GHS & ChemGes

Overview and quick guide

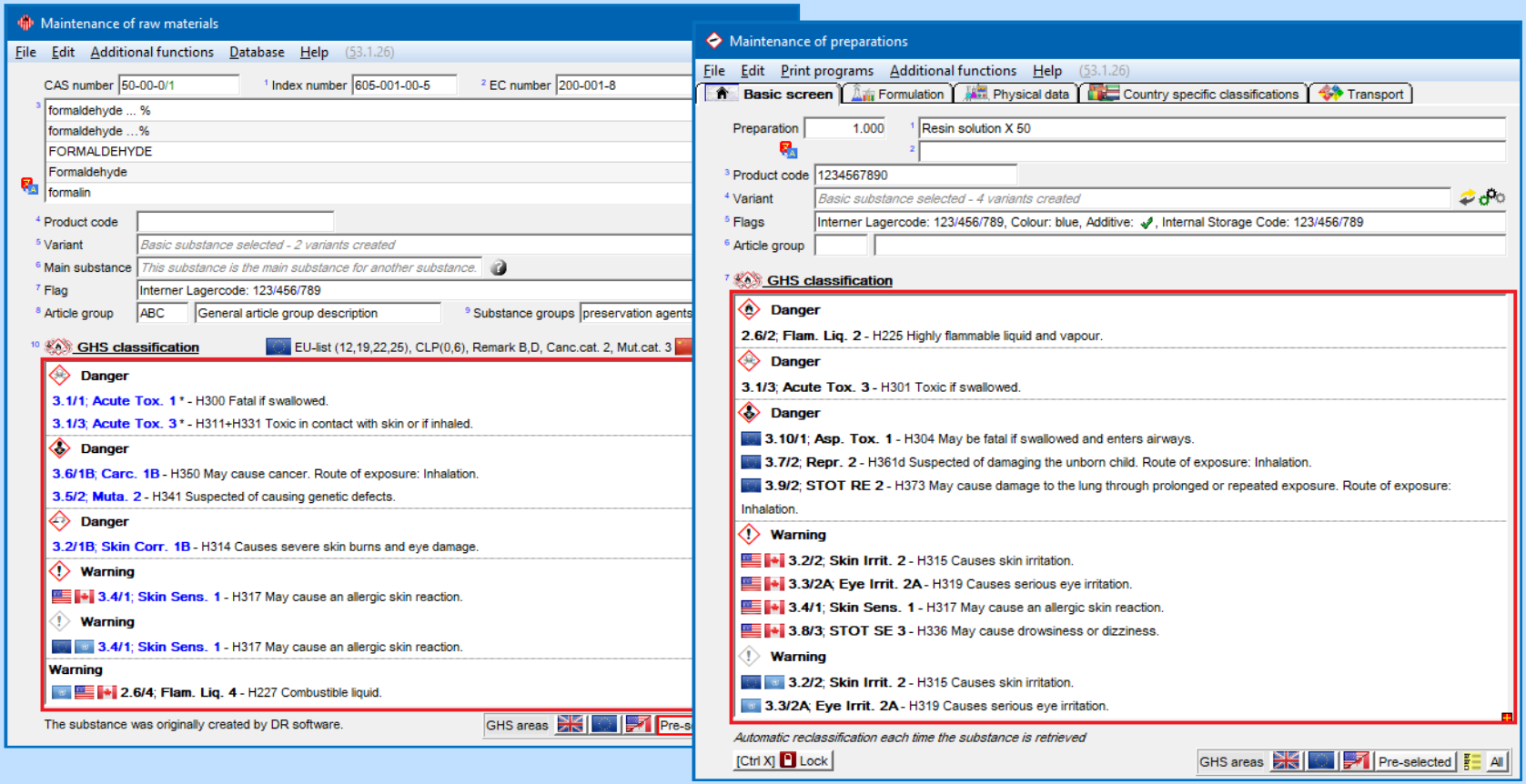
GHS Options in ChemGes

- The following pages provide a brief overview of the options and settings for GHS that are available in ChemGes.

- Detailed information on the individual menu items can be found in the *Manual to ChemGes* and the *Online help files to ChemGes* at http://www.dr-software.com/en/downloads.html.

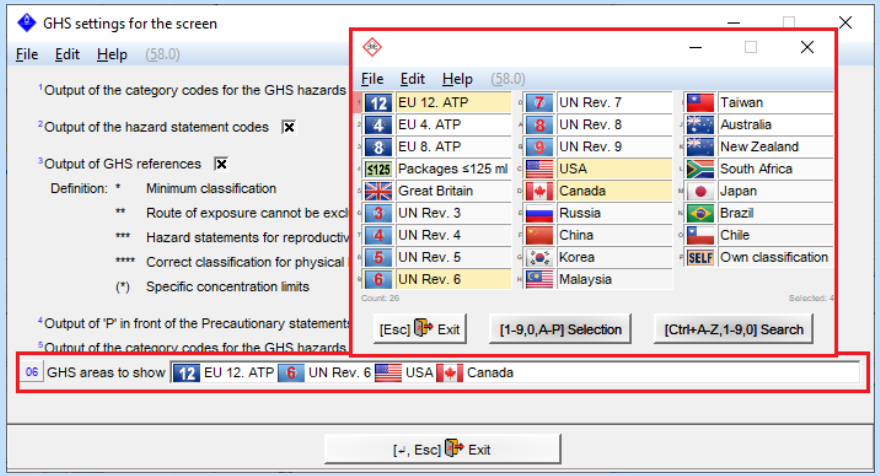
A1. Maintenance of raw materials/ preparations

The GHS classification of a raw material / mixture is displayed in the item **GHS classification**:
United Nations flag: UN GHS (*Rev. 03, Rev. 04, Rev. 05, Rev. 06, Rev. 07, Rev. 08, Rev. 09*)
EU flag: CLP (*4. ATP, 8. ATP and 12. ATP*)
US flag: OSHA HCS
CA flag: HPR
Further national classifications: *see respective flags*
SELF: Self-classifications (can be entered by the user)



A2. Maintenance of raw materials/ preparations

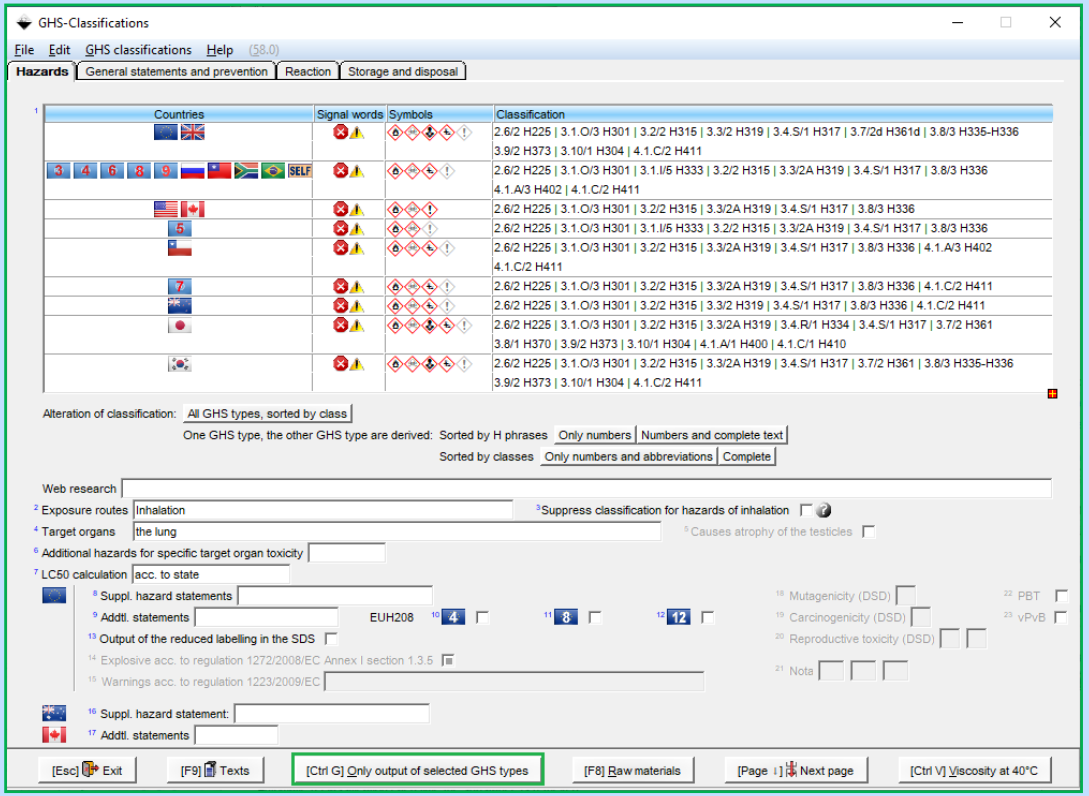
Note: The selection of the GHS systems that shall be displayed in ***Maintenance of raw materials / preparations*** can be done in Ctrl 4 **Maintenance programs** – *Program adjustments - Settings for the output on the screen* – ***GHS settings***, field **GHS areas to show** (*see* **C. GHS settings**) and via the item **GHS areas** in ***Maintenance of raw materials / preparations.***



The display of the GHS-systems selected by the user can also be activated / deactivated for the screen ***GHS-Classifications*** (*Maintenance of raw materials*, 10 **GHS classification** resp. *Maintenance of preparations*, 07 **GHS classification**).

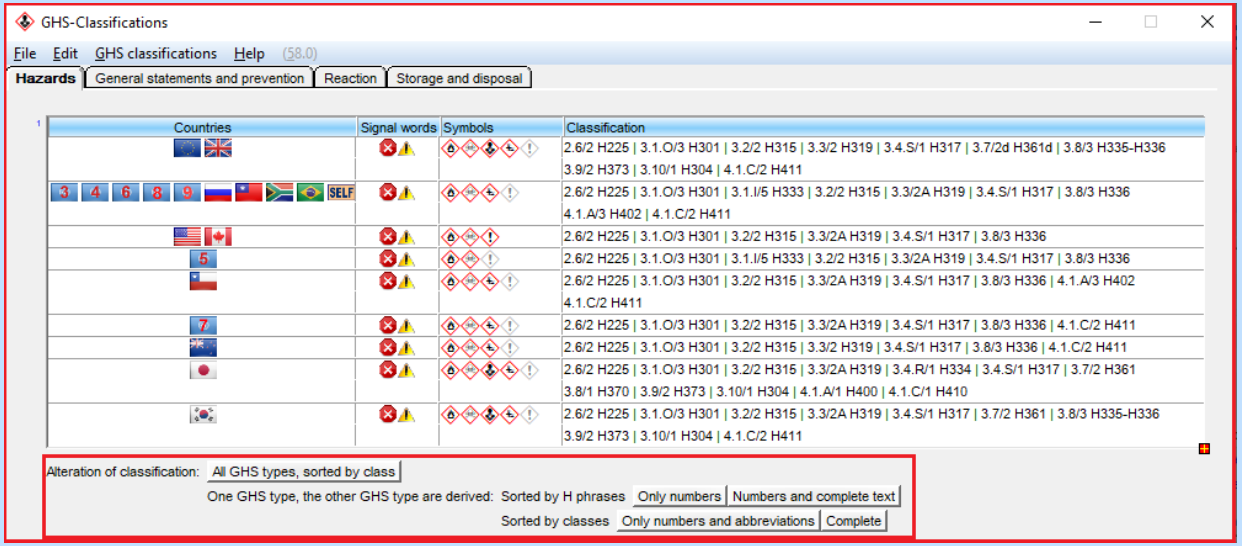
By means of the button Ctrl G **Only output of selected GHS types** you can set that only those GHS systems, which you have activated in Ctrl 4 **Maintenance programs** – *Program adjustments – Settings for the output on the screen* – ***GHS settings***, are displayed on screen.

To reset to the display of all GHS types press Ctrl G **Output of all GHS types**.

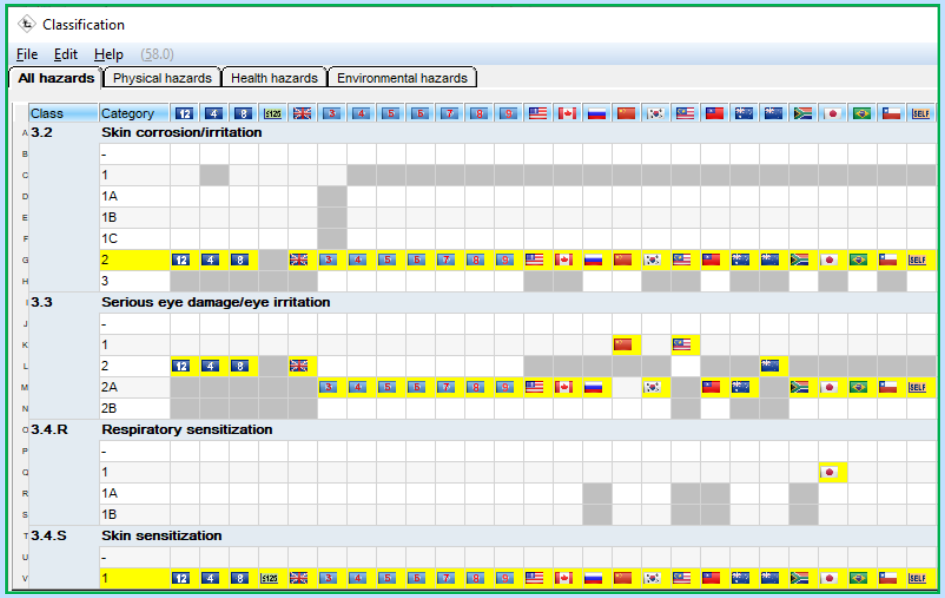


A2. Maintenance of raw materials/ preparations

Note: By means of the buttons under **Alteration of classification** you can vary the display of the GHS information:

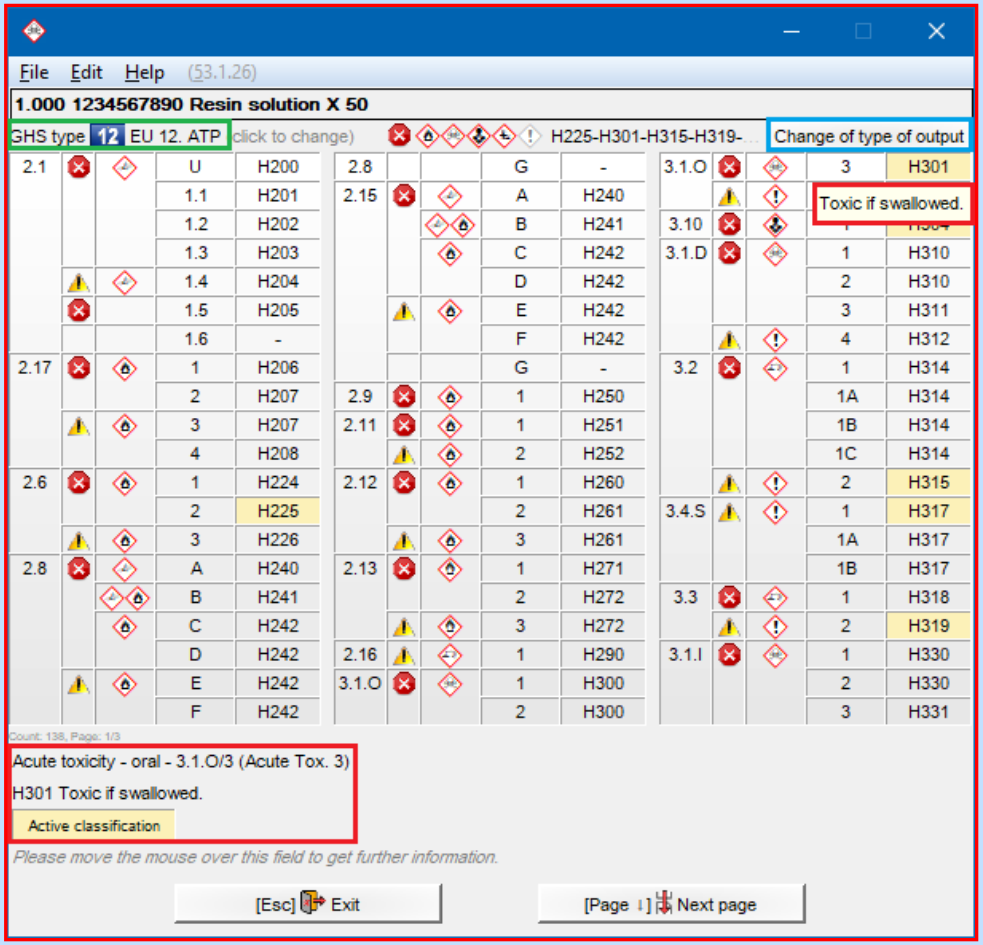


Sample – Display for **All GHS types, sorted by class**:
With this option all classes are displayed one after another with the respective classifications present for the individual GHS systems (GHS types).

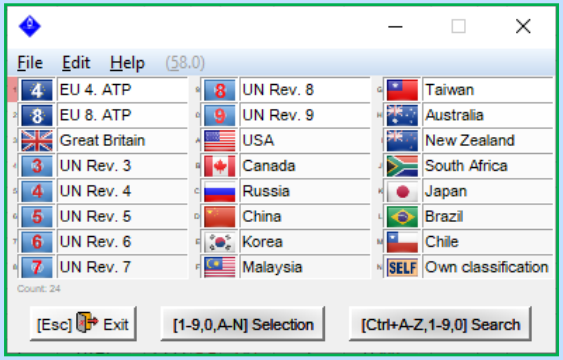


A2. Maintenance of raw materials/ preparations

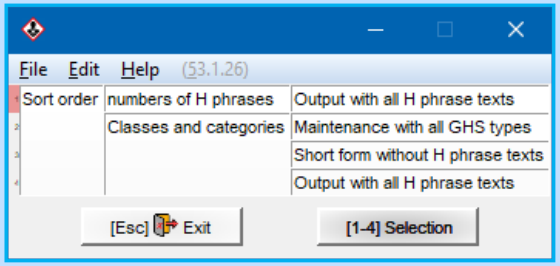
Sample – Display for ***Sorted by H phrases*** -**Only numbers**:
With this option the allocated H phrases (yellow marking) are displayed for a single country.
If you hover the mouse over a H phrase, further information (*Hazard class and category, text of the H phrase, information on the classification for other GHS types*) is displayed.



By means of the field **GHS type** you can select the requested GHS system:

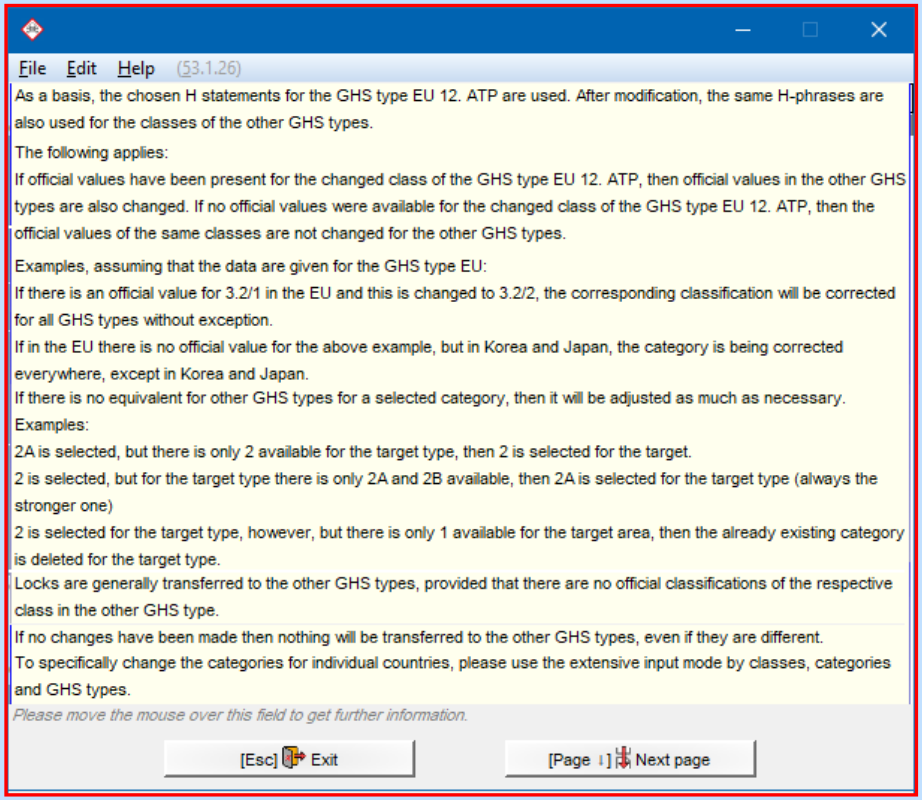


By means of the button **Change of type of output** you can switch to a different type of output:

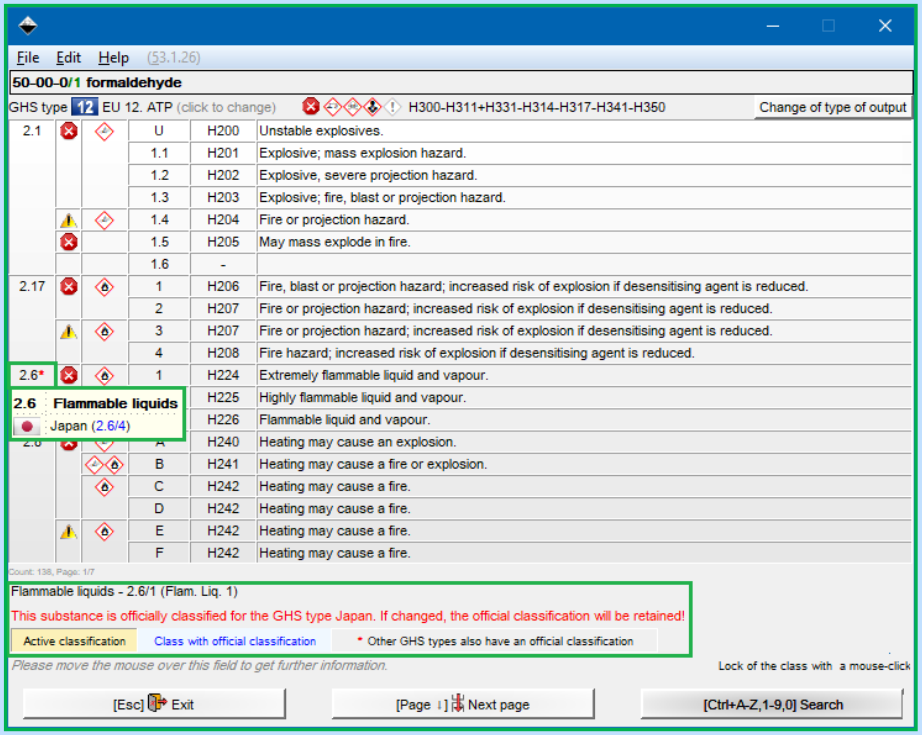


A2. Maintenance of raw materials/ preparations

If you hover the mouse over the grey text in the lower screen margin, you will receive further, detailed information:



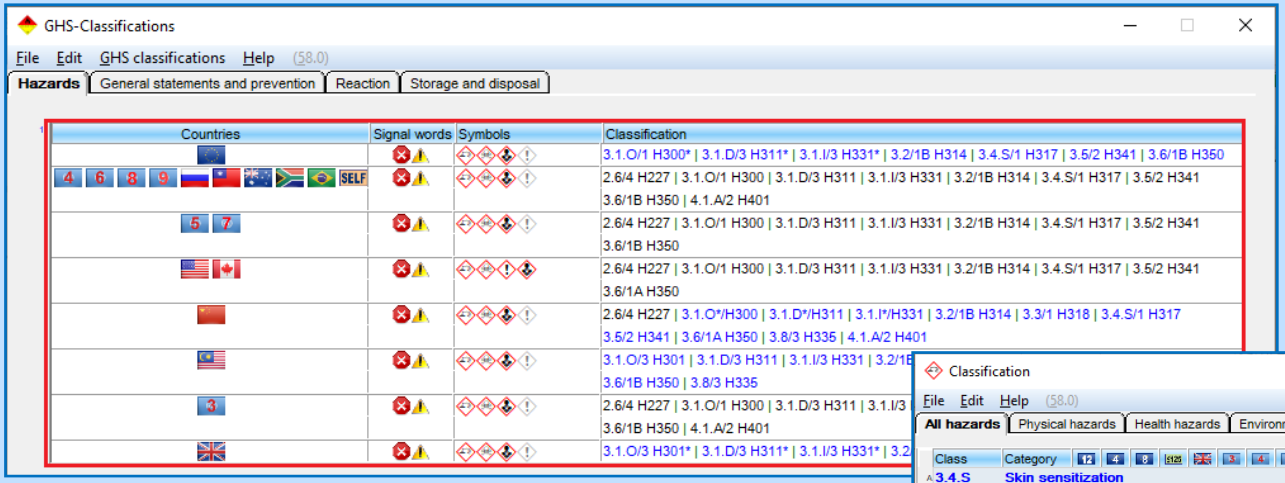
Black classifications marked with a red asterisk (*) indicate that an official classification is available for other GHS types:

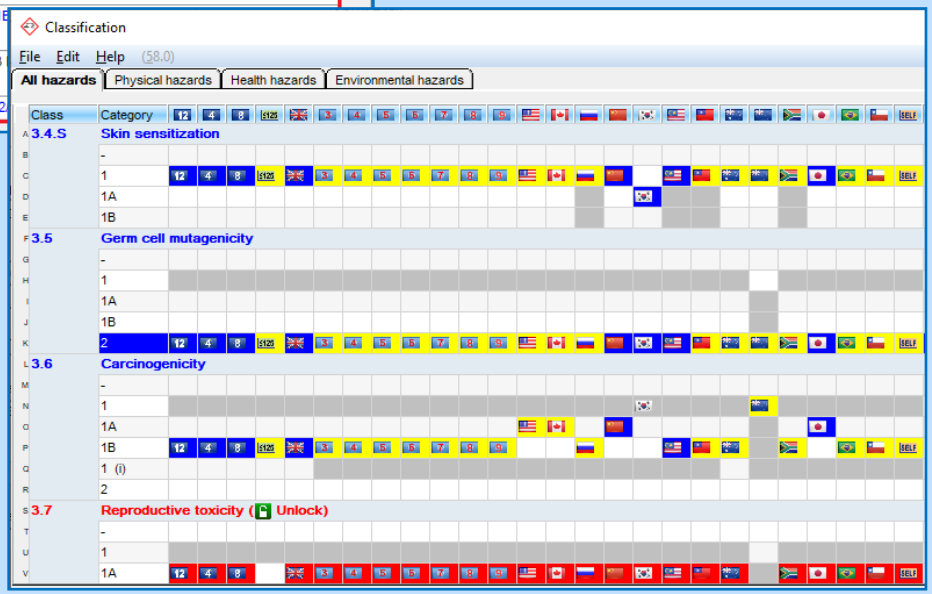


Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

A3. Maintenance of raw materials/ preparations

By clicking on the item **GHS classification** in the screen ***Maintenance of raw materials / preparations*** you can retrieve a detailed overview (screen ***GHS classifications***, tab *Hazards - see picture below*) of the classification elements for the GHS systems *UN GHS* (**UN flag**), *CLP* (**EU flag** and field **≤ 125** for the reduced labelling according to CLP (*see Annex I, 1.5.2 „Exemptions from Article 17 [(Article 29(2)]“)* on labels for small packages (up to 125 ml)), *OSHA HCS* (**US flag**), *HPR* (**CA flag**) and for further national classifications (*see respective flags*), as well as for self-classifications (can be entered by the user).





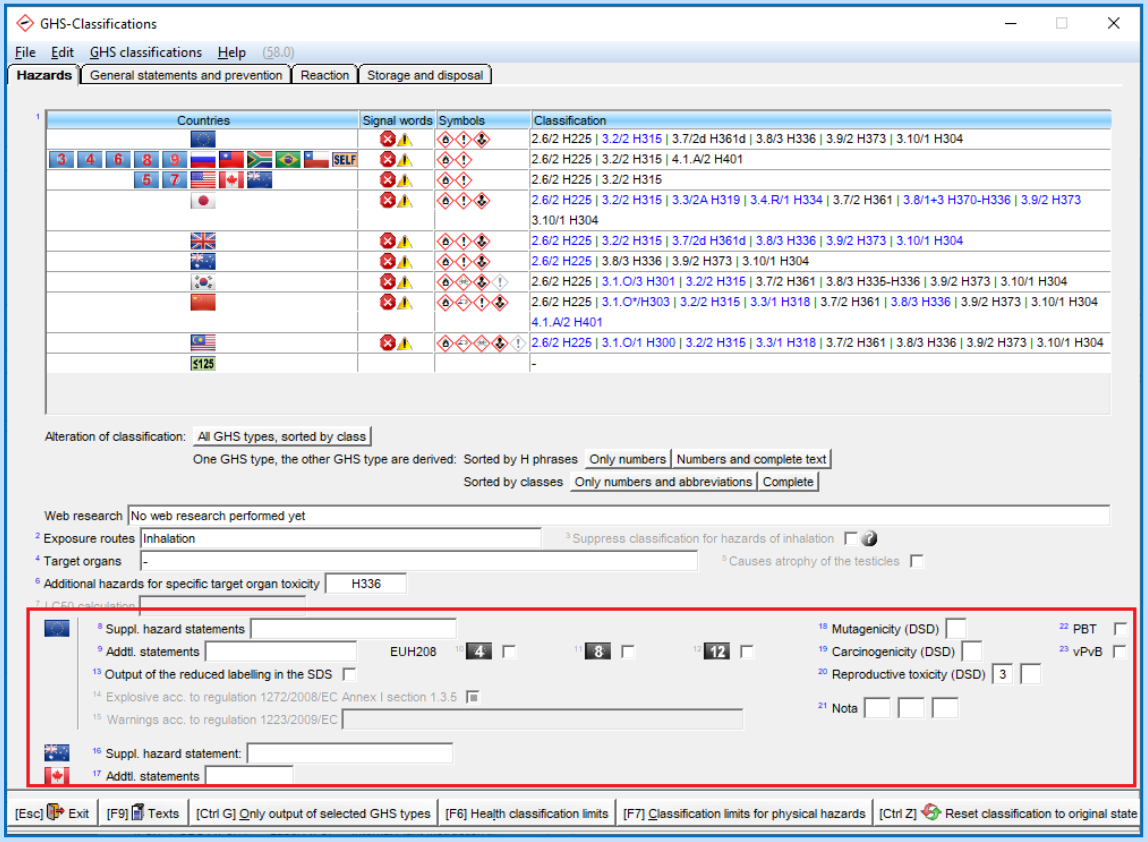
By clicking into the line for the respective GHS system (*see picture above*) you can retrieve a further overview screen, in which you can view and alter the classification of your raw material / mixture (*see picture on the right*).

Blue marking: legal (obligatory) classification
Yellow marking: calculated classification
Red marking: manual alteration
Grey marking: category not adopted

A4. Maintenance of raw materials/ preparations

Screen *GHS classification*, tab *Hazards*

The item **Suppl. hazard statements** contains the supplemental hazard statements for:
EU (field **EU flag**): EUH-phrases according to *1272/2008/EU, Annex II*, as well as
Australia (field **AU flag**): AUH-phrases according to *COP: Preparation of Safety Data Sheets for Hazardous Chemicals Appendix C resp. COP: Labelling of Workplace Hazardous Chemicals, Appendix D*



The field **Special product phrases** contains the *CLP specific* special product phrases (**EU flag**) and the special product phrases according to the Canadian HPR (*Hazardous Products Regulations*, **CA flag**).

By means of the item **Output of the reduced labelling in the SDS** it is possible to have the reduced labelling according to the requirements of CLP (see Annex I, 1.5.2 „*Exemptions from Article 17 [(Article 29(2)]*“) calculated and output in the SDS.

A5. Maintenance of raw materials

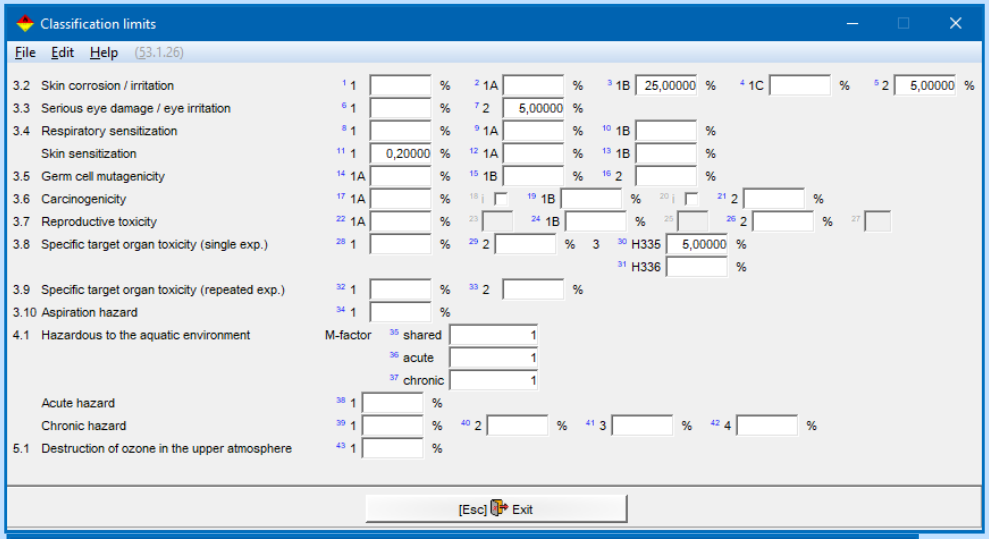
Screen *GHS classification*, tab *Hazards*

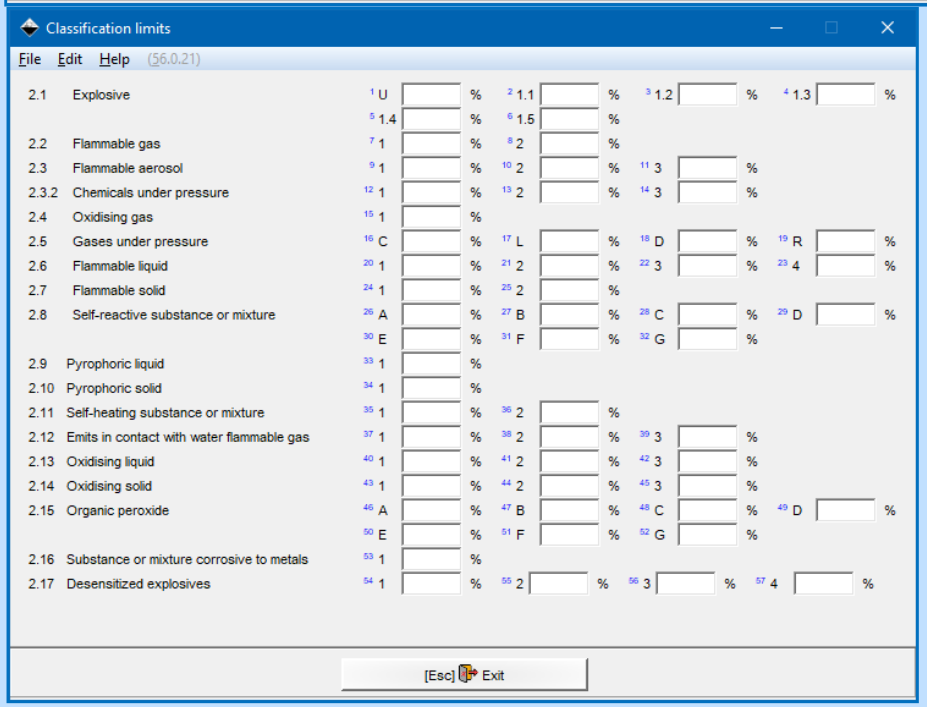
By means of F6 **Health classification limits** you can enter special percentage limits for your **raw materials** for the Classes 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 5.1, as well as M-factors for Class 4.1.

Note: For substances, which are listed in the CLP, these values are transferred automatically.

By means of F7 **Classification limits for physical hazards** you can enter special percentage limits for your **raw materials for** the Classes 2.1 to 2.17.

Note: For substances, which are listed in the CLP, these values are transferred automatically.

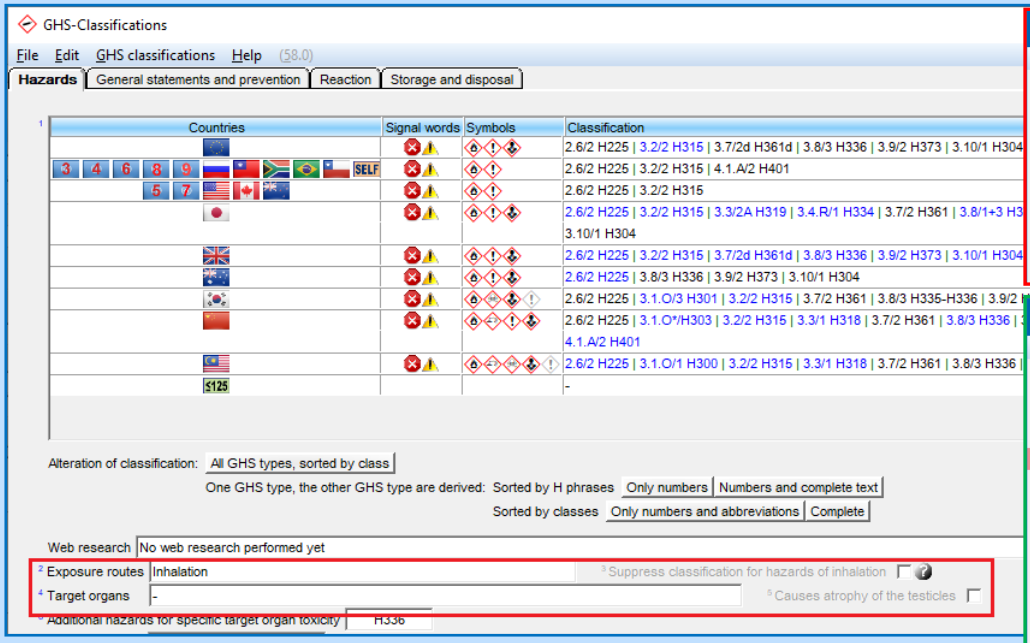


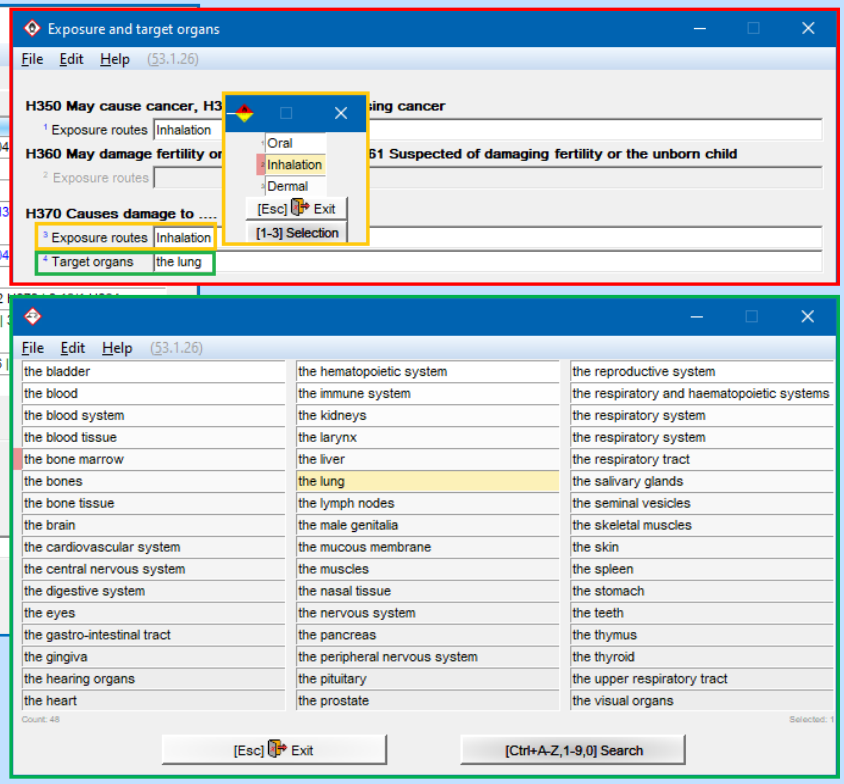


A6. Maintenance of raw materials/ preparations

Screen *GHS classification*, tab *Hazards*

If your raw material / mixture is classified in the Classes 3.6, 3.7, 3.8 resp. 3.9, you can supplement the H phrases H350, H351, H360, H361, as well as H370-373 with the obligatory statement of exposure routes and / or target organs in the screen ***Exposure routes and target organs*** (*see left picture* - access via the field **Exposure routes**, *see first picture on the right*).



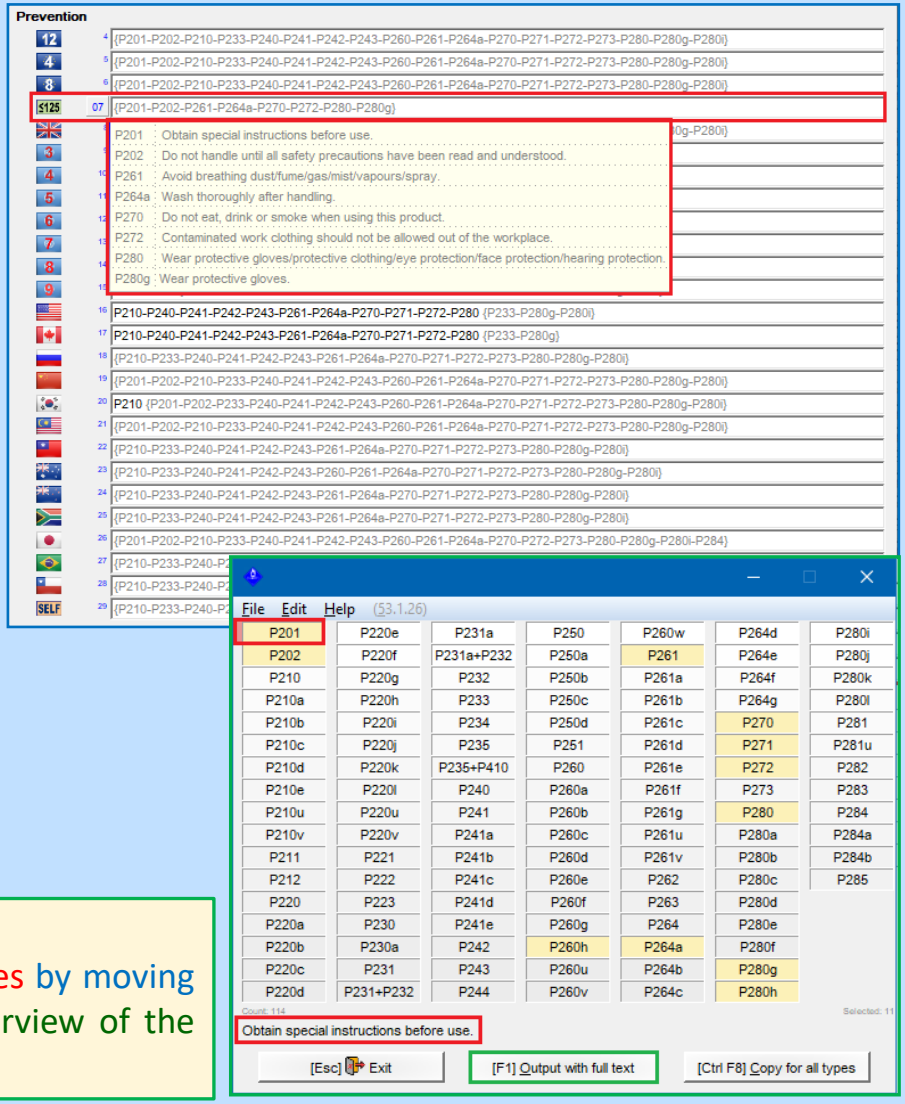


The selected exposure routes and target organs (*see picture on the right*) are displayed in the fields **Exposure routes, Target organs** and **Additional hazards for specific target organ toxicity** (for H335, H336) (*see picture above*).

A7. Maintenance of raw materials/ preparations

Screen *GHS classification*, tabs *General statements and prevention, Reaction* and *Storage and disposal*

The tabs *General statements and prevention, Reaction* and *Storage and disposal* of the screen ***GHS classifications*** contain the respective P phrases, separated into groups (*Prevention, Response, Storage* or *Disposal*). After selecting the requested GHS system you can select and deselect the P phrases of each group by clicking.



Display of Precautionary statements according to:

UN GHS: UN flag (*Rev.03, Rev.04, Rev. 5, Rev.06, Rev.07, Rev. 08, Rev. 09*)

CLP: EU flag (*4. ATP, 8. ATP*, 12. ATP as well as **≤ 125** (for the reduced labelling according to CLP, Annex I, 1.5.2 *„Exemptions from Article 17 [(Article 29(2)]“)),*

OSHA HCS: US flag

HPR: CA flag

Further national classifications: see respective flags

SELF: Self-classifications (*can be entered by user*)

Notes:

You can display the texts of the nationally allocated P phrases by moving the cursor over the respective line. You can display an overview of the phrases with full text by means of F1.

Information on self-classifications

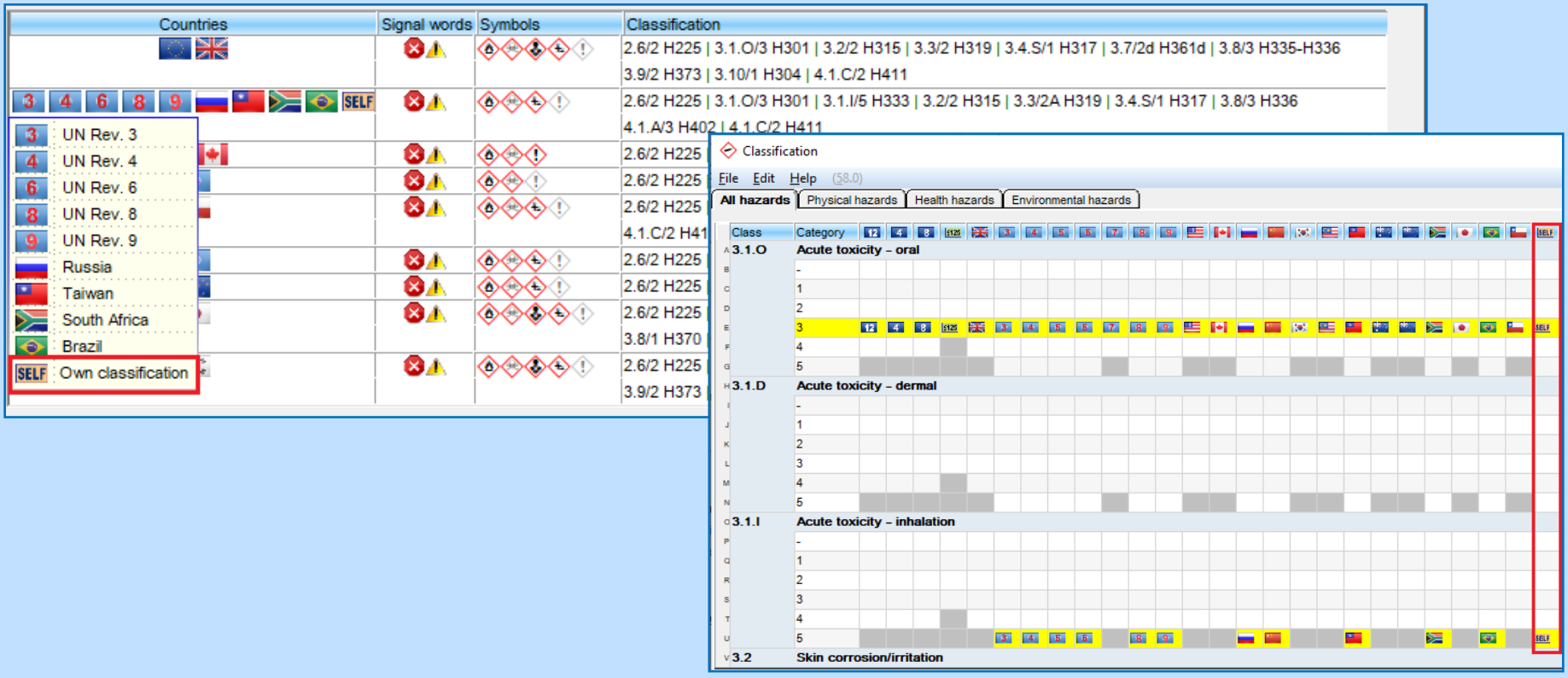
Entry and use

Information on self-classifications:

Since version 43.0 it is also possible for users to enter their own classifications for substances and mixtures. However, the use of self-classifications should be handled with great care, as they do not have a legal background.

Please consider the following items when using self-classifications:

- In this case only the UN GHS calculation algorithm and the self-classifications that you have entered are used **and**
- legal limits, country specific characteristics etc. are **no longer considered**.

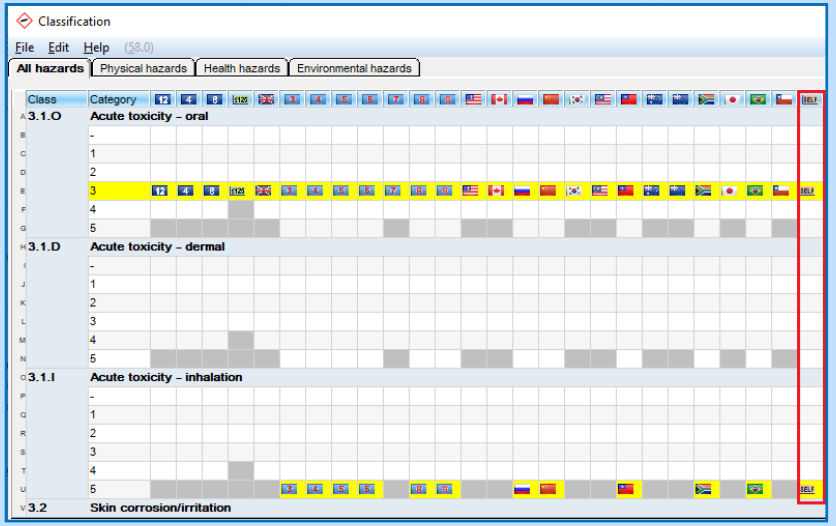


Information on self-classifications

Entry and use

Entry of self-classifications:

You can enter your own classifications for substances and mixtures in the column SELF (item **GHS classification** (see pictures below) in ***Maintenance of raw materials / preparations***).

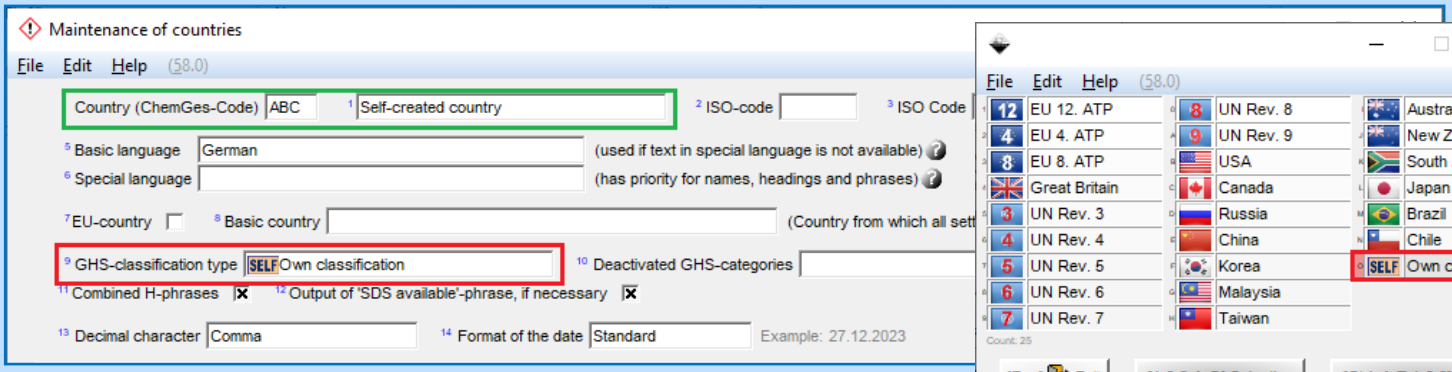


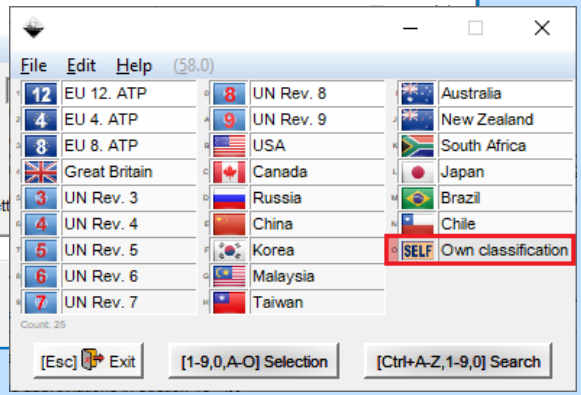
For the use of these self-classifications you have the following two options:

- Allocation of self-classifications to an *existing country* (field **GHS-classification type** in the screen ***Maintenance of countries***)

  or

- *Creation of new country* and allocation of the self-classifications to this self-created country (see example below)

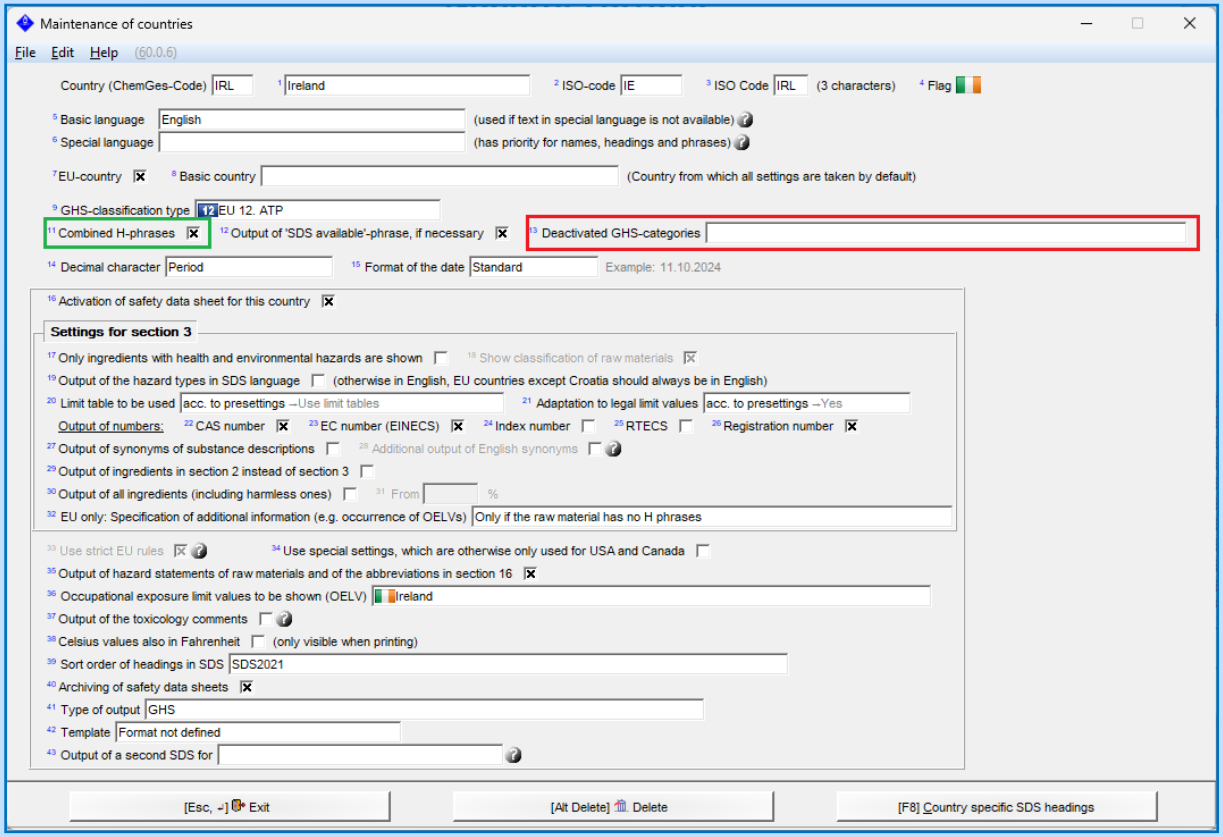




B1. Maintenance of countries

General settings

The upper part of the screen ***Maintenance of countries*** (Ctrl 4 **Maintenance programs** – *Various tables* – *Languages and countries* - ***Countries***) contains all general settings for the selected country.



The item **Deactivated GHS categories** serves to deactivate certain classification criteria (e.g. Class 2.6, "*Combustible liquid*", Category 4) for the output in the SDS of the selected country.

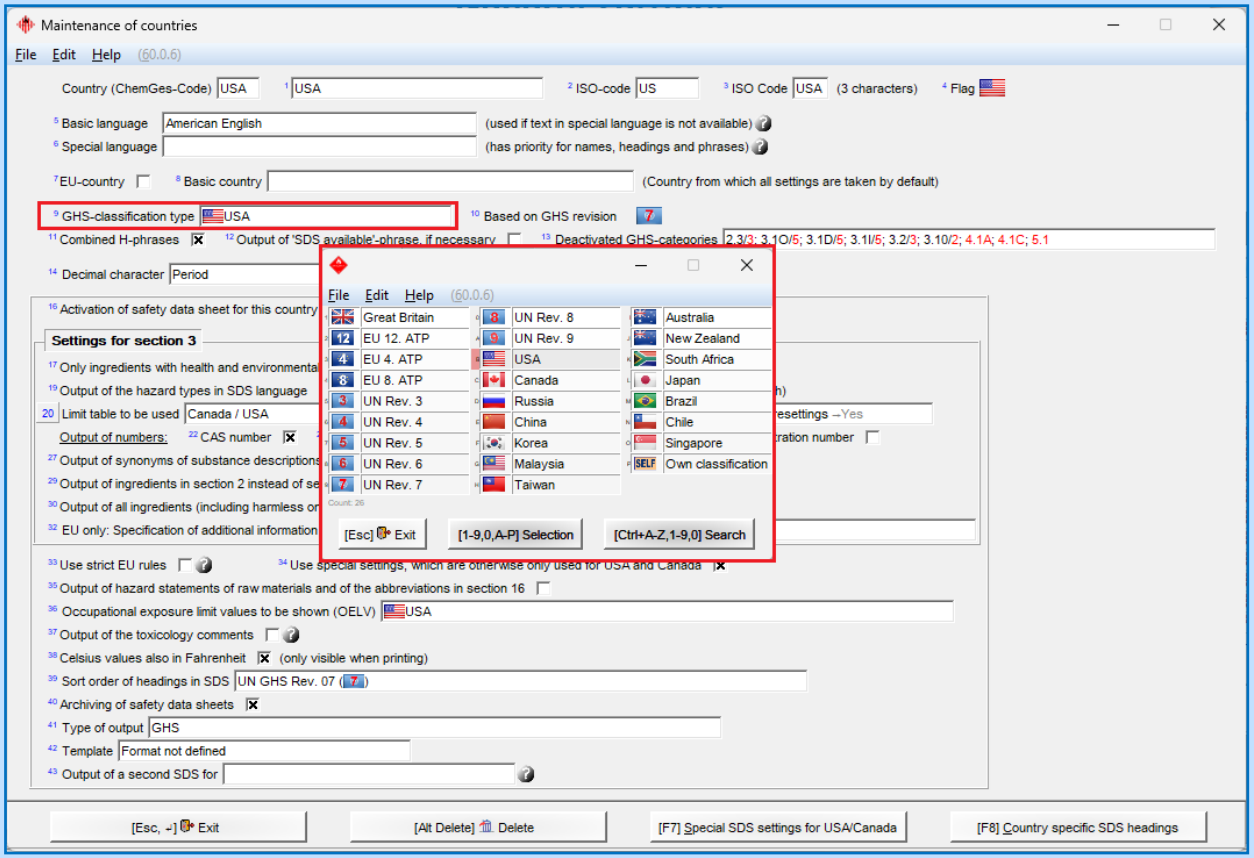
By means of the item **Combined H-phrases** you can activate the output of the combined Hazard statements for Class 3.1 (*Acute toxicity*) in the SDSs for the selected country.

Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

B2. Maintenance of countries

General settings

You can set the GHS system to be used for each country individually by clicking into the field **GHS-classification type** and allocate the requested GHS system to the country by clicking.



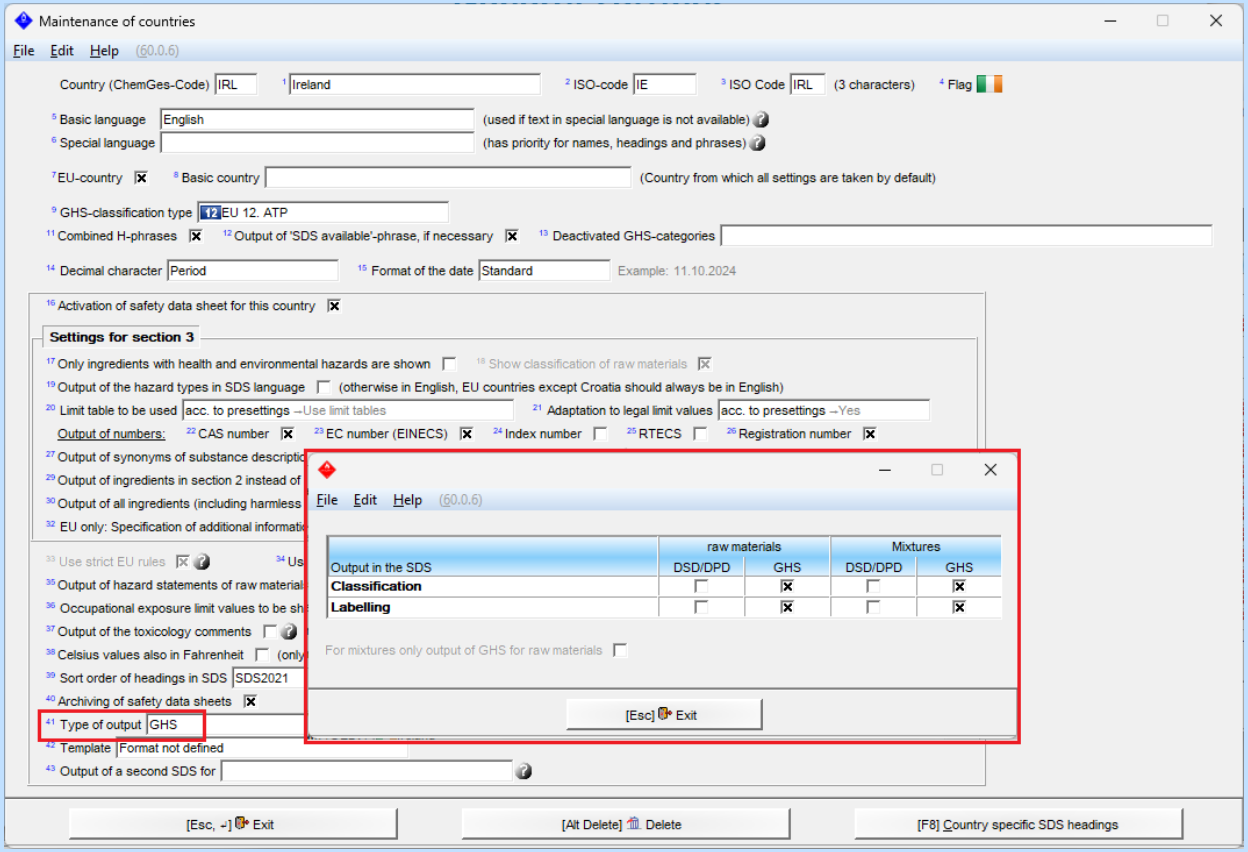
Note: For countries, for which the item **EU country** is activated, the standard setting is *European Union (CLP)*. For these countries a different GHS system can only be selected in the field **GHS-classification type**, if the item **EU country** is deactivated.

Further information on the options can be found in the Online helpfile and the manual to ChemGes.

B3. Maintenance of countries

Settings for the Safety Data Sheets

The lower part of the screen ***Maintenance of countries*** (Ctrl 4 **Maintenance programs** – *Various tables* – *Languages and countries* - ***Countries***) contains the settings for the output of information in the SDS.



The item **Type of output** enables you to determine the type of *labelling* and *classification information* to be output in SDSs for the selected country. This can be set separately for *raw materials* and *mixtures*.

Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

C. GHS settings

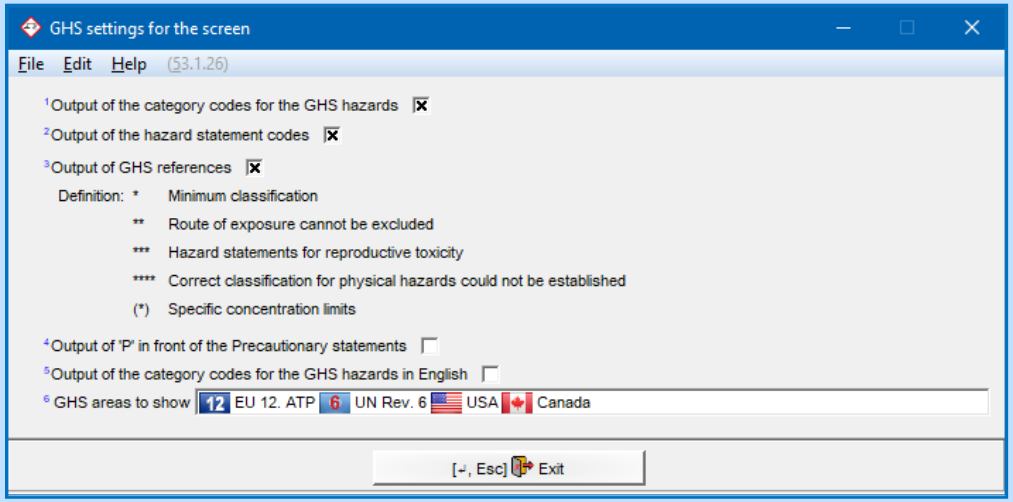
The ***GHS settings*** can be found in Ctrl 4 **Maintenance programs** – *Program adjustments*:

- **GHS-settings** (in the sub-menu ***Settings for the output on the screen***)
- **Classification options** (in the sub-menu ***Calculation of classification***)
- **Calculation and limits** (in the sub-menu ***Toxicity***)
- **Sub-numbers of P-phrases** (in the sub-menu ***Safety instructions***)
- **P-phrase duplicates** (in the sub-menu ***Safety instructions***)
- **Unused P-phrases** (in the sub-menu ***Safety instructions***)

You can find further information on the following pages.

C. GHS settings

***GHS settings for the screen*:**
By means of this screen you can define various settings for the display of GHS information on the screen.



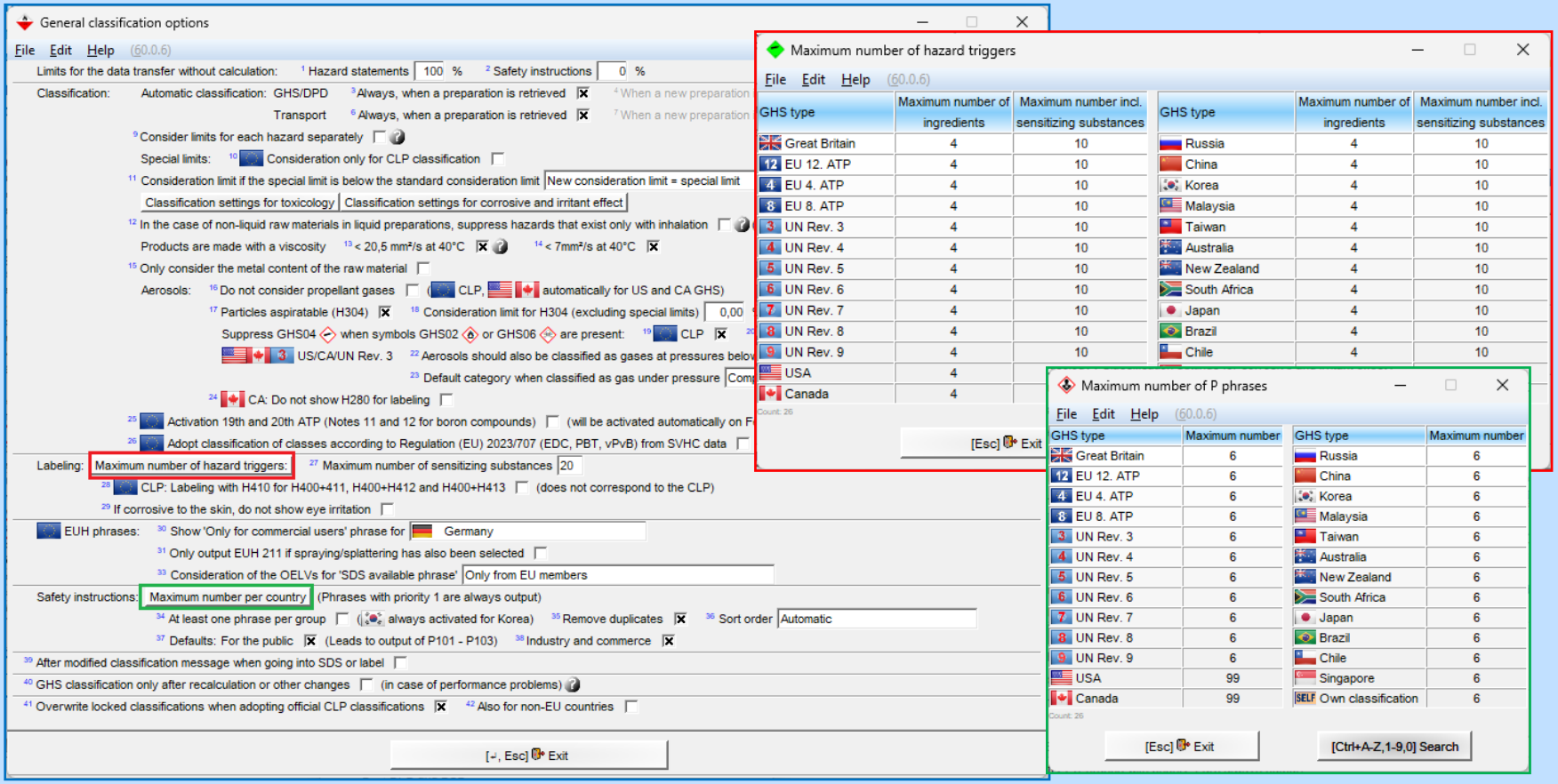
Note: You can find further information on the display of GHS systems in **A2. Maintenance of raw materials/ preparations**.

C. GHS settings

***Classification options*:**

This screen contains all options for the GHS classification.

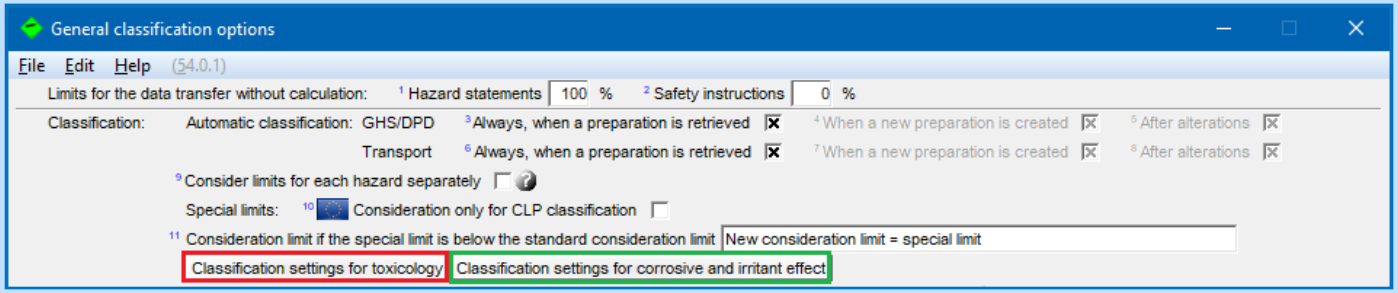
Here you can, for example, determine the **maximum number of P phrases and hazard triggers** separately for *UN GHS, CLP* and *OSHA HCS/ HPR*. By means of the item **Remove duplicates** you can determine, that P-phrases with similar information are not output in duplicate.

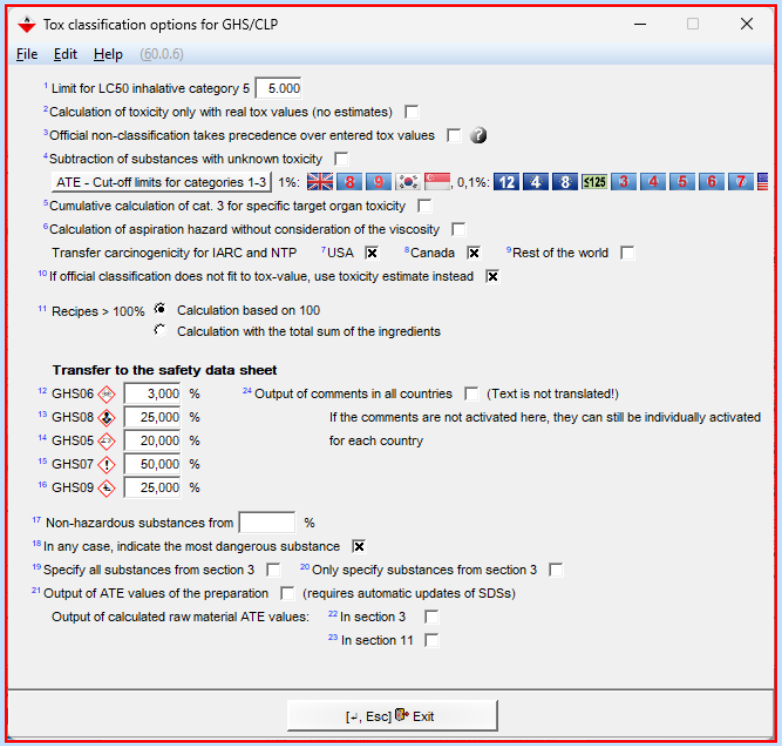


Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

C. GHS settings

Via the buttons **Classification settings for toxicology** and **Classification settings for corrosive and irritant effect**, you can directly switch to the following screens:



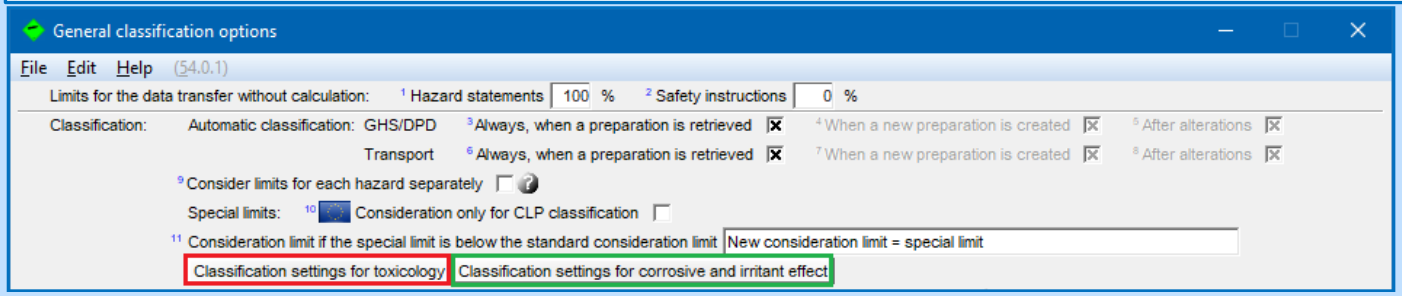


Tox classification options:
(Ctrl 4 **Maintenance programs** – *Program adjustments* – *Calculation of classification - Toxicity* – ***Calculation and limits***) This screen contains all GHS-relevant settings for the calculation of the toxicity.

Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

C. GHS settings

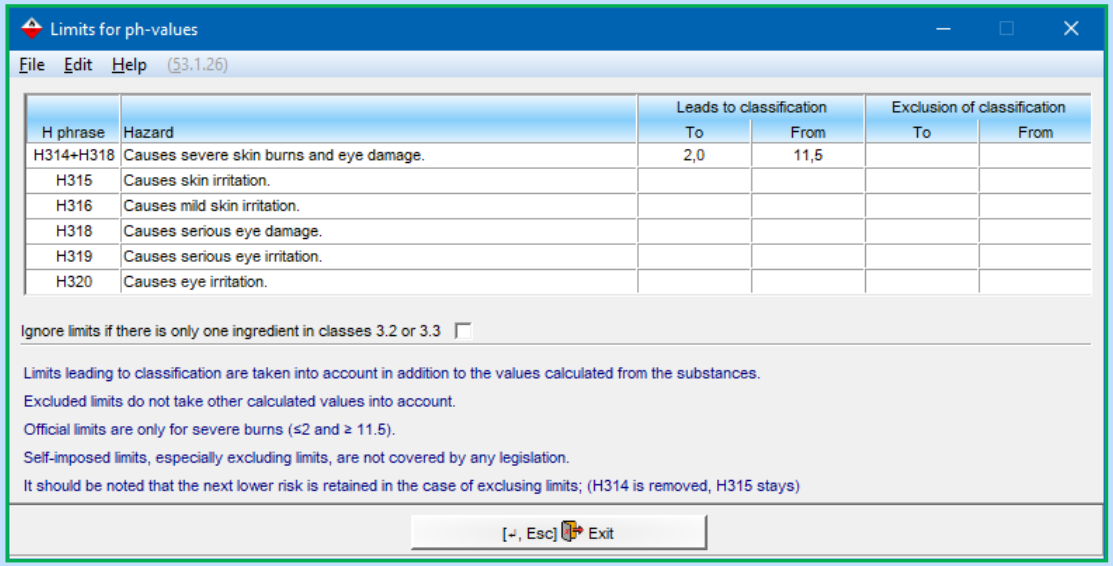
Via the buttons **Classification settings for toxicology** and **Classification settings for corrosive and irritant effect**, you can directly switch to the following screens:



Classification settings for corrosive and irritant effect :

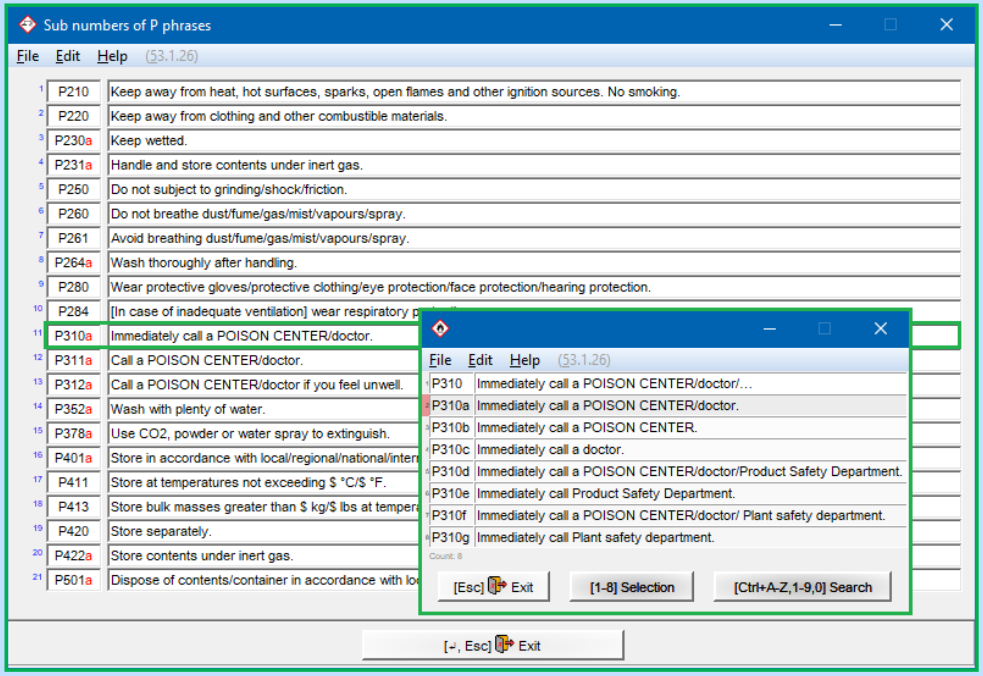
(Ctrl 4 **Maintenance programs** – *Program adjustments – Calculation of classification - **pH-value limits***)

This screen contains all settings for pH-value limits.



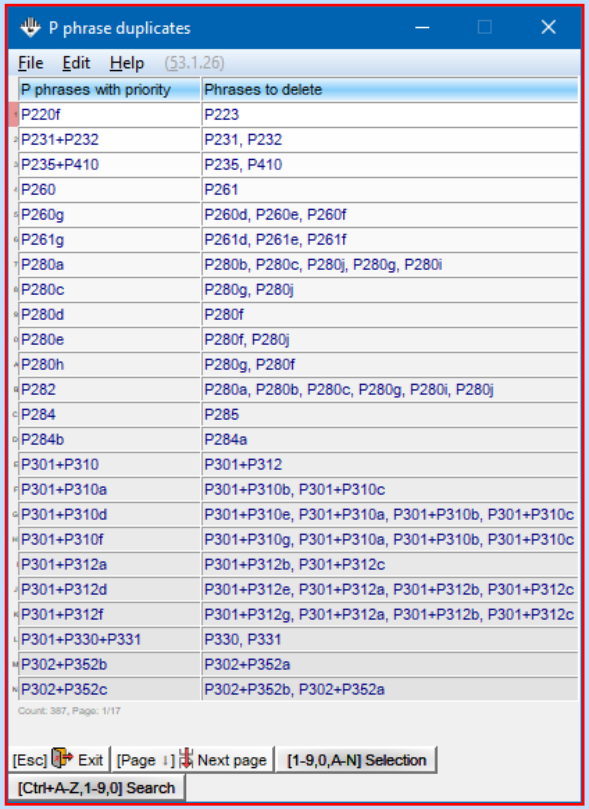
Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

C. GHS settings



Sub-numbers of P-phrases:

This screen contains an overview of the variants for P-phrases. Here you can alternatively define a variant of a P-phrase (*e.g. P310a*) that shall be output in the SDS automatically instead of the respective main P-phrase (*e.g. P310*), if a raw material / mixture is labelled with this main P-phrase.

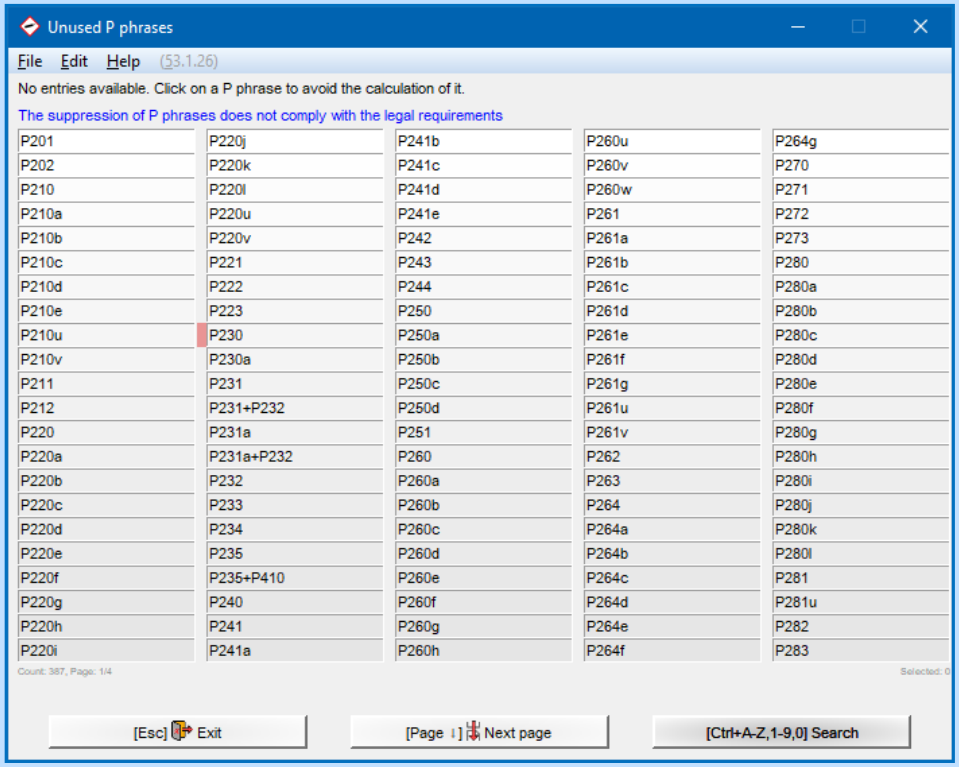


***P-phrase duplicates*:**

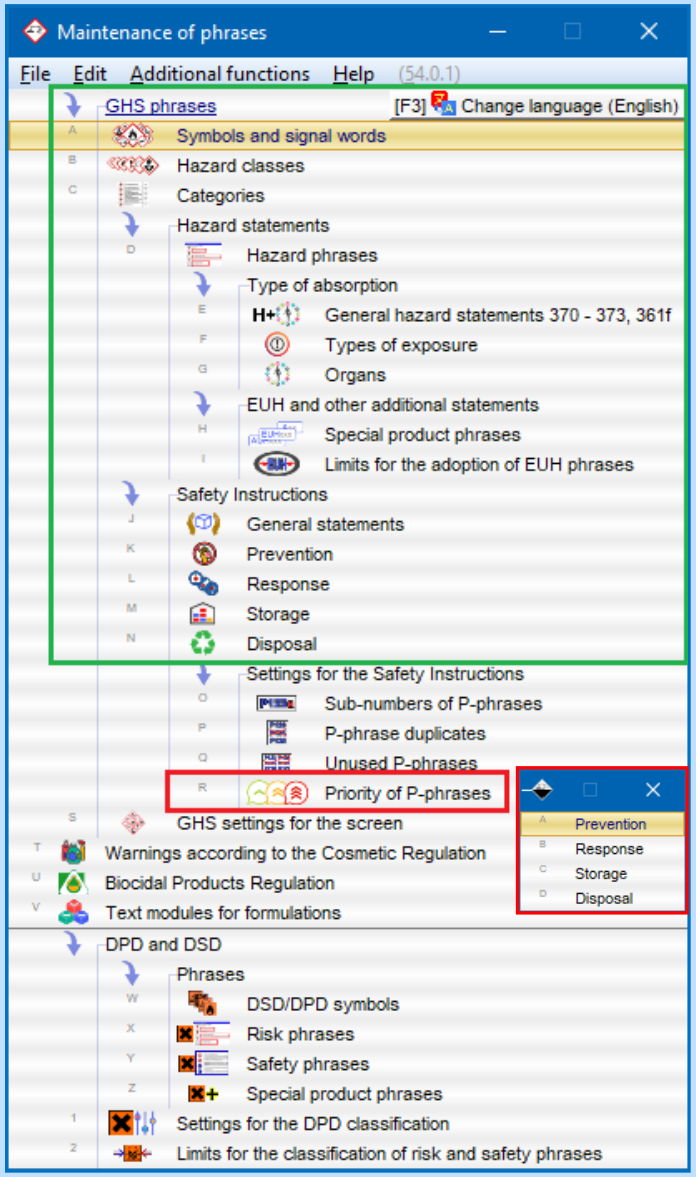
This screen provides an overview of P-phrases with similar information. If you have activated the item **Removal of duplicates** in the screen ***General classification options***, the phrase „ duplicates" listed in the column **Phrases to delete** are no longer output, if the raw material / mixture is labelled with the respective P-phrase listed in the column **Condition** (*for example, if P320 is present, the phrases P321 and 322 are automatically removed*).

C. GHS settings

Unused P-phrases:
In this screen you can determine P-phrases that you do not want to be output (deactivated output).
Please note that this option was implemented on customer request and does not comply with the legal requirements.



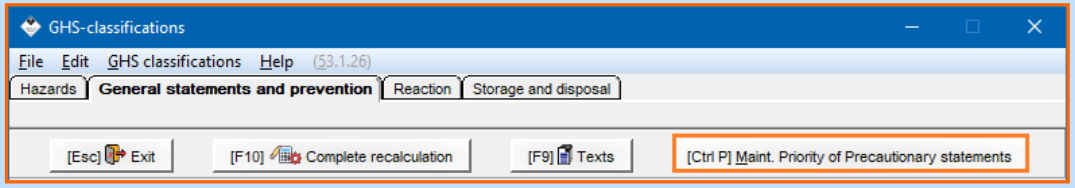
D. Maintenance of GHS texts



By means of the menu item **Phrases** (Ctrl 4 **Maintenance programs** – ***Phrases***) you can retrieve and maintain the GHS texts (*Symbols and signal words, Hazard classes, Categories, Hazard statements, EUH and other additional statements, General statements* and *Precautionary statements*).

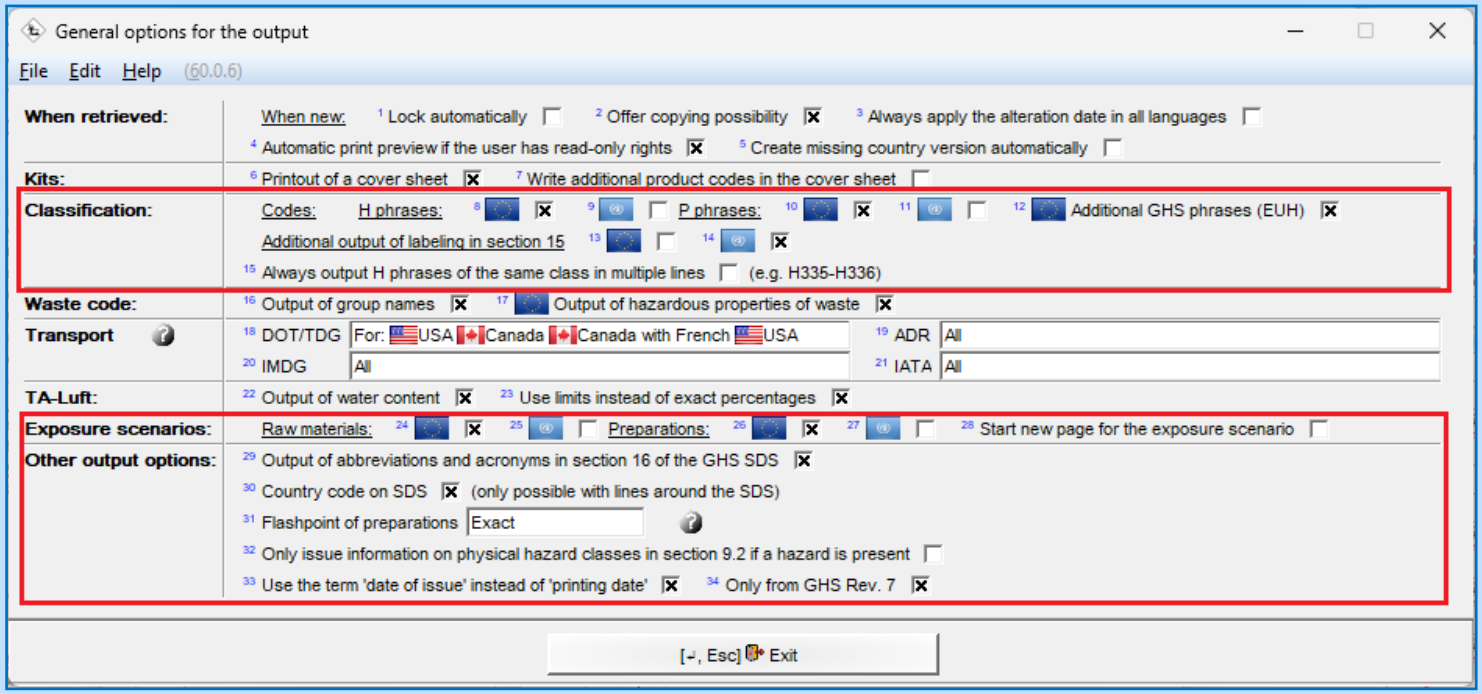
By means of the menu item **Priority of P-phrases** (Ctrl 4 **Maintenance programs** – *Program adjustments – Safety Instructions*) you can retrieve an overview of all available texts with their assigned priority levels (numbers 1-9) for each of the four phrase types (*Prevention, Response, Storage* and *Disposal*). Phrases, which have a lower priority level, are stated first. Phrases, which do not have a priority level (=0), are stated last.

Note: The maintenance of the **priority of P-phrases** can also be accessed directly in the tabs *General statements and prevention*, *Reaction* and *Storage and disposal* of the screen ***GHS classifications*** by means of Ctrl P.



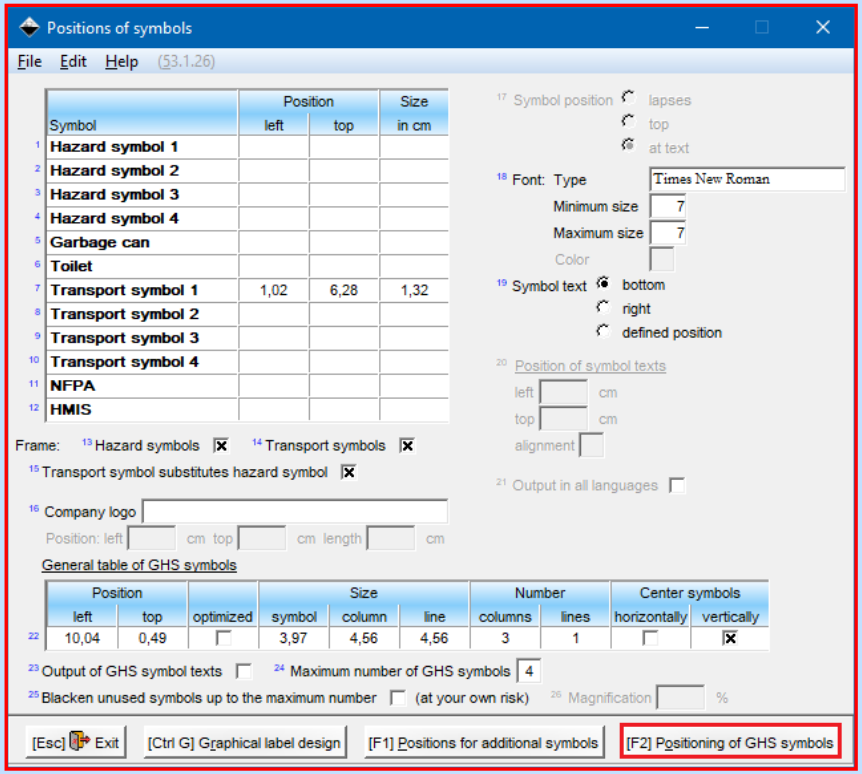
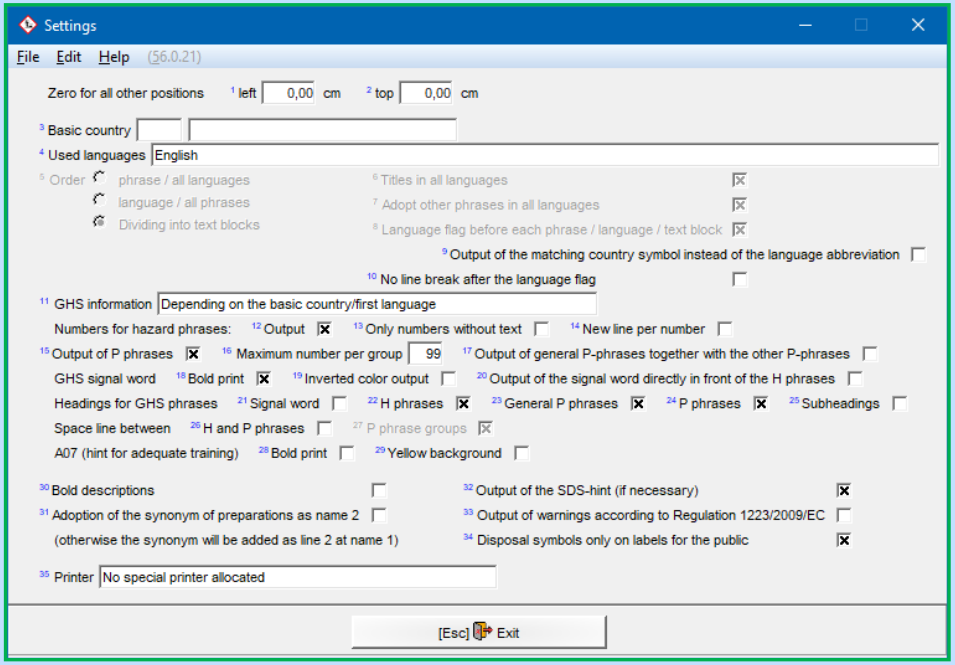
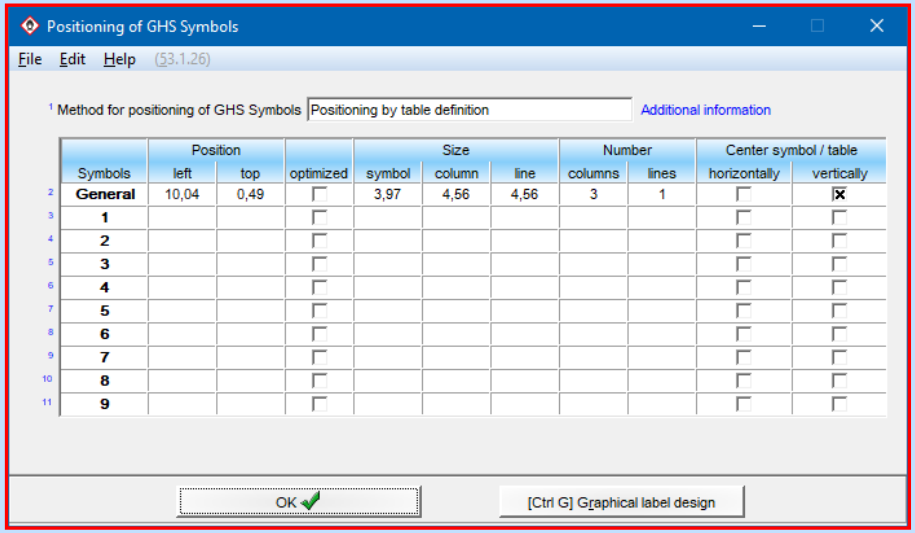
E. Options for the output of classifications

In the screen ***Options for the output of classifications*** (in Ctrl 4 **Maintenance programs** – *Safety Data Sheets* – ***General options for output***) you can define the output of GHS information in the SDS.



Note: Some of the settings in this screen require the *activation* of the output of **GHS classification** in the screen ***Maintenance of countries*** (field **Type of output**, see item **B3. Maintenance of countries**).

F. GHS settings for labels

You can adjust your label templates in the screen ***Settings*** (in Ctrl 4 **Maintenance programs** – *Labels – Label templates* – button **Settings**).

The output of the GHS symbols can be adjusted in the screen ***Position of symbols*** (in Ctrl 4 **Maintenance programs** – *Labels – Label templates* – button **Position of symbols –** F2 **Positioning of GHS symbols**).