



EUROPEAN CHEMICALS AGENCY



## Chesar 3 in a nutshell

Chesar stands for Chemical Safety Assessment and Reporting. The tool has been developed by the European Chemicals Agency (ECHA) for supporting registrants under REACH. It follows a workflow for carrying out exposure assessments and risk characterisations, thereby facilitating the generation of a Chemical Safety Report and exposure scenarios for communication.

### What does Chesar offer?

Chesar increases the efficiency in conducting chemical safety assessments (CSAs). It supports a workflow for the assessment process and facilitates the re-use (or update) of assessment elements across substances generated within a single Chesar instance or imported from external sources. The tool enables automated generation of chemical safety reports (CSRs) and exposure scenarios (ESs) for communication from the assessment.

Chesar provides consistency between CSRs and the exposure scenarios communicated to downstream users. It also facilitates exchange of data between IUCLID and Chesar and therefore supports consistency between the technical dossier and the CSR.

In order to fully benefit from Chesar's capacity to re-use assessment elements (across various substances) downstream user sector organisations can provide information on uses within their sectors and the associated conditions of use. With Chesar such information can be generated in XML exchange format and made available to all registrants in support of their CSR preparations.



## How does Chesar work?

To use Chesar, an assessor needs to have sufficient information available on the properties of the substance, the uses of the substance, the related tonnages and the conditions under which the uses take place. Based on these inputs the assessor defines the conditions of safe use, calculates (and/or reports) the corresponding exposure estimates and compares the estimated exposure to the i) predicted no-effect concentrations for environment (PNECs) and ii) the derived no-effect levels human health (DNELs).

Workers and consumers exposure estimations provided by Chesar are calculated using the ECETOC TRA tool (available on <http://www.ecetoc.org/tra>).

Environmental exposure estimates provided by Chesar are based on the EUSES 2.1 fate model and a release module for reporting environmental releases and the corresponding conditions of use. The release estimates can be based on Environmental Release Categories (ERCs), release factors or Specific Environmental Release Categories (SpERCs).

Chesar also supports the assessments based on other exposure estimation tools or measured data.

In addition, Chesar can be used for qualitative assessments when predicted no-effect-levels are unavailable for certain hazards.

## What is new on Chesar 3?

Compared to the previous versions, Chesar 3 supports assessment of complex cases such as substances that transforms, multi constituent/UVCB where (groups of) constituents behave differently or substances available in several forms/compositions with different hazard profile.

In future versions of Chesar 3 it will be possible to import use maps, and to export to EComXML format.

## Why using Chesar?

Chesar helps you in managing the safety and exposure of your chemicals. You or your consultant can:

- Perform your chemical safety assessment (CSA) with standard workflow/harmonised format
- Create and update your chemical safety report (CSR) – it is generated automatically from the CSA. This saves money and time!
- Use it to create the exposure scenarios (ES) to communicate the conditions of safe use to your customers
- Be consistent with data: Chesar exchanges data with IUCLID.
- Download it free-of-charge and install it very easily!



More information on Chesar is available on Chesar's website:

<http://chesar.echa.europa.eu/>