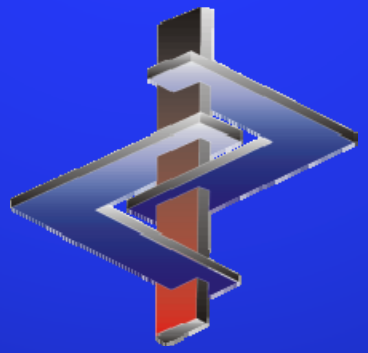
Creating a Preparation



Introduction

- **Raw Materials are those with a CAS number and Preparations are a combination of Raw Materials.**
  - Many companies have Raw Materials that are in actuality intermediate products consisting of Raw Materials (CAS Numbers).
  - It is necessary to set up these intermediates in ChemGes as preparations, so that, for calculation, as is legislatively required, they can be broken down into their Raw Materials.
  - This also means that data/classification changes need to be done at the lowest level of the breakdown, so that they carry through. (i.e. Changing the classification of an intermediate will not carry through to the final product – it is necessary to change the Raw Material Data so that it leads to the desired change).

- **ChemGes does not contain any Preparations by default.**

Please direct additional questions to our hotline
Via telephone at *+1 (902) 832-3425* or *+43 2628 619 00*
Via email to *info@dr-software.com*

Introduction

- **ChemGes calculations are based on formulae from the legislation**, as far as they exist and on formulae based on the legislation, generated by our staff of experts.
  - We do not base our calculations or data on 'Guidance Documents' (ie ECHA, EPA,…). When there is a discrepancy, the legislation takes precedence.

- **Transport legislation calculation**
  - In most cases, it is possible to calculate a specific transport classification, but some classes, as well as often the UN Numbers, require human input. In such cases, ChemGes will make an educated and logical suggestion.
  - Our Programmers, Chemists and Transport experts have created a system for 'calculating' the transport classification based on the data of the preparation (classification, physical data,…) and the data or lack thereof of the individual raw materials, where clear formulae are not present in the legislation.
  - We recommend that you review the transport classification output by ChemGes. Feel free to make changes to the transport classification and/or to the settings for transport, if these are based on sound data from another source.
  - Further details about transport classifications in ChemGes, can be found in the manual located on the downloads page of our Website www.dr-software.com or accessible through the *Help* option in ChemGes (*General Help*) or in the **Transport** power point.

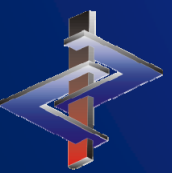
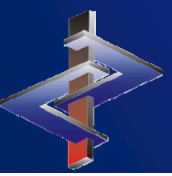


Table of Contents

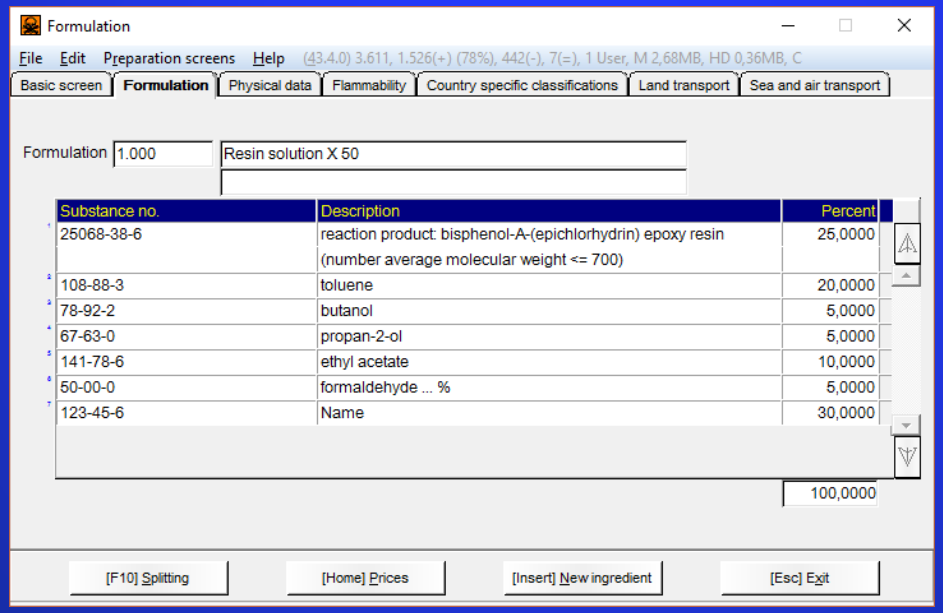


1. Entering the Formula

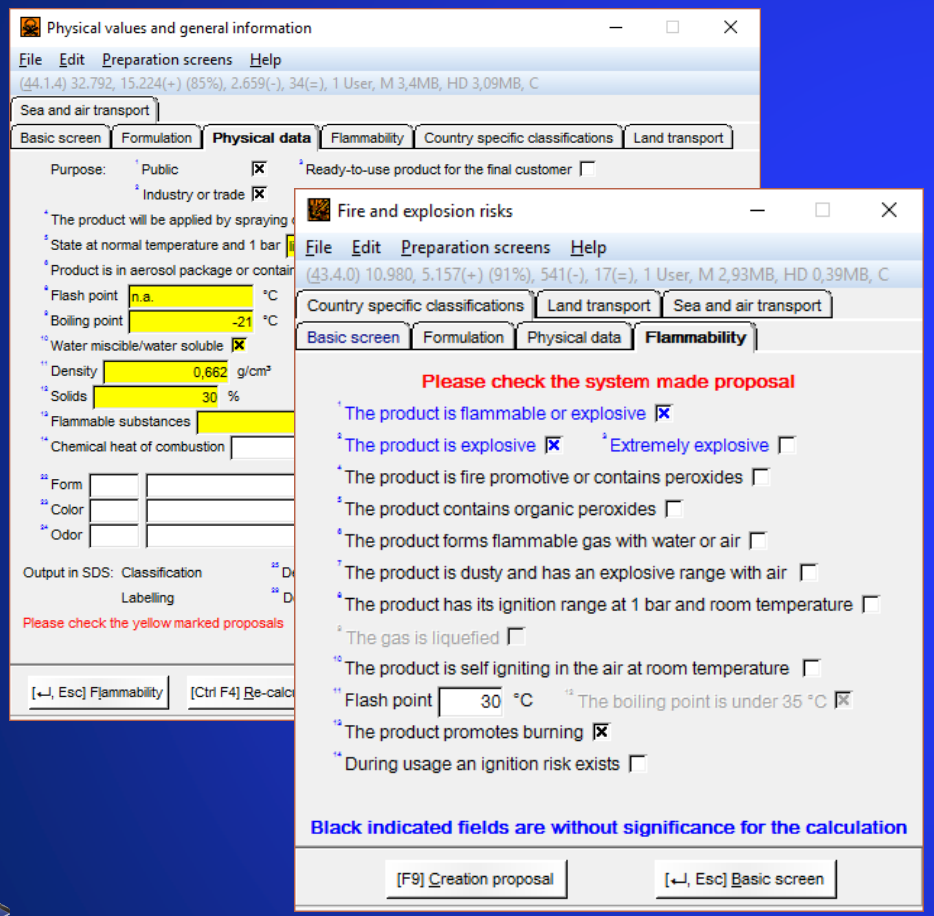
- Ingredients can be entered by their CAS Number, their name, a partial search string or an internal Product Code.

- For each ingredient, enter the percentage at which it is contained in the preparation.

- Even though non-hazardous ingredients do not have to appear on your SDS, it is recommended to input all ingredients when generating the formulation, as this way calculations performed by ChemGes can be more exact.



2. Entering Additional Data



- After inputting the formulation, ChemGes automatically takes you to two screens, where you are shown some initial calculations.
- Here, please input any additional data for your preparation, that you might have, and check the data provided by ChemGes.
- ChemGes has marked the data provided automatically, based on the ingredients, in yellow and blue.
- Appropriate formulae are used when applicable.
- Certain data, such as Flash Point, cannot be calculated. Therefore, the worst-case-scenario is output.

3. Understanding the Calculation Results

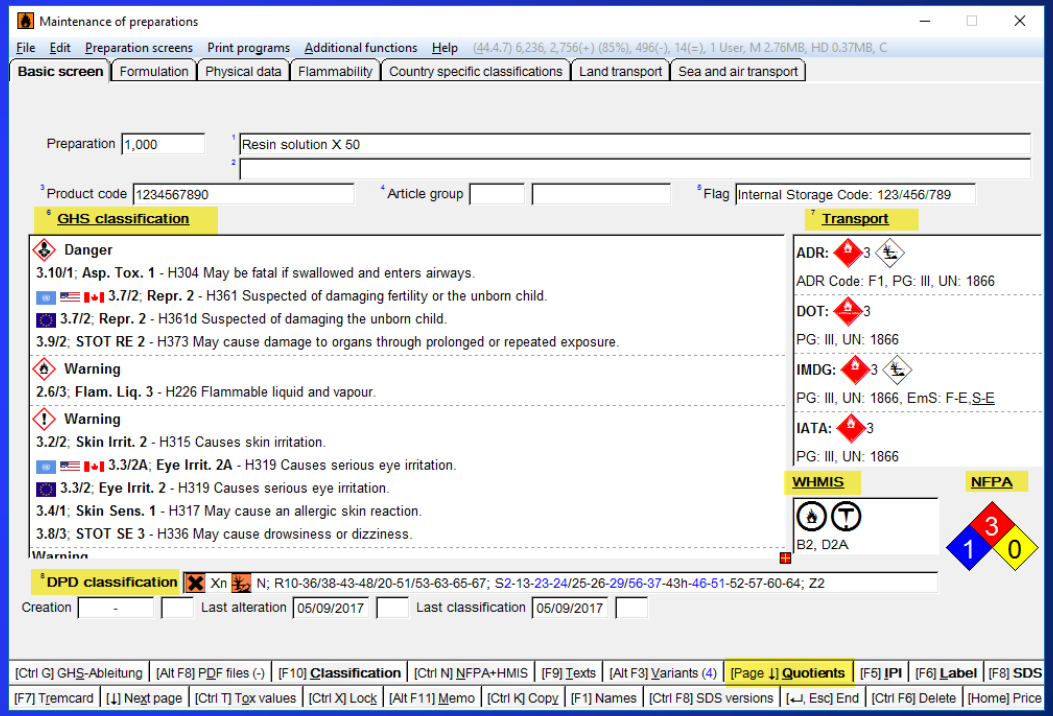
GHS Classification: Here you can see the details to the classification results based on the different forms of the GHS. **(see ‚GHS in Brief' Power Point for details)**
If you wish to change these classifications, that is certainly possible, but be aware that any such changes must have solid reasons to back them up.

DPD Classification: These are the results based on the old system, using R and S Phrases.

Transport: The transport classification for the ADR, DOT, IMDG, and IATA are output here. **(see ‚Transport' Power Point for details)**

On this screen, you can also find **WHMIS 1988** and **NFPA/HMIS.**

The **Quotients** Button, at the bottom of the screen, lets you examine the calculations that have lead to the classification of your preparation. **(see ‚Quotients' Power Point for details)**



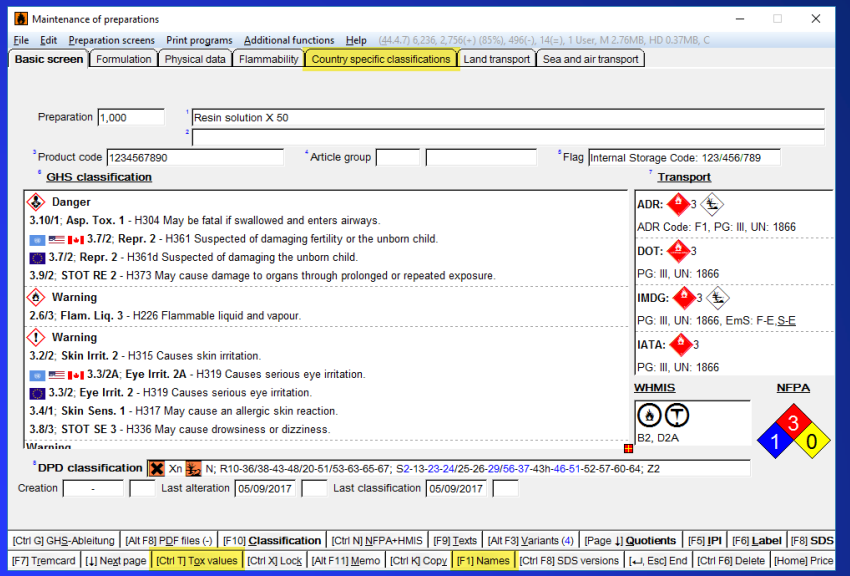
4. Further Data Entry

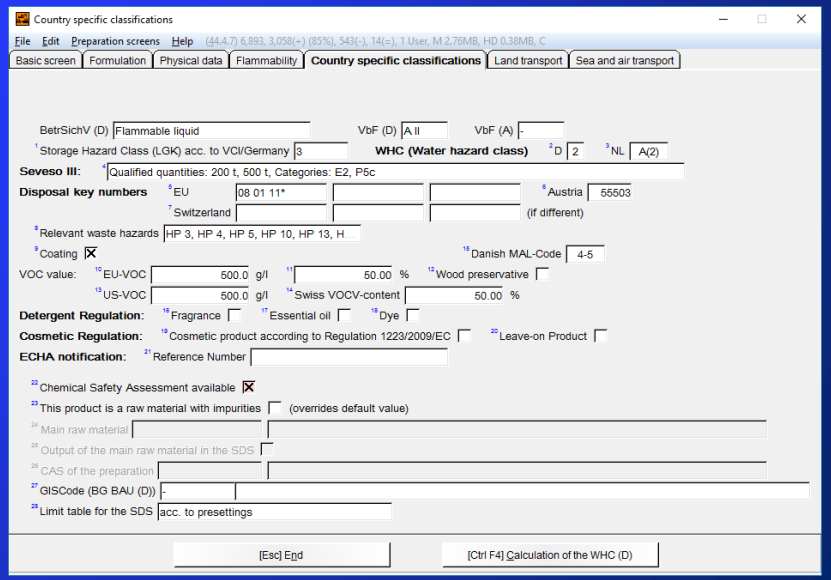
Tox Values: Here you can enter Toxicological Value Data for the preparation itself.

Names: In this field, you can enter/edit the names of the Preparation in various languages and with various markings for application.

Country specific classification: This screen allows for the input and viewing of country specific data, such as VOCs or Water Hazard Class.

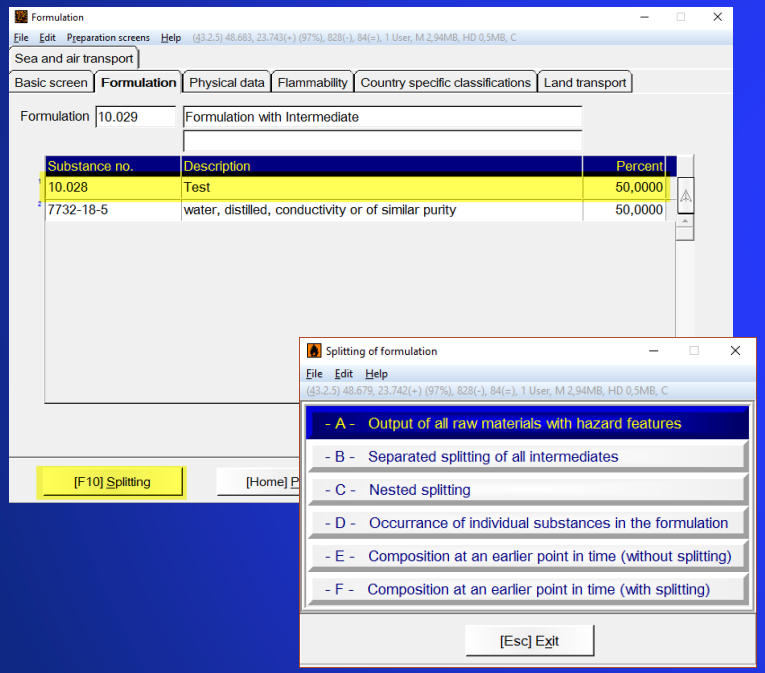
At any time, it is possible to return to any of the screens of your formulation and add or change information/data. After changes, please ensure that these changes are actually applied, by means of recalculations and reclassification of affected areas.
(see ‚Updating and Updates' Power Point for details)





5. Using a Preparation as an Intermediate

In order to use a preparation as an intermediate, simply create the preparation first and then enter it in the formulation screen of a new preparation, with the percentage at which it is contained.



When such an intermediate preparation is used, the data from the raw materials (CAS Numbers) is what will be used for the calculations of the resulting preparation.

Changes made in the intermediate preparation will not carry through into the next preparation.

This is what the legislation requires.

The **Splitting Option** allows for an easy overview of the ingredients contained in the whole preparation, including the intermediate preparations.

More detailed Information can be found in the Manual to ChemGes

@ www.dr-software.com Downloads