. For more information on the purpose of Chesar, and how it supports registrants in their chemical safety assessment, see section 1.1 of the **Chesar 3 user manual**. A glossary is also available at the end of that manual.

Chesar contains a library, which is personal to each user of the tool. This library serves two purposes:

- For sector associations creating use maps, the Chesar library is used to generate the SPERC, SCED and SWED information in a Chesar readable format (XML)

- For registrants, the library enables to store CSA elements that can be used in various assessments.

1.1 Data elements relevant for use maps in Chesar

In order to build a complete use map, several types of elements need to be created in Chesar.

- A use map consists of a number of uses. Each use consists of a number of contributing activities defined from the environmental perspective, and contributing activities for workers or consumers respectively.

- For each contributing activity a relevant SPERC (for the environment), SWED (for workers) or SCED (for consumers) can be linked. Those SPERCs, SCEDs and SWEDs need first to be defined in Chesar before they can be linked to a contributing activity.

- SPERCs, SWEDs and SCEDs contain conditions of use. Some are pre-defined in Chesar (the so-called built-in conditions of use), others are not. This for example concerns conditions of use, which are sector-specific for the environment (justifying the release factors reported), or conditions of use relevant for exposure estimation tools other than the ECETOC TRA for workers, for example substance use rate or surface area treated, as relevant for the *Advanced REACH Tool* (ART)[1]. Those conditions of use need first to be defined in Chesar before they can be included in a SPERC, SWED or SCED[2].

The various data elements of the use map as described above are illustrated in Figure 1.

SPERCs, SCEDs, SWEDs and specific conditions of use are generated in the Library of Chesar (Box 6). More information on the Chesar library can be found in section 8 of the Chesar 3 user manual for registrants.

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[1] Note that work is ongoing under the ENES programme (action 3.2) to harmonise the conditions of use for the different workers exposure tools. This is expected to lead to a situation where more conditions of use are covered by those built-in to Chesar, and less need to define separate conditions of use for different tools.

[2] Note the, although it is technically possible, the addition of non built-in conditions of use to SCEDs is currently not foreseen in the SCED template.

Figure 1: Data elements of a use map
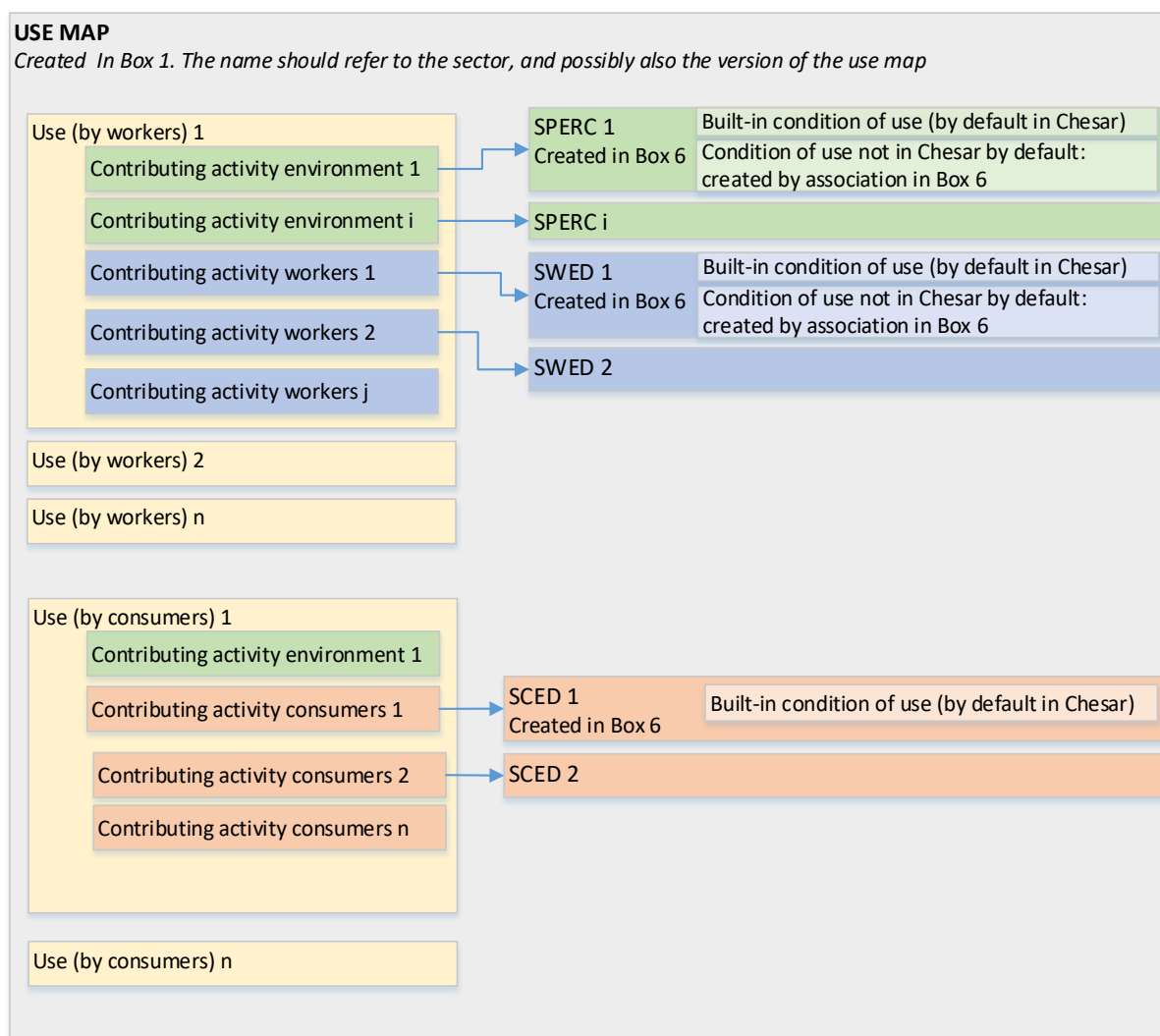
SPERCs, SCEDs, SWEDs and conditions of use, once created, have a unique identifier and have a clear Author. They can be imported by assessors as such (or as part of a use map) into their own library, for assessing contributing scenarios. However, the single assessor cannot modify them. Chesar includes a versioning management system for those elements (see section 5).

1.2 Differences in different versions of Chesar

Use maps created in Chesar 3.2 onward also have a unique identifier, which allows a tracking of the use map versions. In practice, it means that each use map is unique, and that all versions of the same use map have the same identifier. When sectors decide to update their use map, they should simply modify its content as needed in Chesar, and export a new version (see section 5 for more information on how updates are handled in Chesar).

Note that some improvements for use map developers have been implemented in Chesar 3.3 and 3.4. Therefore, use map developers are advised to use Chesar 3.4 to develop or update their use maps. Use maps exported from Chesar 3.4 can be imported by users in both Chesar 3.3 and Chesar 3.4.

2. Getting started with Chesar

You can find information on how to install and start Chesar 3 in the Installation manuals available in https://chesar.echa.europa.eu/support/manuals-tutorials.

The boxes referred to in this document correspond to the major groups of functionalities listed below. An icon is associated with each Box. All the icons form the main toolbar:

Figure 2: Chesar main tool bar

Box 1:   Substances

Box 2:   Uses

Box 3 : Exposure assessment

Box 4:   CSR

Box 5:   ES for extended SDS

Box 6:   Library

Box 7:   Users

Chesar 3 needs to be set up in order to be ready to be fully functional for you. For that you need to:

- Import a legal entity that contains the name of your sector association, and assign it to your user profile
- Assign a "Use map developer" role to your profile
- Import the ESCom phrase catalogue

2.1 Import a legal entity containing your sector association name

The assignment of a legal entity in Chesar is required to create Chesar library items (condition of use templates, SPERCs, SCEDs and SWEDs) to trace the author of those elements. When a legal entity is available (and assigned to your user name), all items created by you will have that specific legal entity as the author. The author of a library item (once finalised) cannot be modified, so the owner of a specific library item is always known.

If you do not have your legal entity yet, you can create one directly in IUCLID 6. The name of your legal entity will be the "author" of the Chesar library elements you will create. Steps for importing and assigning a legal entity to your username:

1. Click the "Legal entity management" tab in Box 7

2. Click the import button: the import legal entity dialogue box appears

3. Select your legal entity and import it

4. Click the "User management" tab in Box 7

5. Select your username (by default it will be "admin"): the "Edit user" page appears

6. Go to the legal entity dropdown box and select your legal entity

7. Click the "Save" button

2.2 Assign a "Use map developer" role to your profile

In order to be able to create a use map, and have access to the "Use map management" functionalities in Box 1, you need to assign a specific role called "Use map developer" to your profile.

Assigning roles to your profile is very easy:

1. Click the "User management" tab in Box 7

2. Click on your username (by default it will be "admin"): the "Edit user" page appears

3. Go to the roles and select "Use map developer". Check that the "Library manager role" is also assigned. In order to be able to "check" the content of your use map before publication, you will also need the assessor role. Therefore you are advised to set all the roles to your profile.

4. Click the "Save" button

2.3 Import standard phrase catalogue ESCom

It is recommended to upload the standard phrase catalogue, ESCom. ESCom is a catalogue of standard phrases developed by the European chemical industry and which is available in Chesar format on http://www.cefic.org/Industry-support/Implementing-reach/escom/.

Steps for importing ESCom phrase catalogue once downloaded from Cefic webpage:

1. Click the "Standard phrases" tab in Box 6

2. Click the import button and upload the Chesar file for ESCom Phrase Catalogue (ending with .chr3). Note the specific explanations available on Cefic's website if you download the file with internet explorer.
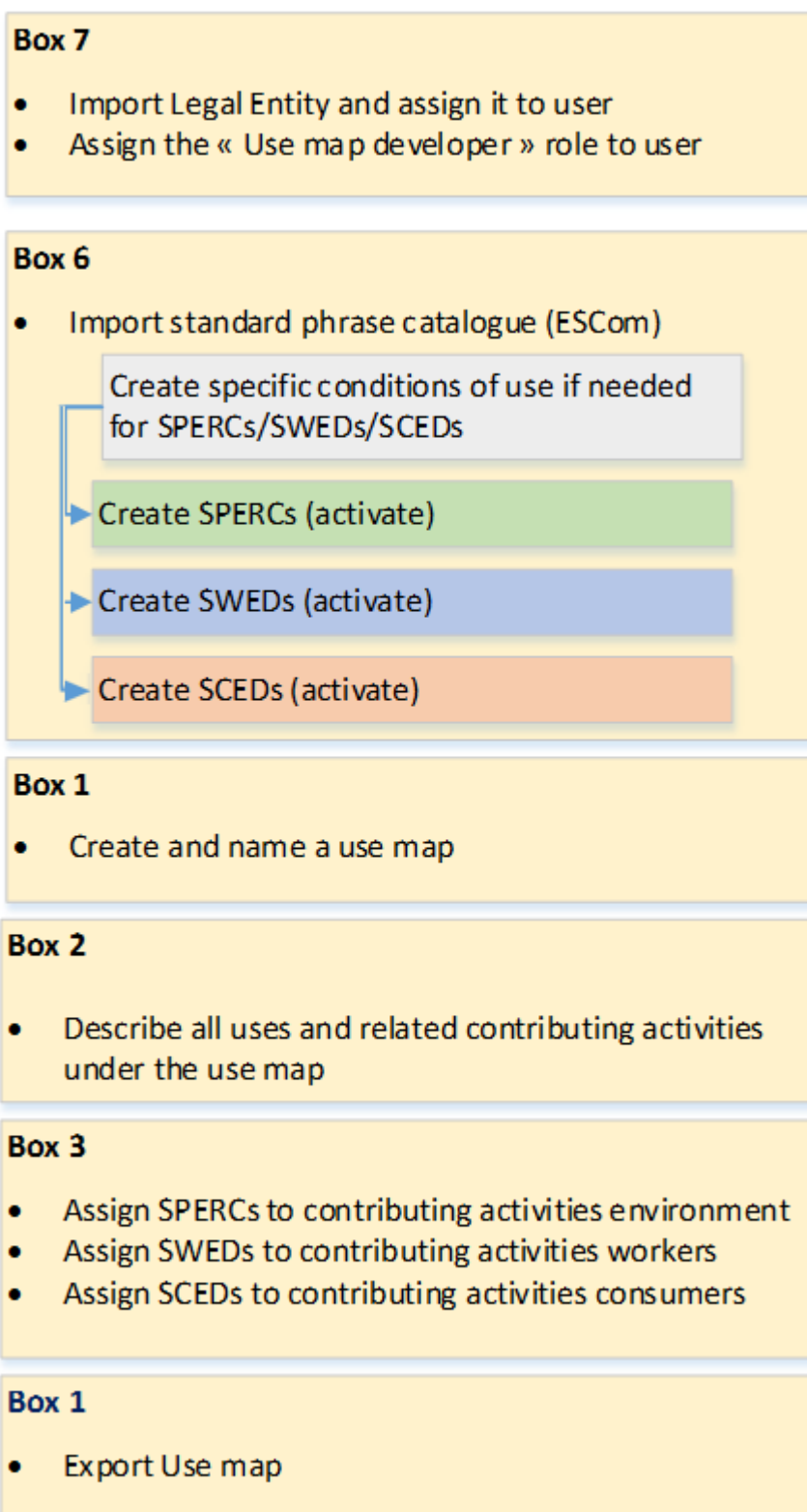
3. Use map creation steps

You can create the various elements of your use maps in any order by saving parts of them and then completing with other elements. Nevertheless it is important to understand that in order to link an element to another one (e.g. a condition of use in a SPERC or a SPERC to a contributing activity), it has to be created in the Library first.

Therefore, we advise you to create the various elements of a use map in the following order:

- Create condition of use templates if needed for any SPERC, SWED or SCED in Box 6 (do not forget to check beforehand if a condition of use does not already exist in the library)

- Create SPERCs, SCEDs, SWEDs in Box 6, including, as relevant, the condition of use templates created in the previous step

- Create and name the use map in Box 1

- Describe all the uses, and their contributing activities under the use map in Box 2

- Associate SPERCs, SCEDs, SWEDs to the relevant contributing activities in Box 3

From Box 1, you can then export the use map. It will include all the SPERCs, SCEDs, SWEDs.

Figure 3: Steps to create a use map

Box 7

- Import Legal Entity and assign it to user
- Assign the « Use map developer » role to user

Box 6

- Import standard phrase catalogue (ESCom)

Create specific conditions of use if needed for SPERCs/SWEDs/SCEDs

Create SPERCs (activate)

Create SWEDs (activate)

Create SCEDs (activate)

Box 1

- Create and name a use map

Box 2

- Describe all uses and related contributing activities under the use map

Box 3

- Assign SPERCs to contributing activities environment
- Assign SWEDs to contributing activities workers
- Assign SCEDs to contributing activities consumers

Box 1

- Export Use map

3.1 Creating a condition of use template in Chesar

Select the condition of use templates tab in Box 6 and select the create button.
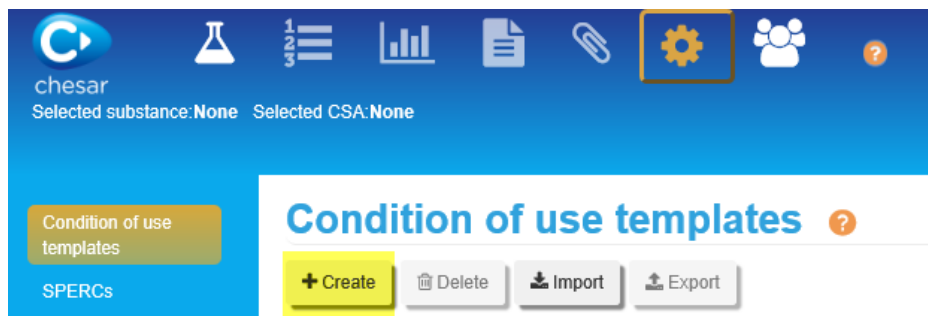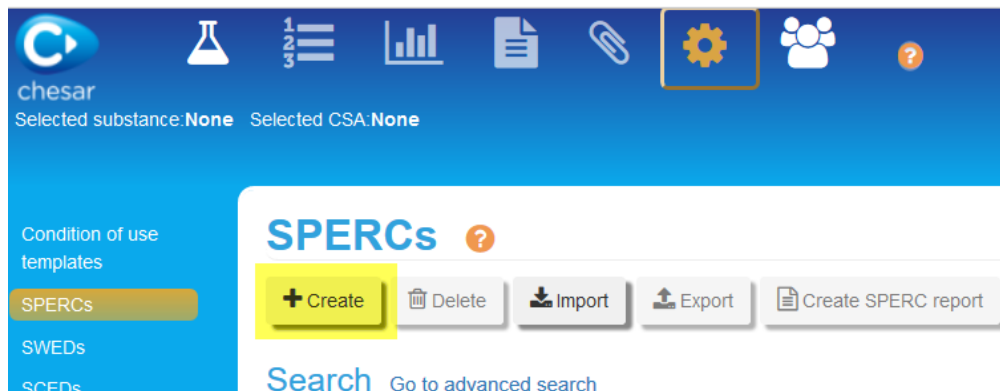

Read the help text in the application to understand the information to be reported in the various fields.
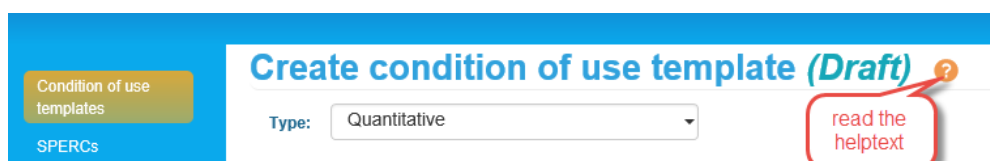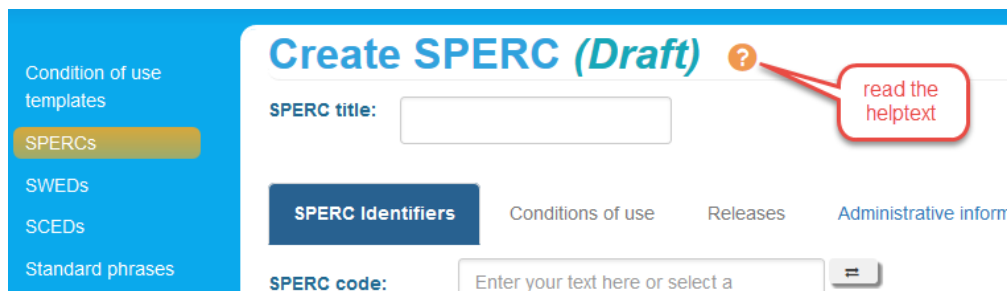

Once you have finalised your condition of use template, **Activate** it. You can then use it when creating SPERCs, SWEDs and SCEDs.

3.2 Creating a SPERC in Chesar format

Select the SPERCs tab in Box 6 and select the create button.

Read the help text in the application to understand the information to be reported in the various fields.

A SPERC describes the conditions of use for a contributing activity, and the related release factors. In most end-uses, mixtures are used rather than substances. In that case the conditions of use apply to all substances in the mixture, but the related release factors may differ from substance to substance, depending on the technical function and

the fate properties of each substance. Therefore, sub-SPERCs can be defined to provide differentiated sets of release factors for different types of substances. Sub-SPERCS are created in the Releases tab in Chesar.

Note the following when transferring the information from a SPERC to Chesar:

- Making use of the possibility to create several sub-SPERCs within a SPERC in Chesar has the advantage of ensuring that the set of conditions of use described in the SPERC is consistent for all ingredients of the mixture. It also limits the number of SPERCs in the Chesar library. When creating a sub-SPERC, the applicability domain of the sub-SPERC can be defined by including minimum and maximum values for vapour pressure, water solubility and log Kow. The selection of the appropriate sub-SPERC for the assessor is automatically made by Chesar on the basis of the ERC selected and the substance properties when relevant.

- There is support for versioning in Chesar. See section 5.

- The entry screens differ depending whether the SPERC is meant for a use being widespread or at a site.

- The information on the operational conditions is to be reported in the following way:

  o The *Place of use*, whether there is *Water contact during use* and whether the site is expected to be connected to *a standard municipal biological STP* can be selected from existing (built-in) conditions of use in the Conditions of use tab.

  o Whether the contributing activity takes place in a *Rigorously contained system with minimisation of release to the environment* is to be reported in the tab *SPERC Identifiers.*

  o For all *Further operational conditions impacting on releases to the environment* a condition of use template should have been created and added by clicking the "Add new condition of use" button.

  o When providing an *explanation for the CSR* for a condition of use using the
    💬 , do not repeat the information already specified in the condition of use itself. Provide in this field additional information for readers of the CSR when relevant only.

- The *Waste handling and disposal* is also predefined in the condition of use section.

- For all the *obligatory RMMs on site* a condition of use template should be created in the library (Box 6) and added by clicking the "Add new condition of use" button in the Conditions of use tab of the SPERC.

- To report the information from the section 3 *Exposure assessment input* of the SPERC template:

  o To report the *Fraction of EU tonnage used in region*, you should add the condition of use *Percentage of EU tonnage used at regional scale*. It is only useful to do so if the value deviates from the defaults (100% for uses at industrial sites and 10% for widespread uses).

  o The *amount of substance use per day* is to be reported in the *Daily use amount at site* field in the conditions of use tab.

  o For widespread uses, in Chesar a field enables to report the *Local daily fraction of regional tonnage for the use (widespread)* used to estimate the local daily tonnage from the annual use tonnage. By default it is set to 5.5 10^{-6} as described in the guidance on environmental assessment R16. If information is provided in the SPERC factsheet for modifying this value (in

the *Fraction of Regional tonnage used locally*), then the *Local fraction of tonnage for the use (widespread)* is to be modified accordingly in Chesar.

- o The *Justification and information sources* should be reported in the *explanation for CSR* field accessed by the 💬 .

- o The *number of emission days per year* may be reported in the *Extrapolation factor for annual use amount* for uses at site[3] in case it corresponds to the number of use days. If the number of emission days does not correspond to the number of use days, Chesar 3 does not support the release estimation.

- To report the *Release factors* you have to go to the Releases tab and create a sub-SPERC (even if you only need one). Note that in Chesar, in case you have several sub-SPERCs with similar justification you can report some *Explanations for the release factors valid for all the Sub-SPERCs.* Explanations entered there do not need to be repeated for the different sub-SPERCs.

- For the communication of the conditions of use:
  - o If the exposure assessment is SPERC-based, then it is the conditions of use provided in the SPERC that will be communicated in the exposure scenario.
  - o By default each condition of use is communicated as defined in the condition of use template in the Library.
  - o Nevertheless it is possible to adapt the default setting for communication within each SPERC. To do so, click on the "Edit SDS ES" (paperclip icon). You can then see whether the condition of use will be communicated (this is the case when the box is ticked) and the default phrase/text for communication is shown. You can modify both the communication setting and the default phrase if needed.

Before activating your SPERC, **Save** it and **Create SPERC report** from the main tab to check that your content is fine. Once you have finalised your SPERC, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).

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[3] for widespread uses it cannot be modified. If the use is seasonal this information has to be taken into account for the *Local daily fraction of regional tonnage for the use (widespread)*

3.3 Creating a SCED in Chesar format

Select the SCEDs tab in Box 6 and select the create button.
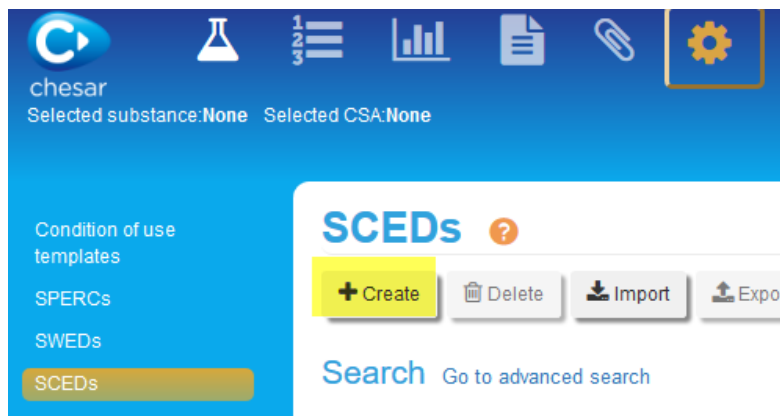
Read the help text in the application to understand the information to be reported in the various fields.

Note that a change in the structure of the SCEDs has been introduced in Chesar 3.3. Previously, the SCEDs contained several tabs for common, dermal, inhalation and oral parameters. These have been grouped into one conditions of use tab, similar to the view for SPERCs and SWEDs. Therefore the exact view will depend on the version of Chesar being used but the content of the SCED will be the same. The below screenshots represent the view in Chesar 3.4.
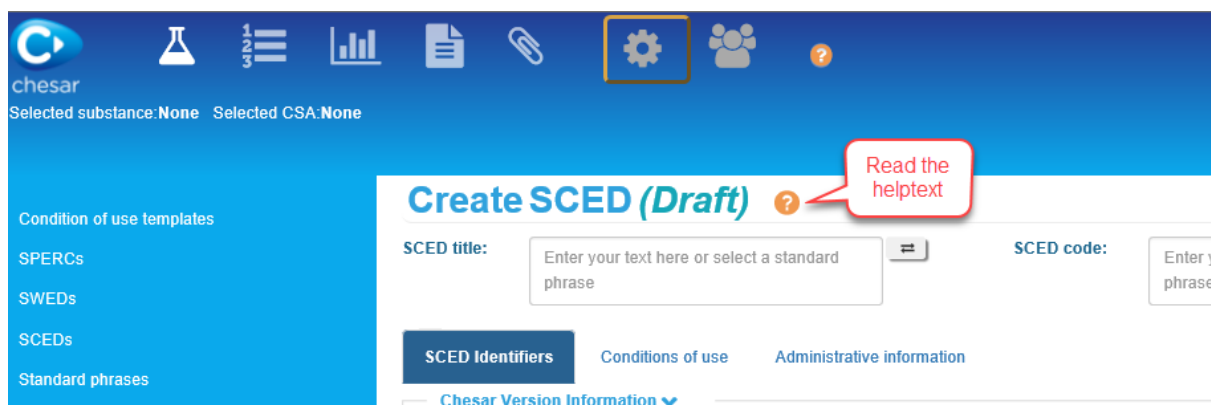
Note the following when transferring the information from a SCED to Chesar:
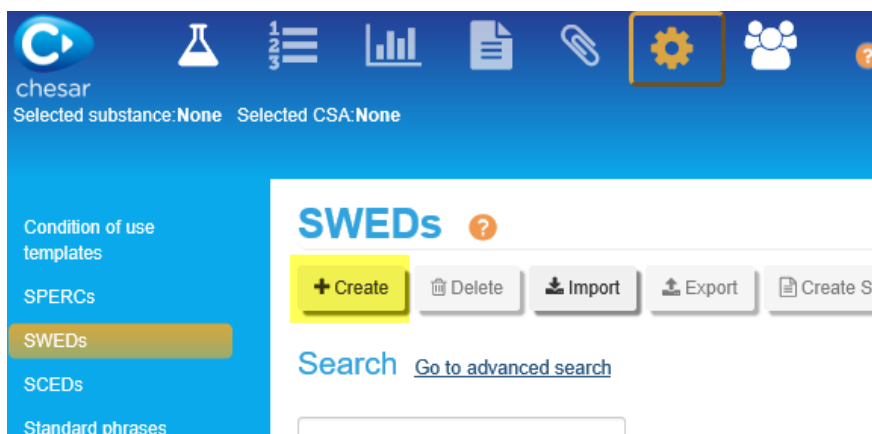
- Although possible, it is not useful to use a standard phrase for the SCED name (it is not foreseen to be communicated downstream). What will be communicated is the contributing scenario name (which may be the same as the SCED name).

- In the *Frequency of use over the year*, the picklist items *Occasional* and *Very infrequent* cannot be selected anymore, as Chesar has been adapted to the update of guidance R15 (in July 2016) on consumer exposure assessment. *Infrequent* in Chesar means less than 15 days of exposure per year. To summarise, this means that:

  o *Frequent* and *Occasional* in SCED are equivalent to *Frequent* in Chesar;

  o *Infrequent* and *Very infrequent* in SCED are equivalent to *Infrequent* in Chesar.

- The *Skin Contact Area* in SCED corresponds to *Body parts potentially exposed* in Chesar and in this field:

  o *2 hands* selected in SCED is equivalent to *Hands* selected in Chesar;

- o *Inside of 2 hands/palm of 2 hands/ one hand* in SCED is equivalent to *Inside of 2 hands/ palm of 2 hands/one hand* in Chesar

- In *Exposure via inhalation route*, if *Inhalation exposure estimated to be negligible* had been selected, it corresponds to *Inhalation exposure is considered to be not relevant* in Chesar. An explanation has to be provided.

- In *Exposure via oral route*, if *Oral exposure not foreseen* had been selected it corresponds to *Oral exposure is considered to be not relevant* in Chesar. An explanation has to be provided.

- If values (quantitative or qualitative input) are missing, which are required to run the TRA consumers, it will not be possible for registrants to get an exposure estimate using the TRA in Chesar. All the conditions of use required to run the TRA are by default present in a SCED when created in Chesar, therefore it is advised that no values are left empty.

Before activating your SCED, **Save** it and **Create SCED report** from the main tab to check that your content is fine. Once you have finalised your SCED, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).

3.4 Creating a SWED in a Chesar format

Select the SWEDs tab in Box 6 and select the create button.

Read the help text in the application to understand the information to be reported in the various fields.
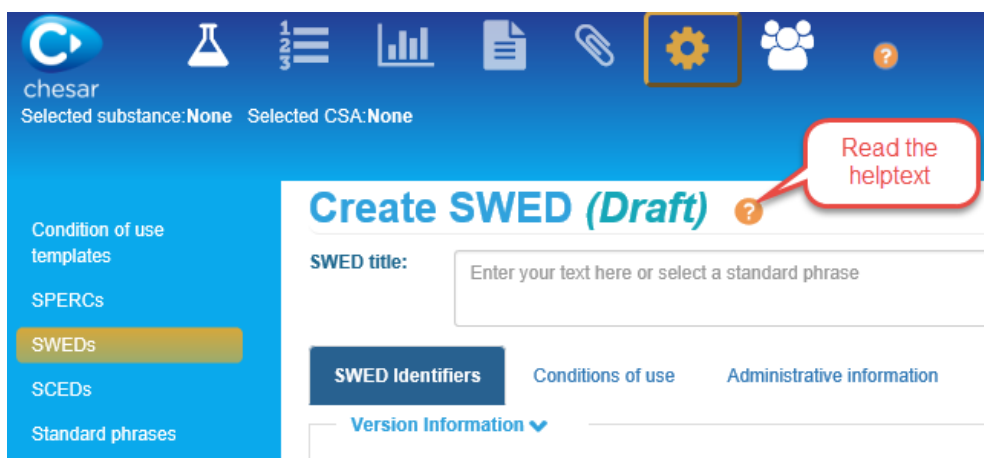
Note the following when transferring the information from a SWED to Chesar:

- Although possible, it is not useful to use a standard phrase for the SWED name (it is not foreseen to be communicated downstream). What will be communicated is

the contributing scenario name (which may be the same as the SWED name).

- The conditions of use are not provided in the same order in the SWED template and in Chesar, as in Chesar they follow the ES sub-heading order.

- If values (quantitative or qualitative input) are missing, which are required to run the TRA workers, it will not be possible for registrants to get an exposure estimate using the TRA in Chesar. All the conditions of use required to run the TRA are by default present in a SWED when created in Chesar, therefore it is advised that no values are left empty.

- For some conditions of use where picklists are provided in the SWED template, the option "other" is usually not covered in the built-in conditions of use in Chesar. In this case, you need to create a specific *condition of use template*.

- If the place of use selected is *Indoor or outdoor*, select *Indoor and outdoor* in Chesar. Note that the TRA workers cannot run with such a value, as two separate assessments with different resulting exposure estimates would be needed.

- The picklist items for the Physical form of the used product are expressed slightly differently for solids between the SWED template and Chesar but they mean the same for the TRA calculations:

Value in SWED	Value in Chesar
Solid (high dusty)	Solid (very dusty form)
Solid (medium dusty)	Solid (medium dusty form)
Solid (low dusty)	Solid (non or low dusty form)

- The operating temperature can only be reported as a numerical value in Chesar. This is because this numerical value is used for recalculating a vapour pressure or comparing to the melting point for solids. The standard default temperature assumed in Chesar (worst case ambient temperature for summer southern Europe) is 40°C.

- The picklist items for the General ventilation are expressed slightly differently between the SWED template and Chesar but they mean the same for the TRA calculations:

Value in SWED	Value in Chesar
Basic (natural)	Basic general ventilation (1-3 air changes per hour)
Good (natural and/or mechanical)	Good general ventilation (3-5 air changes per hour)
Enhanced (engineered mechanical)	Enhanced general ventilation (5-10 air changes per hour)

- For the Local exhaust ventilation, if you expect the registrant to use the effectiveness provided by the ECETOC TRA (*TRA default value* selected in the SWED) you should select *Yes (TRA effectiveness)* in Chesar. When the SWED is used, Chesar will automatically populate the effectiveness with the TRA value. In case you have selected *Yes*, you will need to specify the effectiveness. In case your SWED contains an effectiveness for the LEV different than the one of the TRA, it will not be possible for registrants to estimate exposure using the TRA.

- For the respiratory protection, if you had selected an effectiveness of 90% you should pick in Chesar *Yes (Respirator with APF of 10).* If you had selected an effectiveness of 95% you should pick in Chesar *Yes (Respirator with APF of 20).*

- For the dermal protection, the values proposed are according to the ECETOC TRA workers:

Effectiveness selected	Value in Chesar
80%	Yes (Chemically resistant gloves conforming to EN374…

| 90% | Yes (Chemically resistant gloves conforming to EN374 with basic… |
| 95% | Yes (Chemically resistant gloves conforming to EN374 with specific… |

- If in your SWED the "rigorously contained system" in row 4.1 of the template is set to Yes you should check the box at the top of the conditions of use tab (see section 6 for more information).

SWED Identifiers   **Conditions of use**   Administrative information

☐ Rigorously contained system with strict control for manual interventions

- When a SWED is expected to cover assessments made with other tools than ECETOC TRA, use the field "Advice to assessor" (template 1.4.1) to provide information on how to select the input parameters which are not part of the conditions of use. e.g. you could specify here the activity class to select in ART or values for conditions of use not specified in the SWED.

- In the condition of use description, there is no need to repeat in the field "Default explanation for CSR" 💬 the information already specified in the condition of use itself. Provide in this field additional information for readers of the CSR when relevant only.

- For the communication of the conditions of use:

  o If the exposure assessment is SWED-based, then it is the conditions of use provided in the SWED that will be communicated in the exposure scenario.

  o By default, each condition of use is communicated as defined in the condition of use template in the Library.

  o Nevertheless, it is possible to adapt the default setting for communication within each SWED. To do so, click on the "Edit SDS ES" (paperclip icon). You can then see whether the condition of use will be communicated (this is the case when the box is ticked) and the default phrase/text for communication is shown. You can modify both the communication setting and the default phrase if needed.

W-5 : Other conditions affecting workers exposure

Place of use [Indoor ▾] 💬 🗑

🔗

Operating temperature <= [40] °C 💬 🗑

🔗

SDS ES Related

☑ Relevant by default for SDS ES ﹀
Assumes process temperature up to
Specific description for SDS ES Reset to default description for SDS ES

[Enter your text here or select a standard phrase   ] [⇄]

Default description for SDS ES: Assumes process temperature up to

Before activating your SWED, **Save** it and **Create SWED report** from the main tab to check that your content is fine. Once you have finalised your SWED, **Activate** it so that you can link it to a contributing activity in your use map (see section 3.5).

3.5 Creating a use map in Chesar format

To create your use map, follow the step-by-step instructions below:

- Download the "use map" substance from the Chesar website library (https://chesar.echa.europa.eu/web/chesar/support/library)

- Go to Box 1, in the "Substance management" menu item, select
  Import Chesar substance file   to import the Use map substance in your Chesar.
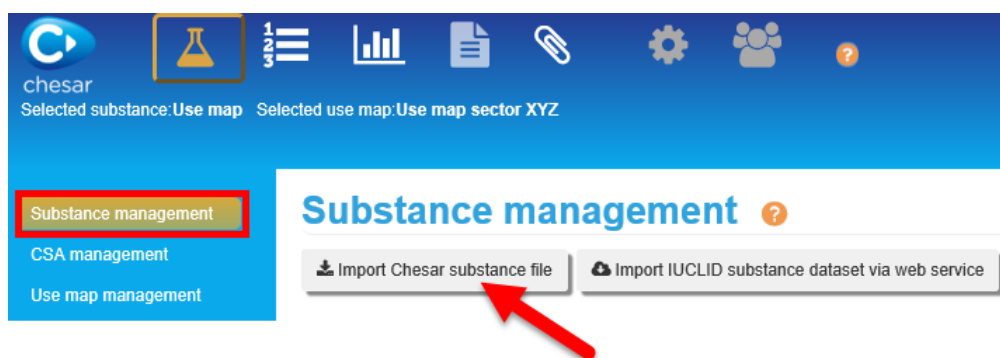
- Note that in case you have already imported the use map substance before, you should select it using the 🖑 icon on its right.

- Go to the "Use map management" tab[4] and click on the "Create" button.
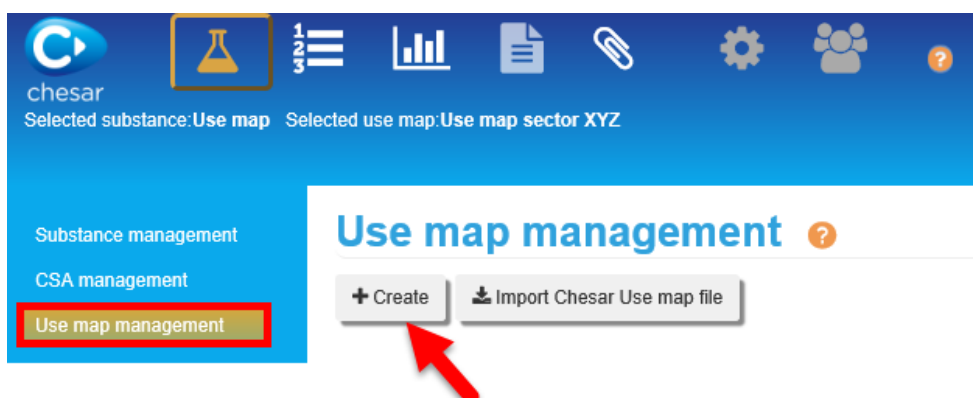
- Provide a name for the use map. The name of the use map could include for example the sector name, possibly a version date or number. You also have the possibility to provide additional information to the assessor. The internal remarks field will not be visible to the assessor, but could be used by you to record some information regarding the version history of the use map for example. Save the information you have specified.

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[4] Remember that such tab is only visible if you have the "Use map developer" role.

- In Box 2, you can now create the backbone of the use map, i.e. you can describe under the use map name all the uses, and their contributing activities.

For more information on how to create/add uses and contributing activities, read the help text in Chesar.
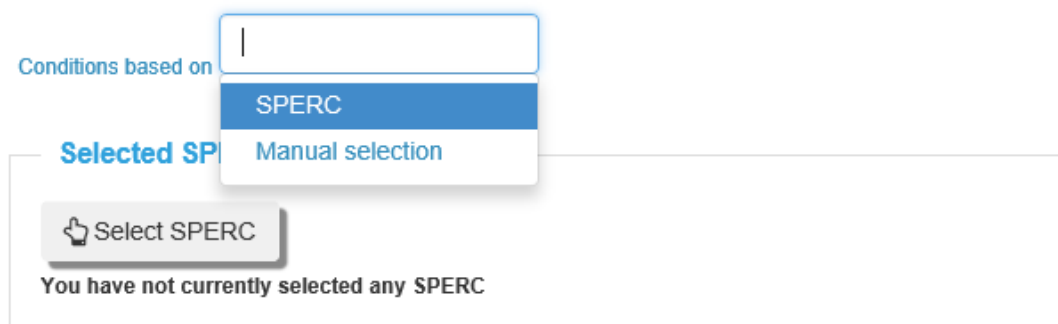

Specific notes when transferring use information from the use map template (excel files) to Chesar:

- o The *link to entry in previous use maps* does not have a corresponding field in Chesar. This information should be reported in the field "Additional information from use map".

- o For an environmental contributing activity, several ERCs may be applicable depending on the technical function of a substance in that activity and its fate during the use. In that situation, several contributing activities with the same name should be created (under one use) in Chesar, but with different ERCs assigned (Note: in Chesar only one ERC can be assigned

per contributing activity). The assessor will have to select the relevant contributing activities based on the relevant ERC (depending on the technical function of his substance). In this case, the same SPERC (containing several sub-SPERCs for the releases of substances with different technical functions) can still be associated to all the contributing activities created as described above. The relevant sub-SPERC will automatically be selected for assessors based on the ERC. When service life is part of the use map, it will be up to the assessor to keep or delete the related "uses" depending on whether they are relevant for the substance (i.e. if the technical function of the substance implies that the substance will remain in the article). It may be useful to draw the attention of the assessor to the fact that he needs to select the appropriate ERC by adding explanation either at the use map level in the field "Advice to assessor" or at the level of the use in the field "Additional information from use map".

- In Box 3, you can then **for each contributing activity associate a relevant active SPERC, SCED or SWED,** which you should have first created in your library. To do so:

    o   For an environmental contributing activity, in the Conditions of use section, select *Conditions based on* SPERC and Select your SPERC.

Conditions of use ❓

Conditions based on

| SPERC |
| Manual selection |

Selected SP

🖐 Select SPERC

You have not currently selected any SPERC

SPERCs proposed by Chesar for selection for a given contributing activity are SPERCs which are relevant for the same ERC as the one in the selected contributing activity.

Repeat the action for each environmental contributing activity for which a SPERC is available.

    o   The same is to be done for each consumer contributing activity where a SCED can be assigned. SCEDs proposed by Chesar for selection for a given contributing activity are SCEDs which are relevant for the same PC or AC as the one in the selected contributing activity.

    o   The same is to be done for each workers contributing activity. SWEDs proposed by Chesar for selection for a given contributing activity are SWEDs which are relevant for the same PROC as the one in the selected contributing activity.

When you have created your use map as described above, you can **Create a report** to check that your content is fine. To create the report, go to Box 1, in the "Use map management" tab, identify the use map for which you want to create the report and click

on the Create report icon next to it 📄 .

3.6 Export the use map

Once finalised, you can **export your use map**:

- Go to Box 1, in the "Use map management" tab, and select the use map you have created.

- Click on the export icon

- Provide an appropriate name (use map name, possibly including a modification date or a version) for the exported file.

Your use map will contain all relevant information. When a registrant imports the use map, the SPERCs, SCEDs and SWEDs linked to it will automatically be imported in his library.

Nevertheless, if you have updated some SPERCs, SCEDs or SWEDs in an updated use map you should also export them from your library as explained in section 5.

The use map you have created can then be made available to all registrants on ECHA webpage https://echa.europa.eu/csr-es-roadmap/use-maps/use-maps-library. We strongly recommend that you check/test your use map before publication in the ECHA use maps library. You will find more information in the section 4 on how to check (test) your use map.

4. Checking of the use map before publication

Before making their use maps available to assessors, use maps developers are encouraged to perform the following checks:

- Ensure that a TRA assessment can be run based on the information available (where it is indeed the intention that TRA could be used)

- Ensure that an EUSES assessment can be run based on the information available (where it is indeed the intention that EUSES could be used)

- Check the content of the CSR and ES for communication generated based on their use map, including a check to ensure that no phrases for the ES for communication are missing from a SPERC, SWED or SCED

Those basic "checking" steps are highly recommended as they can prevent some feedback from users of the use map (therefore preventing a need for update).

In addition to this checking, we also recommend that you "test" your use map with a registrant and formulator from your sector, in order to fix potential issues that would not have been highlighted by the basic checking in Chesar.

4.1 Pre-requisite to check the content of your use map

In order to perform the checking in Chesar, you first need to export the use map you have created from Box 1. You will then run Chesar as an assessor.

4.2 Checking that no critical information is missing

The following step by step instructions enable checking that:

- Appropriate information is included in the use map for running an exposure estimation with built-in exposure estimation tools (TRA worker and consumer and EUSES) and that

- Information for the ES for communication is available in the use map

1. Box 1 - Import "dummy substance" files:

Two Chesar files for dummy substances (solid and liquid) are available on the Chesar website in the use maps section of https://chesar.echa.europa.eu/support/library. They contain dummy key phys-chem parameters (needed to run TRA and EUSES), as well as fake PNECs and DNELs for systemic effects. For the purpose of this exercise, we recommend to use those substance files.

- Import the substance files in Chesar
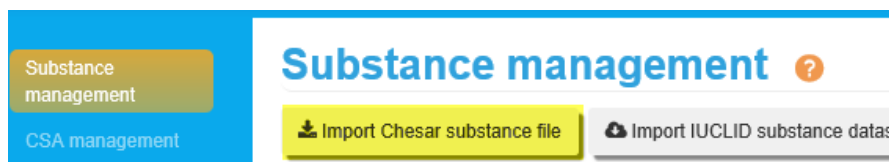
Note that if you had imported the substance previously you just need to select it.

Check that the proposed substance is selected and that **a CSA is selected** (not a use map).

2. Box 2 - Import the use map you want to check:
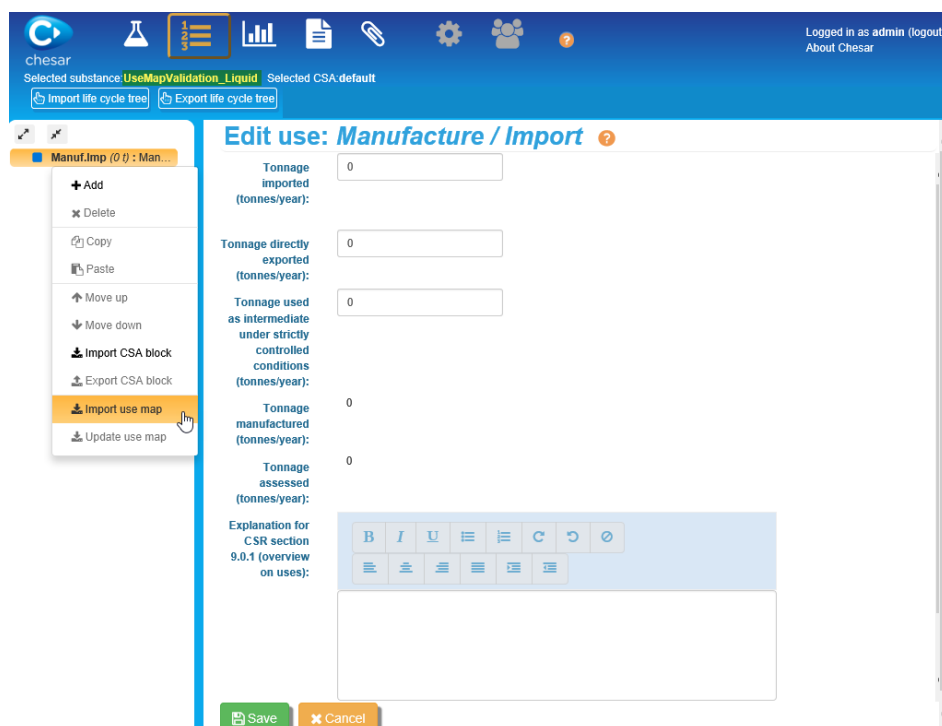
3. Checking that an environmental assessment can be run with EUSES

In order to check that, for example, no release factors were missing in any SPERC linked to the use map, you may want to run an EUSES assessment for all the environmental contributing activities using the *UseMapValidation_Liquid* substance. For that, you first

need to provide a tonnage for each use in Box 2 (you may input a fake value) and then run an EUSES exposure data set for the full life cycle tree. Thanks to the icons appearing in the life cycle tree in Box 3 you will quickly see if information is missing.

a. Box 2 - Provide use tonnage for each use

b. Box 3 - Add EUSES default exposure datasets

- In Box 3, expand the life cycle tree by clicking ⤢
- From the Add default exposure datasets menu, select EUSES 2.1.2 datasets

c. Box 3 - Check if EUSES can run

- All the contributing scenarios for the environment for which there is a blue question mark ⓘ indicate that the exposure assessment could not be calculated. Have a closer look at those. In particular, check that all release rates are provided.
  You may notice that for a contributing scenario where a SPERC is assigned in the use map, the SPERC has been replaced by "Manual selection" for the condition of use and the release estimation method by ERC. This may be the case if there is no sub-SPERC in your SPERC valid for the substance properties you have assigned.

4. Checking that a TRA workers can be run

If you expect that a number of registrants will use the TRA to assess their substance on

the basis of your use map, you may want to quickly check whether all relevant information is provided in your use map. You may need to run the check twice: for the *UseMapValidationLiquid* and *UseMapValidationSolid* substances.
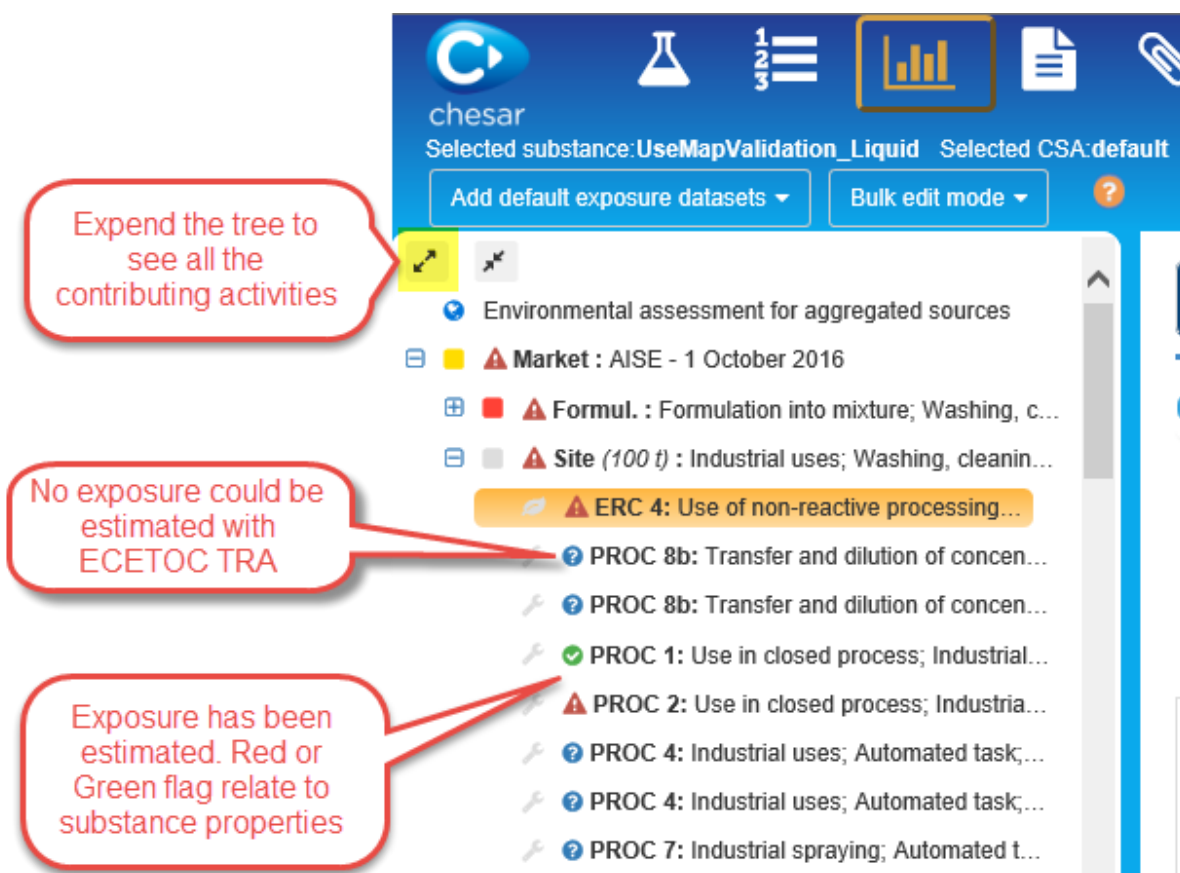
a. Box 3 - Add TRA workers default exposure datasets

- In Box 3, expand the life cycle tree by clicking ⤢
- From the Add default exposure datasets menu, select TRA Workers 3.0 datasets
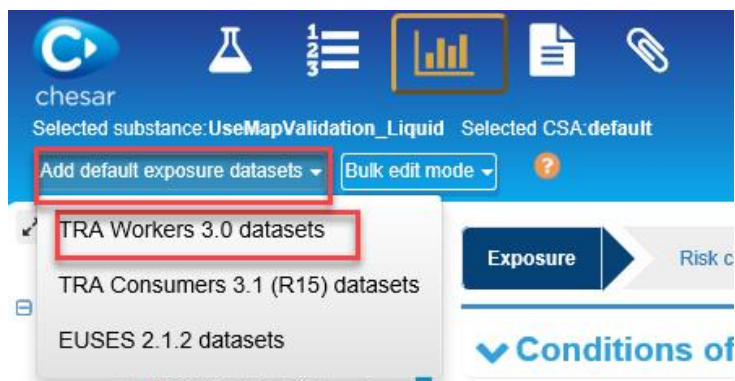
b. Box 3 - Check if ECETOC TRA workers can run

- You can easily figure out if ECETOC TRA can run, thanks to the symbol in front of each contributing activity.
- The blue question marks ❓ indicate that the exposure assessment could not be calculated.

- To understand why exposure assessment could not be calculated, click on the

contributing activity with   ❓ , and press the "Exposure estimates information"

button   ![exposure estimates information]   .
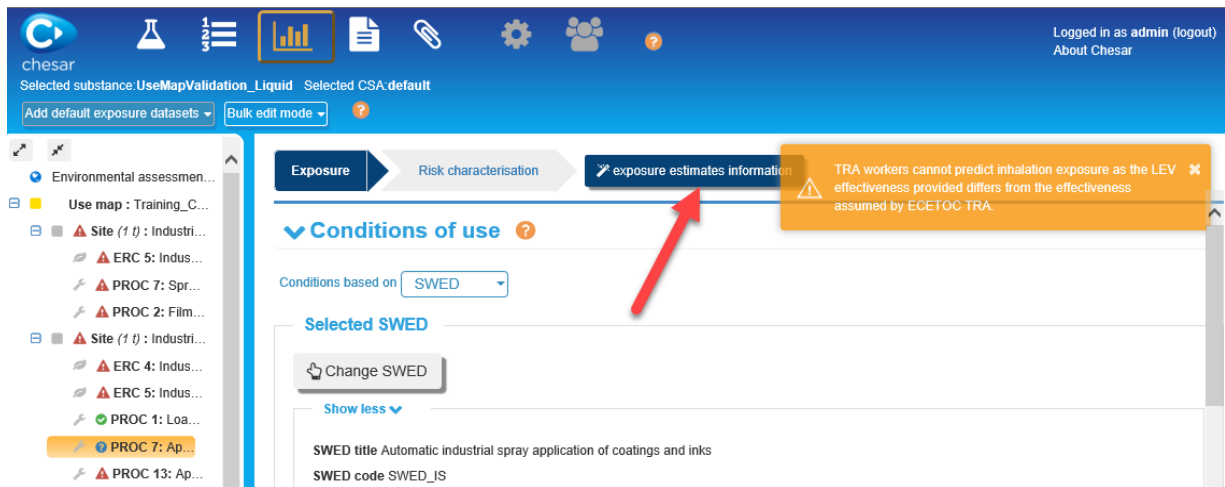
There might be various reasons why an exposure assessment could not be calculated, for example:

- o A condition of use is missing which is required to be able to run the ECETOC TRA assessment in Chesar

- o The contributing activity has been assigned PROC 7 and the Occupational Health and Safety Management System has been set to Basic

- o The contributing activity has been assigned PROC 21 and the substance being assessed is a liquid

- o Local Exhaust Ventilation has been set to "Yes" and the effectiveness values entered do not match the default values use by ECETOC TRA

Note that in case a SWED is expected to cover assessments made with other tools (such as ART), ❓ is normal. In that situation, you may want to check that sufficient information is available in the field "Advice to assessor", so an assessor would understand why the TRA assessment in Chesar cannot be run. Depending on the version of Chesar you are using, you may need to click on "show more" in the contributing activity to view this field.

## 5. Checking that a TRA consumers can be run

If you expect that a number of registrants will use the TRA to assess their substance on the basis of your use map, you may want to quickly check whether all relevant information is provided in your use map. You may need to run the check twice: for the *UseMapValidationLiquid* and *UseMapValidationSolid* substances.

a. Box 3 - Add TRA consumers default exposure datasets

- In Box 3, expand the life cycle tree by clicking
- From the Add default exposure datasets menu, select TRA Consumers 3.1 (R15) datasets
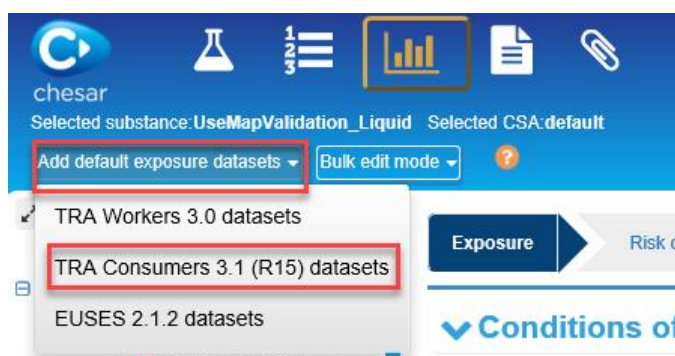
b. Box 3 - Check if ECETOC TRA consumers can run

- You can easily figure out if ECETOC TRA can run, thanks to the symbol in front of each contributing activity.
- The blue question marks indicate that the exposure assessment could not be calculated.
- To understand why exposure assessment could not be calculated, click on the contributing activity with , and press the "Exposure estimates information" button .

An exposure assessment could not be calculated when condition of use (or its value) is missing which is required to be able to run the ECETOC TRA assessment in Chesar.

Note that in case a SCED is expected to cover assessments made with other tools, 🔵 is normal. In that situation, you may want to check that sufficient information is available in the field "Advice to assessor", so an assessor would understand why the TRA assessment in Chesar cannot be run. Depending on the version of Chesar you are using, you may need to click on "show more" in the contributing activity to view this field.

6. **Checking that all relevant information for communication on conditions of use is part of the use map**

   a. **Box 5 - Generate the ES for communication**
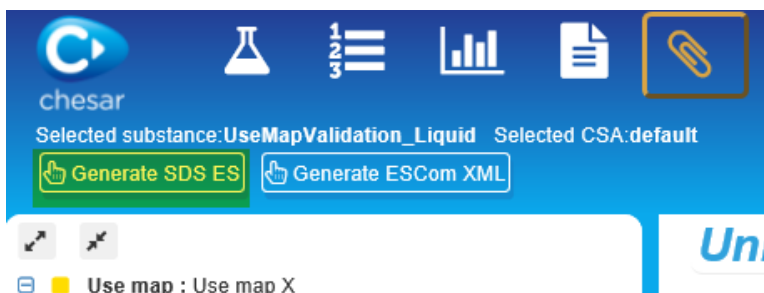
- By clicking "Generate SDS ES", you can already identify if some phrases are missing in the ES for communication. A warning box will appear.

- When a phrase is mentioned as missing

     a. You can check whether the assignment of default text for SDS ES is part of the condition of use template in Box 6 (go to Box 6, search for the condition of use and scroll to the SDS ES related information section). If the condition of use is expected to be communicated, in most cases, it is relevant to have a default phrasing for communication.

b. If the setting in the condition of use template is fine, you may look in which SPERC, SWED or SCED the condition of use is used by selecting the "used in" section in the condition of use template definition in Box 6. Go to those SPERC/SWED/SCED and check that the settings for the SDS ES are appropriate for the mentioned condition of use.

4.3 Checking that the content of your use map provides the expected outcome

It may be relevant to check a bit further whether your use map contains appropriate information. In particular, you may want to check whether:

- Assessing one or more substances relevant for your sector is supported by your use map.

- The CSR and the ES for communication generated on the basis of your use map convey the relevant information.

Those checks are more time consuming than the previous ones, but may ensure that the information you generated is meaningful and corresponds to what you expected.

1. Assessing a relevant substance

You may carry out the same assessment steps as the ones described in section 4.2 using a relevant substance for your sector. This will enable you to check whether:

- It is possible to get RCR <1 for relevant concentrations of the substance in standard products of your sectors.

- Whether the conditions of use support adequately some qualitative hazards which may occur with some substances.

2. Box 4 - Generate CSR section 9-10
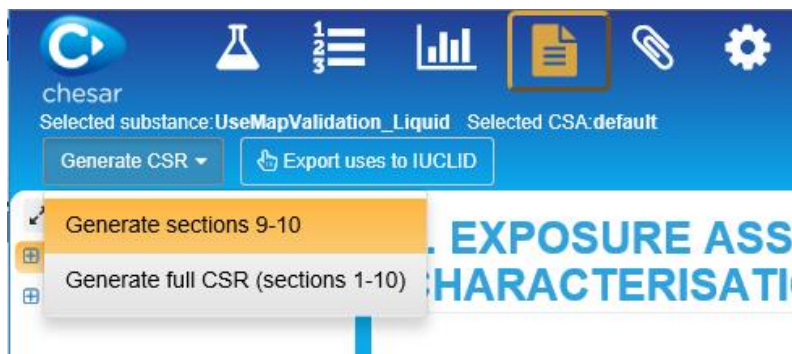
- Check the content of the CSR section 9-10: does it contain what you expected it to contain? In particular, pay attention to the following parts of the document:
    - Title section for each ES (corresponding to your use description)
    - Conditions of use (coming from SPERC/SCED/SWEDs)

3. **Box 5 – Generate the ES for communication**

- Check the content of the ES for communication: does it contain what you expected to contain? In particular, pay attention to the following parts of the document:
    - Table of contents: are the structured short titles clear, can you differentiate the different uses from each other?
    - Conditions for safe use in Section 2 of the ES: is it comprehensive enough for the sector? Is the way they are communicated clear to downstream users?

5. Updating a use map or use map elements (SCEDS, SPERCS, SWEDs)

5.1 How to update a SPERC, SCED, SWED

Some functionalities have been implemented in Chesar to better support versioning management of SPERCs, SCEDs and SWEDs.

- Sectors can specify that a new version of a SPERC (SCED/SWED) updates (replaces) a previous version.
- When this information reaches the assessor:
    - The previous version is not available for selection in a new assessment. It is possible to identify in which previously carried out assessment the "old version" SPERC (SCED/SWED) has been used.
    - When an assessment has been carried out with the "old version" of a SPERC (SCED/SWED) the assessor is warned and has the possibility to replace the old SPERC (SCED/SWED) by the new one.

For updating a SPERC, SCED, SWED the following steps have to be followed:

- Identify the SPERC (SCED/SWED) you want to update in your library.

- Copy it by pressing .

- In the *Chesar version information* block you are advised to report in the *Version* field a new version number or version/modification date. This version is only

relevant for the management for the library and is not part of the communication.

- Then you have to select (again) the SPERC (SCED/SWED) that you want to update with this new one (the one you initially selected and copied for modification) by pressing the **Select SPERC** (SCED/SWED) button.
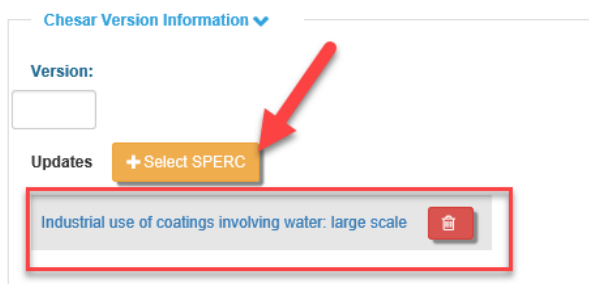
- Modify the newly created SPERC (SCED/SWED) as needed and click on save as you may want to check the SPERC (SCED/SWED) report before finalising it. Pay attention that when you save a SPERC (SCED/SWED) to generate a SPERC (SCED/SWED) report and then re-open the saved SPERC (SCED/SWED), then the SPERC (SCED/SWED) which it updates is removed and you need to select it again.

- Once done, **Activate** it. When activating the new version of the SPERC (SCED/SWED), the SPERC (SCED/SWED) which has been updated is set to obsolete by Chesar.

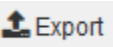## 5.2 How to export updated SPERCs, SCEDs, SWEDs

When creating an export file containing SPERCs (SCEDs/SWEDs) for assessors you should include all the versions that you had previously published, to ensure traceability in the recipients' libraries.

To export **all** the versions of the SPERCs (SCEDs/SWEDs) go to advanced search and search for both active and obsolete elements.

SPERCs ❓

+ Create | 🗑 Delete | ⬇ Import | ⬆ Export | 📄 Create SPERC report

Advanced search Go to search

SPERC title

Life cycle stage

Please select ...

Sector of use

Chemical product category

Status

Active ✕ Obsolete ✕

Author

Description of activities/processes

🔍 Search | ⟳ Clear

Then select all the versions of the various SPERCs (SCEDs/SWEDs) you want to export by ticking the check box on their left (you can also "select all" by ticking the box in the title row) and create your export file by clicking the ⬆ Export button on the top of the page.

⚠ Note that if you do not include all the previous versions (e.g. very old versions), the assessors who had used those versions and imports the new files will not be made aware that their old version may need to be replaced by a newer one.

5.3 How to update a use map

To update a use map, select it in the Use map management tab in Box 1 (after having selected the use map substance in the Substance management tab). Then modify it as you need and export it. You are advised to report in the internal remarks field information which will help you track back when and why you introduced some changes. You may also provide some advice to the assessor.

Note that the versioning management of use maps is to be done outside Chesar. If you want to go back to an earlier version of your use map, you will have to import it again. Note that such import will overwrite all the changes you may have done in the meantime.

5.4 How to export an updated use map

Each use map is identified by a UUID (a code not visible to the user), which makes it unique. It is important that if a use map developer wants to update his use map, he does this always from the same use map. So once a registrant imports a new version of the use map, the changes between the versions are recognised and are flagged to him.

Updating a use map could mean:

- New use added
- Use removed
- Use description updated (new/update/deletion of contributing activities)
- Update in the SPERCs, SWEDs, SCEDs

Once the changes have been performed (and checked), the use map developer can export the use map, and publish it in the ECHA library (cf section 3.6).

As a good practice, it is recommended, to keep track of the changes performed in the

use map, and list them in a release note that could be published together with the Chesar file of the use map in the ECHA library. This will also help assessors to determine whether they need to import the updated use map or e.g. importing the imported SPERCs/SCEDs/SWEDs would suffice.

It is also recommended to indicate a version date or a version number in the name of the use map.

6. Uses in "rigorously contained conditions"

6.1 Background

There is a possibility in IUCLID to flag uses that take place under rigorously contained conditions (with a differentiation between workers and the environment). This flag can be used by the authorities, in combination with information on the hazard of the substance and the tonnage for the use, to deprioritise a substance regarding further regulatory actions. The flag needs to be supported by adequate information describing the rigorously contained conditions.

Figure 4: screenshot of IUCLID in a use (section 3.5 of IUCLID)
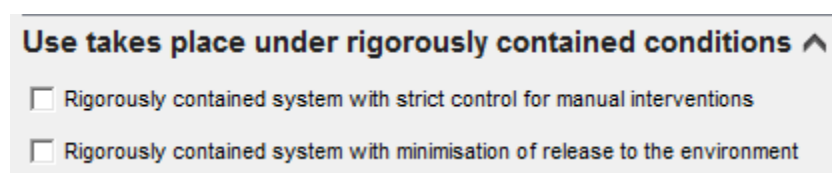
Such information will be exported from Chesar to IUCLID. It is to be set per use (meaning it should apply to all the contributing activities under that use). If the use may take place under both conditions, rigorously contained or more open (e.g. depending on the companies or technology applied), you should create two uses and support registrants in estimating the tonnage (e.g. via the use map), which is handled in contained conditions.

Note: Without differentiation of tonnage, authorities will have difficulties to use the flag on rigorously contained conditions as described above.

6.2 Specificities in Chesar related to uses in rigorously contained conditions

When some uses in a use map are "in rigorously contained conditions" with regard to the environment and /or human health you may flag this for assessors in Chesar in the Additional information from use map field for the relevant uses. Assessors will then be able to check related checkboxes in Box 3 when selecting their use.

6.2.1 Rigorously contained system with minimisation of release to the environment

If the use takes place in a *Rigorously contained system with minimisation of release to the environment* (for all the contributing activities for the environment (if several) of the use) then you should only assign SPERCs which have the flag *Rigorously contained system with minimisation of release to the environment* to each contributing activity for the environment for that use. Note that in such cases the assessor will also have to provide a *Description of non-technical means for rigorous containment and strict control for manual intervention*. Such explanation will also cover the *non- technical means* relevant for the workers activities if they take place in a *Rigorously contained system*

with strict control for manual interventions (see section 6.2.2). You may provide support for such information in the *Additional information from use map for the use* in Box 2 in your use map.

6.2.2 Rigorously contained system with strict control for manual interventions

If the use takes place in a *Rigorously contained system with strict control for manual interventions* (for all the contributing activities for workers of the use) then you should only assign SWEDs which have the flag *Description of non-technical means for rigorous containment and strict control for manual intervention* to each contributing activity for workers for that use. In this case, the assessor will also have to provide a *Description of non-technical means for rigorous containment and strict control for manual intervention*. Such explanation will also cover the non-technical means relevant for the environment if the use takes place in a *Rigorously contained system with minimisation of release to the environment*. You may provide support for such information in the *Additional information from use map* for the use in Box 2 in your use map.