

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)

The image displays two screenshots of a software interface. The left screenshot, titled 'Maintenance of raw materials', shows a search for 'formaldehyde ... %' with various classification flags listed under the 'GHS classification' section. The right screenshot, titled 'Maintenance of preparations', shows a preparation 'Resin solution X 50' with its GHS classification details. Both screenshots have a red box highlighting the GHS classification section.

Maintenance of raw materials

File Edit Additional functions Database Help (53.1.26)

CAS number [50-00-0/1] Index number [605-001-00-5] EC number [200-001-8]

3 formaldehyde ... %
formaldehyde ... %
FORMALDEHYDE
Formaldehyde
formalin

4 Product code
5 Variant Basic substance selected - 2 variants created
6 Main substance This substance is the main substance for another substance.
7 Flag Interner Lagercode: 123/456/789
8 Article group ABC General article group description Substance groups preservation agents

10 **GHS classification** EU-list (12,19,22,25), CLP(0,6), Remark B,D, Canc.cat. 2, Mut.cat. 3

- Danger**
 - 3.1/1; Acute Tox. 1* - H300 Fatal if swallowed.
 - 3.1/3; Acute Tox. 3* - H311+H331 Toxic in contact with skin or if inhaled.
- Danger**
 - 3.6/1B; Carc. 1B - H350 May cause cancer. Route of exposure: Inhalation.
 - 3.5/2; Muta. 2 - H341 Suspected of causing genetic defects.
- Danger**
 - 3.2/1B; Skin Corr. 1B - H314 Causes severe skin burns and eye damage.
- Warning**
 - 3.4/1; Skin Sens. 1 - H317 May cause an allergic skin reaction.
 - 3.4/1; Skin Sens. 1 - H317 May cause an allergic skin reaction.
- Warning**
 - 2.6/4; Flam. Liq. 4 - H227 Combustible liquid.

The substance was originally created by DR software. GHS areas [Flags] Pre-s

Maintenance of preparations

File Edit Print programs Additional functions Help (53.1.26)

Basic screen Formulation Physical data Country specific classifications Transport

Preparation 1.000 1 Resin solution X 50

2

3 Product code 1234567890

4 Variant Basic substance selected - 4 variants created

5 Flags Interner Lagercode: 123/456/789, Colour: blue, Additive: ✓, Internal Storage Code: 123/456/789

6 Article group

7 **GHS classification**

- Danger**
 - 2.6/2; Flam. Liq. 2 - H225 Highly flammable liquid and vapour.
- Danger**
 - 3.1/3; Acute Tox. 3 - H301 Toxic if swallowed.
- Danger**
 - 3.10/1; Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways.
 - 3.7/2; Repr. 2 - H361d Suspected of damaging the unborn child. Route of exposure: Inhalation.
 - 3.9/2; STOT RE 2 - H373 May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.
- Warning**
 - 3.2/2; Skin Irrit. 2 - H315 Causes skin irritation.
 - 3.3/2A; Eye Irrit. 2A - H319 Causes serious eye irritation.
 - 3.4/1; Skin Sens. 1 - H317 May cause an allergic skin reaction.
 - 3.8/3; STOT SE 3 - H336 May cause drowsiness or dizziness.
- Warning**
 - 3.2/2; Skin Irrit. 2 - H315 Causes skin irritation.
 - 3.3/2A; Eye Irrit. 2A - H319 Causes serious eye irritation.

Automatic reclassification each time the substance is retrieved

[Ctrl X] Lock GHS areas [Flags] Pre-selected [Flags] All

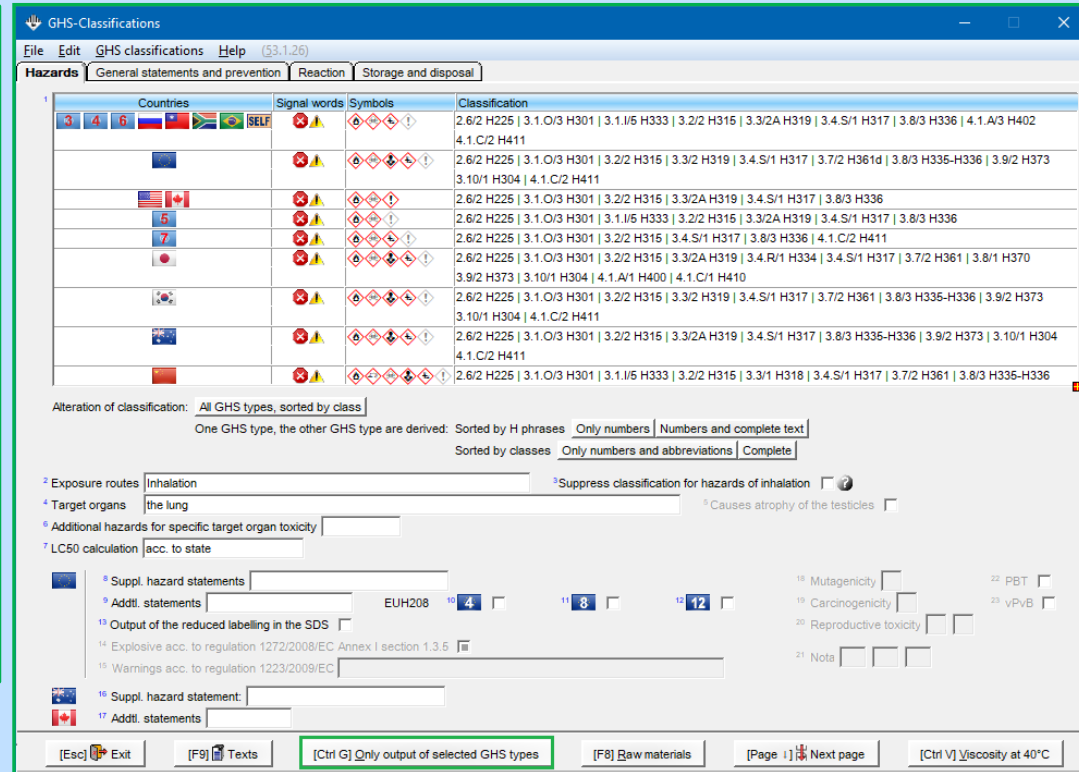
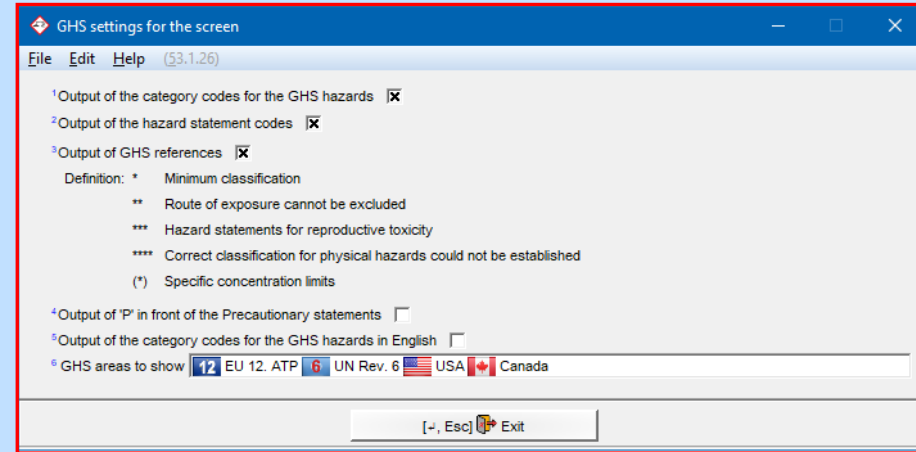
A2. Maintenance of raw materials/ preparations

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:

The screenshot shows the 'GHS-Classifications' software window. The 'Hazards' tab is active, displaying a table with columns for 'Countries', 'Signal words', 'Symbols', and 'Classification'. The table lists various hazard classes (e.g., 3.1.O/3 H301) and their corresponding signal words and symbols for different countries. Below the table, there is a section for 'Alteration of classification' with several options: 'All GHS types, sorted by class', 'One GHS type, the other GHS type are derived: Sorted by H phrases', 'Only numbers', 'Numbers and complete text', 'Sorted by classes', 'Only numbers and abbreviations', and 'Complete'.

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).

The screenshot shows the 'Classification' software window. The 'Health hazards' tab is active, displaying a detailed view of hazard classes and their classifications across various GHS systems. The table shows the following classes and their corresponding classifications:

Class	Category	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
A	3.2	Skin corrosion/irritation																																																																																								
B	-																																																																																									
C	1																																																																																									
D	1A																																																																																									
E	1B																																																																																									
F	1C																																																																																									
G	2	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
H	3																																																																																									
I	3.3	Serious eye damage/eye irritation																																																																																								
J	-																																																																																									
K	1																																																																																									
L	2	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
M	2A																																																																																									
N	2B																																																																																									
O	3.4.R	Respiratory sensitization																																																																																								
P	-																																																																																									
Q	1																																																																																									
R	1A																																																																																									
S	1B																																																																																									
T	3.4.S	Skin sensitization																																																																																								
U	-																																																																																									
V	1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

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.

1.000 1234567890 Resin solution X 50

H phrase	Hazard	Code	H phrase	Hazard	Code	H phrase	Hazard	Code
2.1	U	H200	2.8	G	-	3.1.O	3	H301
1.1	H201	2.15	A	H240	3.1.0	1	H304	
1.2	H202	B	H241	3.1.D	1	H310		
1.3	H203	C	H242	2	H310			
1.4	H204	D	H242	3	H311			
1.5	H205	E	H242	4	H312			
1.6	-	F	H242	1	H314			
2.17	1	H206	2.9	1	H250	1A	H314	
2	H207	2.11	1	H251	1B	H314		
3	H207	2	H252	1C	H314			
4	H208	2.12	1	H260	2	H315		
2.6	1	H224	2	H261	1A	H317		
2	H225	3	H261	1B	H317			
3	H226	2.13	1	H271	3.3	1	H318	
2.8	A	H240	2	H272	2	H319		
B	H241	3	H272	3.1.I	1	H330		
C	H242	2.16	1	H290	2	H330		
D	H242	3.1.O	1	H300	3	H331		
E	H242	2	H300					
F	H242							

Count: 138, Page: 1/3

Acute toxicity - oral - 3.1.O/3 (Acute Tox. 3)
H301 Toxic if swallowed.

Active classification

Please move the mouse over this field to get further information.

[Esc] Exit [Page 1] Next page

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

File Edit Help (56.0.21)

- 4 EU 4. ATP
- 8 EU 8. ATP
- 3 UN Rev. 3
- 4 UN Rev. 4
- 5 UN Rev. 5
- 6 UN Rev. 6
- 7 UN Rev. 7
- 8 UN Rev. 8
- 9 UN Rev. 9
- USA
- Canada
- Russia
- China
- Korea
- Malaysia
- Taiwan
- Australia
- New Zealand
- South Africa
- Japan
- Brazil
- Chile
- SELF Own classification

Count: 23

[Esc] Exit [1-9,0,A-M] Selection

[Ctrl+A-Z,1-9,0] Search

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

File Edit Help (53.1.26)

Sort order	numbers of H phrases	Output with all H phrase texts
	Classes and categories	Maintenance with all GHS types
		Short form without H phrase texts
		Output with all H phrase texts

[Esc] Exit [1-4] Selection

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:

File Edit Help (53.1.26)

As a basis, the chosen H statements for the GHS type EU 12. ATP are used. After modification, the same H-phrases are also used for the classes of the other GHS types.

The following applies:

If official values have been present for the changed class of the GHS type EU 12. ATP, then official values in the other GHS types are also changed. If no official values were available for the changed class of the GHS type EU 12. ATP, then the official values of the same classes are not changed for the other GHS types.

Examples, assuming that the data are given for the GHS type EU:

If there is an official value for 3.2/1 in the EU and this is changed to 3.2/2, the corresponding classification will be corrected for all GHS types without exception.

If in the EU there is no official value for the above example, but in Korea and Japan, the category is being corrected everywhere, except in Korea and Japan.

If there is no equivalent for other GHS types for a selected category, then it will be adjusted as much as necessary.

Examples:

2A is selected, but there is only 2 available for the target type, then 2 is selected for the target.

2 is selected, but for the target type there is only 2A and 2B available, then 2A is selected for the target type (always the stronger one)

2 is selected for the target type, however, but there is only 1 available for the target area, then the already existing category is deleted for the target type.

Locks are generally transferred to the other GHS types, provided that there are no official classifications of the respective class in the other GHS type.

If no changes have been made then nothing will be transferred to the other GHS types, even if they are different.

To specifically change the categories for individual countries, please use the extensive input mode by classes, categories and GHS types.

Please move the mouse over this field to get further information.

[Esc] Exit [Page 1] Next page

File Edit Help (53.1.26)

50-00-0/1 formaldehyde

GHS type EU 12. ATP (click to change) H300-H311+H331-H314-H317-H341-H350 Change of type of output

2.1	U	H200	Unstable explosives.
	1.1	H201	Explosive; mass explosion hazard.
	1.2	H202	Explosive, severe projection hazard.
	1.3	H203	Explosive; fire, blast or projection hazard.
	1.4	H204	Fire or projection hazard.
	1.5	H205	May mass explode in fire.
	1.6	-	
2.17	1	H206	Fire, blast or projection hazard; increased risk of explosion if desensitising agent is reduced.
	2	H207	Fire or projection hazard; increased risk of explosion if desensitising agent is reduced.
	3	H207	Fire or projection hazard; increased risk of explosion if desensitising agent is reduced.
	4	H208	Fire hazard; increased risk of explosion if desensitising agent is reduced.
2.6*	1	H224	Extremely flammable liquid and vapour.
2.6	Flammable liquids		
		H225	Highly flammable liquid and vapour.
		H226	Flammable liquid and vapour.
2.0	A	H240	Heating may cause an explosion.
	B	H241	Heating may cause a fire or explosion.
	C	H242	Heating may cause a fire.
	D	H242	Heating may cause a fire.
	E	H242	Heating may cause a fire.
	F	H242	Heating may cause a fire.

Count: 138, Page: 1/7

Flammable liquids - 2.6/1 (Flam. Liq. 1)

This substance is officially classified for the GHS type Japan. If changed, the official classification will be retained!

Active classification Class with official classification * Other GHS types also have an official classification

Please move the mouse over this field to get further information. Lock of the class with a mouse-click

[Esc] Exit [Page 1] Next page [Ctrl+A-Z,1-9,0] Search

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).

Countries	Signal words	Symbols	Classification
4 6 7 8 9 [UN] [EU] [US] [CA] [BR] [AU] [IN] [CH] [SE]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.4.S/1 H317 3.5/2 H341 3.6/1B H350 4.1.A/2 H401
[EU]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	3.1.O/1 H300* 3.1.D/3 H311* 3.1.I/3 H331* 3.2/1B H314 3.4.S/1 H317 3.5/2 H341 3.6/1B H350
[US] [CA]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.4.S/1 H317 3.5/2 H341 3.6/1B H350
[CN]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	2.6/4 H227 3.1.O*/H300 3.1.D*/H311 3.1.I*/H331 3.2/1B H314 3.3/1 H318 3.4.S/1 H317 3.5/2 H341 3.6/1A H350 3.8/3 H335 4.1.A/2 H401
[US]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	3.1.O/3 H301 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.3/1 H318 3.4.S/1 H317 3.6/1B H350 3.8/3 H335
[3]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.4.S/1 H317 3.5/2 H341 3.6/1B H350 4.1.A/2 H401
[CN]	[GHS07] [GHS09]	[GHS02] [GHS05] [GHS06] [GHS07] [GHS08] [GHS09]	3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.3/1 H318 3.4.S/1 H317 3.6/1B H350 4.1.A/2 H401

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

Class	Category	12	4	8	10	12	15	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	
A	3.4.5																														
B	-																														
C	1	12	4	8	10	12	15	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	
D	1A																														
E	1B																														
F	3.5																														
G	-																														
H	1																														
I	1A																														
J	1B																														
K	2	12	4	8	10	12	15	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	
L	3.6																														
M	-																														
N	1																														
O	1A																														
P	1B	12	4	8	10	12	15	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	
Q	1 (I)																														
R	2																														
S	3.7																														
T	-																														
U	1																														
V	1A	12	4	8	10	12	15	18	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	

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 screenshot shows the 'GHS-Classifications' software window. The 'Hazards' tab is active, displaying a table of hazard classifications. The table has four columns: 'Countries', 'Signal words', 'Symbols', and 'Classification'. The 'Classification' column contains GHS hazard codes such as '2.6/4 H227 | 3.1.O/1 H300 | 3.1.D/3 H311 | 3.1.I/3 H331 | 3.2/1B H314 | 3.4.S/1 H317 | 3.5/2 H341 | 3.6/1B H350 | 4.1.A/2 H401'. Below the table, there are several settings and options, including 'Alteration of classification', 'Exposure routes', 'Target organs', and 'Suppl. hazard statements'. The 'Suppl. hazard statements' field is highlighted with a red box and contains the text 'A26 EUH208'. Other fields include 'Mutagenicity (DSD)', 'Carcinogenicity (DSD)', and 'Reproductive toxicity (DSD)'. The bottom of the window shows a status bar with various keyboard shortcuts and page information.

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.

The screenshot shows the 'Classification limits' window for health hazards. The title bar reads 'Classification limits' and the menu bar includes 'File', 'Edit', and 'Help (53.1.26)'. The main area contains a list of hazard classes with corresponding input fields for percentage limits:

- 3.2 Skin corrosion / irritation: 1 1, 2 1A, 3 1B (25,00000 %), 4 1C, 5 2 (5,00000 %)
- 3.3 Serious eye damage / eye irritation: 6 1, 7 2 (5,00000 %)
- 3.4 Respiratory sensitization: 8 1, 9 1A, 10 1B, 11 1 (0,20000 %), 12 1A, 13 1B
- 3.5 Germ cell mutagenicity: 14 1A, 15 1B, 16 2
- 3.6 Carcinogenicity: 17 1A, 18 1B, 19 1B, 20 1, 21 2
- 3.7 Reproductive toxicity: 22 1A, 23 1B, 24 1B, 25 1, 26 2
- 3.8 Specific target organ toxicity (single exp.): 28 1, 29 2, 30 H335 (5,00000 %), 31 H336
- 3.9 Specific target organ toxicity (repeated exp.): 32 1, 33 2
- 3.10 Aspiration hazard: 34 1
- 4.1 Hazardous to the aquatic environment: M-factor 35 shared (1), 36 acute (1), 37 chronic (1)
- Acute hazard: 38 1
- Chronic hazard: 39 1, 40 2, 41 3, 42 4
- 5.1 Destruction of ozone in the upper atmosphere: 43 1

[Esc] Exit

The screenshot shows the 'Classification limits' window for physical hazards. The title bar reads 'Classification limits' and the menu bar includes 'File', 'Edit', and 'Help (56.0.21)'. The main area contains a list of hazard classes with corresponding input fields for percentage limits:

- 2.1 Explosive: 1 U, 2 1.1, 3 1.2, 4 1.3, 5 1.4, 6 1.5
- 2.2 Flammable gas: 7 1, 8 2
- 2.3 Flammable aerosol: 9 1, 10 2, 11 3
- 2.3.2 Chemicals under pressure: 12 1, 13 2, 14 3
- 2.4 Oxidising gas: 15 1
- 2.5 Gases under pressure: 16 C, 17 L, 18 D, 19 R
- 2.6 Flammable liquid: 20 1, 21 2, 22 3, 23 4
- 2.7 Flammable solid: 24 1, 25 2
- 2.8 Self-reactive substance or mixture: 26 A, 27 B, 28 C, 29 D, 30 E, 31 F, 32 G
- 2.9 Pyrophoric liquid: 33 1
- 2.10 Pyrophoric solid: 34 1
- 2.11 Self-heating substance or mixture: 35 1, 36 2
- 2.12 Emits in contact with water flammable gas: 37 1, 38 2, 39 3
- 2.13 Oxidising liquid: 40 1, 41 2, 42 3
- 2.14 Oxidising solid: 43 1, 44 2, 45 3
- 2.15 Organic peroxide: 46 A, 47 B, 48 C, 49 D, 50 E, 51 F, 52 G
- 2.16 Substance or mixture corrosive to metals: 53 1
- 2.17 Desensitized explosives: 54 1, 55 2, 56 3, 57 4

[Esc] Exit

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 screenshot displays the GHS-Classifications software interface. The main window shows the 'Hazards' tab with a table of hazard classifications. Below the table, there are fields for 'Exposure routes' (set to 'Inhalation') and 'Target organs' (set to 'the lung'). A dialog box titled 'Exposure and target organs' is open, showing a list of target organs with 'the lung' selected. The dialog also shows the H350, H360, and H370 hazard phrases and their corresponding exposure routes and target organs.

Countries	Signal words	Symbols	Classification
4 6 7 8 9			2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.6/1B H350 4.1.A/2 H401
			3.1.O/1 H300* 3.1.D/3 H311* 3.1.I/3 H331* 3.2/1B H314 3.4.S/1 H317 3.6/1B H350
			2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.6/1B H350
			2.6/4 H227 3.1.O*/H300 3.1.D*/H311 3.1.I*/H331 3.2/1B H314 3.6/2 H341 3.6/1A H350 3.8/3 H335 4.1.A/2 H401
			3.1.O/3 H301 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.3/1 H318 3.3/1 H319 3.4.S/1 H317 3.6/1B H350 3.8/3 H335
			2.6/4 H227 3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1 H314 3.6/1B H350 4.1.A/2 H401
			3.1.O/1 H300 3.1.D/3 H311 3.1.I/3 H331 3.2/1B H314 3.4.S/1 H317 3.6/1B H350 4.1.A/2 H401

Alteration of classification: All GHS types, sorted by class

One GHS type, the other GHS type are derived: Sorted by H phrases Only numbers Numbers and complete text

Sorted by classes Only numbers and abbreviations Complete

2 Exposure routes Inhalation ³ Suppress classification for hazards of inhalation

4 Target organs the lung ⁵ Causes atrophy of the testicles

⁶ Additional hazards for specific target organ toxicity

Exposure and target organs dialog box:

H350 May cause cancer, H360 May damage fertility or the unborn child, H370 Causes damage to ...

Exposure routes: Inhalation

Target organs: the lung

Target organs list:

- the bladder
- the blood
- the blood system
- the blood tissue
- the bone marrow
- the bones
- the bone tissue
- the brain
- the cardiovascular system
- the central nervous system
- the digestive system
- the eyes
- the gastro-intestinal tract
- the gingiva
- the hearing organs
- the heart
- the hematopoietic system
- the immune system
- the kidneys
- the larynx
- the liver
- the lymph nodes
- the male genitalia
- the mucous membrane
- the muscles
- the nasal tissue
- the nervous system
- the pancreas
- the peripheral nervous system
- the pituitary
- the prostate
- the reproductive system
- the respiratory and haematopoietic systems
- the respiratory system
- the respiratory tract
- the salivary glands
- the seminal vesicles
- the skeletal muscles
- the skin
- the spleen
- the stomach
- the teeth
- the thymus
- the thyroid
- the upper respiratory tract
- the visual organs

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].

Prevention

12	{P201-P202-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h}
4	{P201-P202-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h}
8	{P201-P202-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h}
≤125	07 {P201-P202-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h}
3	P201 : Obtain special instructions before use.
4	P202 : Do not handle until all safety precautions have been read and understood.
5	P260h : Do not breathe dusts or mists.
6	P261 : Avoid breathing dust/fume/gas/mist/vapours/spray.
7	P264a : Wash thoroughly after handling.
8	P270 : Do not eat, drink or smoke when using this product.
9	P271 : Use only outdoors or in a well-ventilated area.
10	P272 : Contaminated work clothing should not be allowed out of the workplace.
11	P280 : Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
12	P280g : Wear protective gloves.
13	P280h : Wear protective gloves / protective clothing.
14	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P284}
15	P210e {P201-P202-P210-P260-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P284}
16	{P201-P202-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280i}
17	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280j}
18	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280k}
19	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280l}
20	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280m}
21	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280n}
22	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280o}
23	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280p}
24	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280q}
25	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280r}
26	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280s}
27	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280t}
28	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280u}
SELF	{P201-P202-P210e-P260h-P261-P264a-P270-P271-P272-P280-P280g-P280h-P280v}

P201	P220e	P231a	P250	P260w	P264d	P280i
P202	P220f	P231a+P232	P250a	P261	P264e	P280j
P210	P220g	P232	P250b	P261a	P264f	P280k
P210a	P220h	P233	P250c	P261b	P264g	P280l
P210b	P220i	P234	P250d	P261c	P270	P281
P210c	P220j	P235	P251	P261d	P271	P281u
P210d	P220k	P235+P410	P260	P261e	P272	P282
P210e	P220l	P240	P260a	P261f	P273	P283
P210u	P220u	P241	P260b	P261g	P280	P284
P210v	P220v	P241a	P260c	P261u	P280a	P284a
P211	P221	P241b	P260d	P261v	P280b	P284b
P212	P222	P241c	P260e	P262	P280c	P285
P220	P223	P241d	P260f	P263	P280d	
P220a	P230	P241e	P260g	P264	P280e	
P220b	P230a	P242	P260h	P264a	P280f	
P220c	P231	P243	P260i	P264b	P280g	
P220d	P231+P232	P244	P260j	P264c	P280h	

Obtain special instructions before use.

[Esc] Exit [F1] Output with full text [Ctrl F8] Copy for all types

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**.

The screenshot displays the 'GHS-Classifications' software interface. The main window shows a list of countries with their respective flags and a 'SELF' option for 'Own classification'. The 'Classification' window is open, showing a detailed matrix for 'Acute toxicity - oral' (Class 3.1.O) and 'Acute toxicity - dermal' (Class 3.1.D). The matrix columns represent hazard classes (1, 2, 3, 4, 5) and rows represent hazard categories (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V). The 'SELF' option is highlighted in red in the country list, and the 'Acute toxicity - oral' and 'Acute toxicity - dermal' sections are also highlighted in red in the classification matrix.

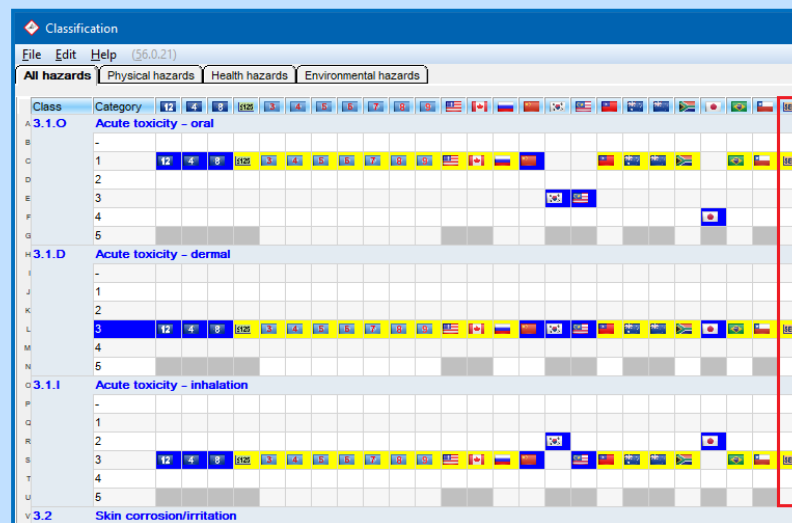
Country	Signal words	Symbols	Classification
4 6 7 8 9			2.6/4 H227 3.6/1B H350
4 UN Rev. 4			3.1.O/1 H300
6 UN Rev. 6			3.6/1B H350
7 UN Rev. 7			2.6/4 H227 3.6/1B H350
8 UN Rev. 8			2.6/4 H227 3.6/1B H350
9 UN Rev. 9			2.6/4 H227 3.6/1B H350
Russia			3.5/2 H341 3.6/1B H350
Taiwan			3.1.O/3 H301
Australia			3.6/1B H350
South Africa			2.6/4 H227 3.6/1B H350
Brazil			3.1.O/1 H300
SELF Own classification			3.6/1B H350

Information on self-classifications

Entry and use

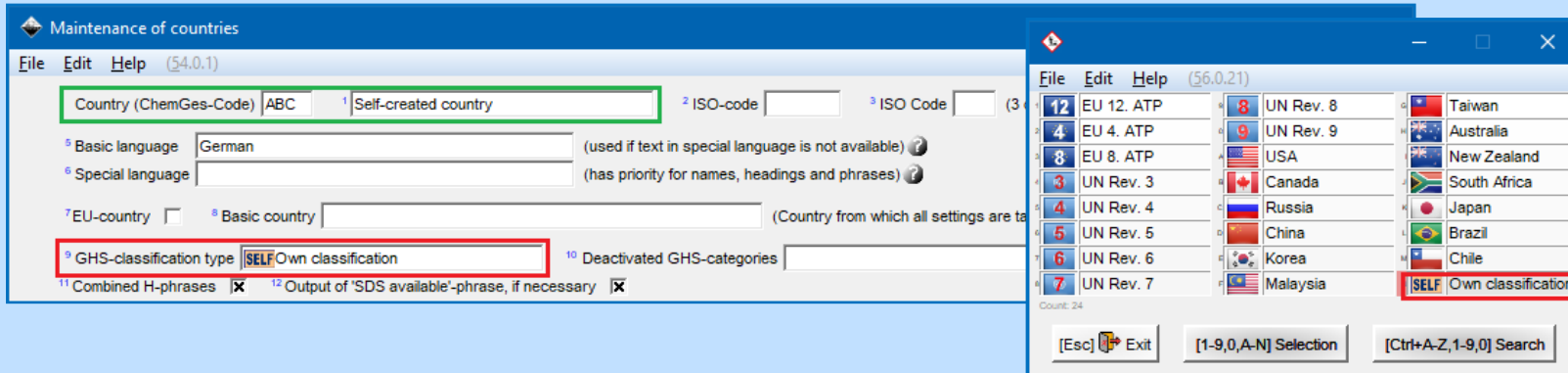
Entry of self-classifications:

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 screenshot shows the 'Maintenance of countries' window with the following settings for Ireland:

- Country (ChemGes-Code): IRL
- ISO-code: IE
- ISO Code: IRL (3 characters)
- Flag: Ireland
- Basic language: English
- Special language: (empty)
- EU-country: Basic country: (empty)
- GHS-classification type: EU 12. ATP
- Deactivated GHS-categories: (empty)
- Combined H-phrases: Output of 'SDS available'-phrase, if necessary:
- Decimal character: Period
- Format of the date: Standard
- Activation of safety data sheet for this country:
- Settings for section 3:
 - Only ingredients with health and environmental hazards are shown:
 - Show classification of raw materials:
 - Output of the hazard types in SDS language: (otherwise in English, EU countries except Croatia should always be in English)
 - Limit table to be used: acc. to presettings --Use limit tables
 - Adaptation to legal limit values: acc. to presettings --Yes
 - Output of numbers:
 - CAS number:
 - EC number (EINECS):
 - Index number:
 - RTECS:
 - Registration number:
 - Output of synonyms of substance descriptions:
 - Additional output of English synonyms:
 - Output of ingredients in section 2 instead of section 3:
 - Output of all ingredients (including harmless ones):
 - From: %
 - EU only: Specification of additional information (e.g. occurrence of OELVs) Only if the raw material has no H phrases
- Use strict EU rules:
- Use special settings, which are otherwise only used for USA and Canada:
- Output of hazard statements of raw materials and of the abbreviations in section 16:
- Occupational exposure limit values to be shown (OELV): Ireland
- Output of the toxicology comments:
- Celsius values also in Fahrenheit: (only visible when printing)
- Sort order of headings in SDS: Standard
- Archiving of safety data sheets:
- Type of output: GHS
- Template: Format not defined
- Output of a second SDS for: (empty)

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.

The screenshot displays the 'Maintenance of countries' application window. The main window is titled 'Maintenance of countries' and shows settings for the USA. The 'GHS-classification type' field is highlighted in red. A secondary window is open, showing a list of GHS systems (UN Rev. 8, UN Rev. 9, EU 12, ATP, EU 4, ATP, EU 8, ATP, UN Rev. 3, UN Rev. 4, UN Rev. 5, UN Rev. 6, UN Rev. 7) and their corresponding flags. The 'USA' option is selected. The interface includes various checkboxes and text fields for configuring SDS settings.

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.

Maintenance of countries

Country (ChemGes-Code) D 1 Germany 2 ISO-code DE 3 ISO Code DEU (3 characters) 4 Flag

5 Basic language German (used if text in special language is not available) ?

6 Special language (has priority for names, headings and phrases) ?

7 EU-country 8 Basic country (Country from which all settings are taken by default)

9 GHS-classification type 12 EU 12. ATP 10 Deactivated GHS-categories

11 Combined H-phrases 12 Output of 'SDS available'-phrase, if necessary

13 Decimal character Comma 14 Format of the date Standard Example: 08.06.2022

15 Activation of safety data sheet for this country

Settings for section 3

16 Only ingredients with health and environmental hazards are shown 17 Show classification of raw materials

18 Output of the hazard types in SDS language (otherwise in English, EU countries except Croatia should always be in English)

19 Limit table to be used acc. to pre

Output of numbers: 21 CAS num

20 Output of synonyms of substance

22 Output of ingredients in section 2

23 Output of all ingredients (including

24 EU only: Specification of additional

25 Use strict EU rules ?

26 Output of hazard statements of ra

27 Occupational exposure limit value

28 Output of the toxicology comments

29 Celsius values also in Fahrenheit

30 Sort order of headings in SDS | S

31 Archiving of safety data sheets

32 Type of output | GHS

33 Template | Format not defined

34 Output of a second SDS for

	raw materials		Mixtures	
Output in the SDS	DSD/DPD	GHS	DSD/DPD	GHS
Classification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Labelling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

For mixtures only output of GHS for raw materials

[Esc] Exit

[Esc, -] Exit [Alt Delete] Delete [F8] Country specific SDS headings

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:**

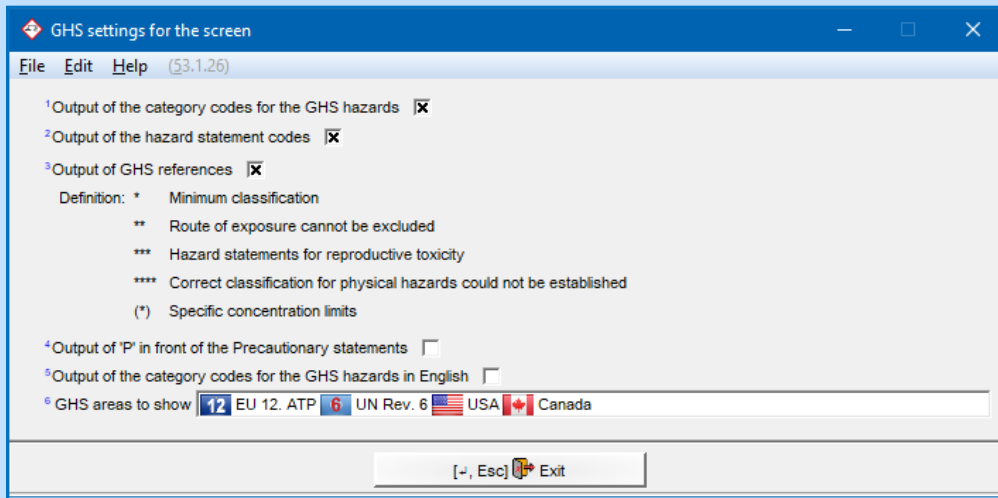
- **GHS-settings** (in the sub-menu **Settings for the output on the screen**)
- **Classification options** (in the sub-menu **Calculation of classification**)
- **Calculation and limits** (in the sub-menu **Toxicity**)
- **Sub-numbers of P-phrases** (in the sub-menu **Safety instructions**)
- **P-phrase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

General classification options

File Edit Help (54.0.1)

Limits for the data transfer without calculation: ¹ Hazard statements 100 % ² Safety instructions 0 %

Classification: Automatic classification: GHS/DPD ³ Always, when a preparation is retrieved ⁴ When a new preparation is created ⁵ After alterations
Transport ⁶ Always, when a preparation is retrieved ⁷ When a new preparation is created ⁸ After alterations

⁹ Consider limits for each hazard separately ¹⁰ Consideration only for CLP classification

¹¹ Consideration limit if the special limit is below the standard consideration limit New consideration limit = special limit
Classification settings for toxicology | Classification settings for corrosive and irritant effect

¹² In the case of non-liquid raw materials in liquid preparations, suppress hazards that exist only with inhalation (Default value for new preparations)
Products are made with a viscosity ¹³ < 20,5 mm²/s at 40°C ¹⁴ < 7mm²/s at 40°C

¹⁵ Only consider the metal content of the raw material

Aerosols: ¹⁶ Do not consider propellant gases (CLP, US, CA) automatically for US and CA GHS
¹⁷ Particles aspiratable (H304) ¹⁸ Consideration limit for H304 (excluding special limits) 0,00 %
Suppress GHS04 when symbols GHS02 or GHS06 are present: ¹⁹ CLP ²⁰ US/CA ²¹ Rest of the world
 US/CA/UN Rev. 3 ²² Aerosols should also be classified as gases at pressures below 29 psig
²³ Default category when classified as gas under pressure Compressed gas

²⁴ CA: Do not show H280 for labeling

Labeling: Maximum number of hazard triggers: ²⁵ UN-GHS 4/10 ²⁶ CLP 4/10 ²⁷ US-,CA-GHS 4/10 ²⁸ Sensitizing substances 20
²⁹ CLP: Labeling with H410 for H400+411, H400+H412 and H400+H413 (does not correspond to the CLP)
³⁰ If corrosive to the skin, do not show eye irritation

EUH phrases: ³¹ Show 'Only for commercial users' phrase for
³² Only output EUH 211 if spraying/splattering has also been selected
³³ Consideration of the OELVs for 'SDS available phrase' Only from EU members

Safety instructions: Maximum: ³⁴ UN-GHS 6 ³⁵ CLP 6 ³⁶ US-,CA-GHS 99 (Phrases with priority 1 are always output, Korea≥6)
³⁷ At least one phrase per group always activated for Korea ³⁸ Remove duplicates ³⁹ Sort order Automatic

⁴⁰ Defaults: For the public (Leads to output of P101 - P103) ⁴¹ Industry and commerce

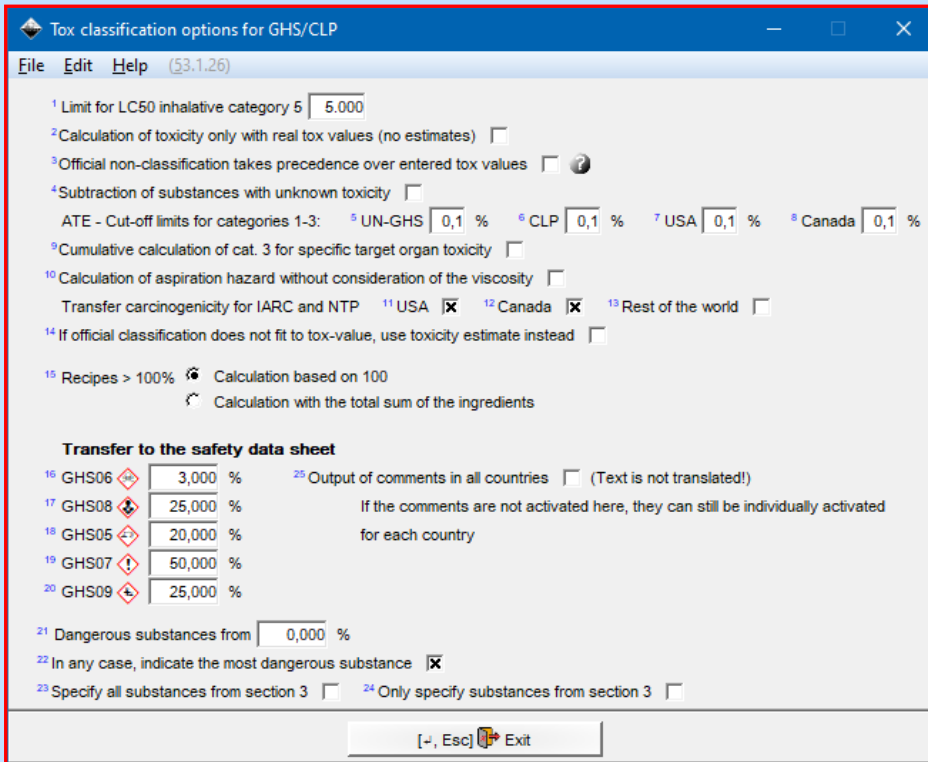
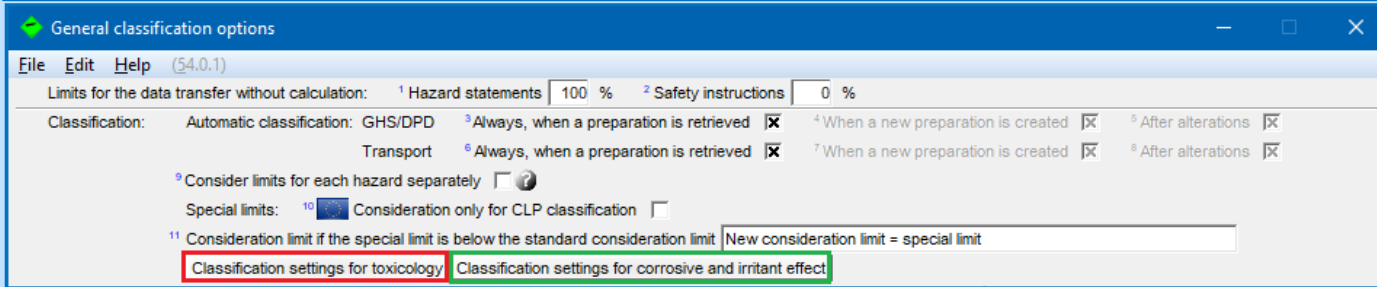
⁴² After modified classification message when going into SDS or label
⁴³ GHS classification only after recalculation or other changes (in case of performance problems)
⁴⁴ Overwrite locked classifications when adopting official CLP classifications ⁴⁵ Also for non-EU countries

[-, Esc] Exit

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:



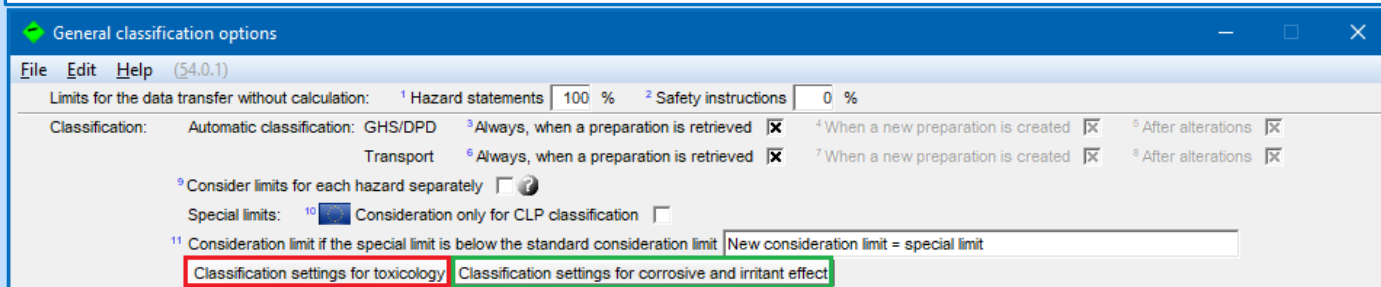
Tox classification options:

(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

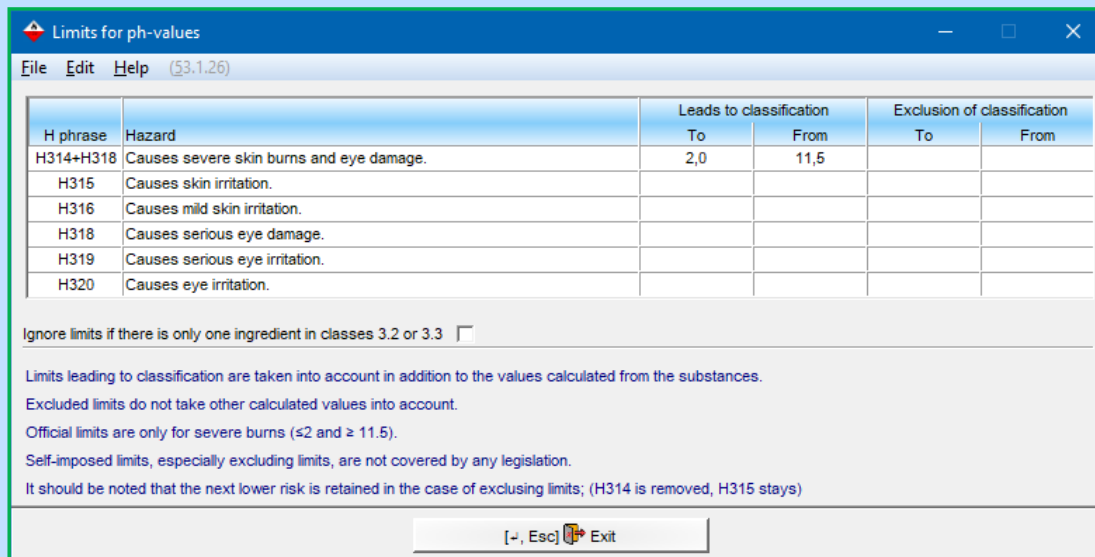
Via the buttons **Classification settings for toxicology** and **Classification settings for corrosive and irritant effect**, you can directly switch to the following screens:



Classification settings for corrosive and irritant effect :

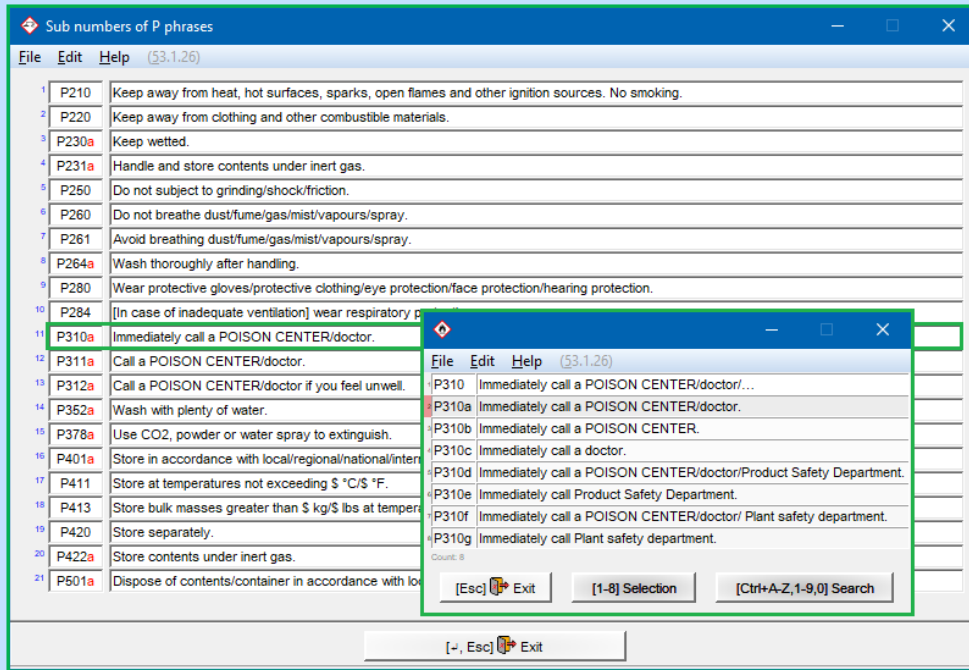
(Ctrl 4) Maintenance programs – Program adjustments – Calculation of classification - pH-value limits)

This screen contains all settings for pH-value limits.



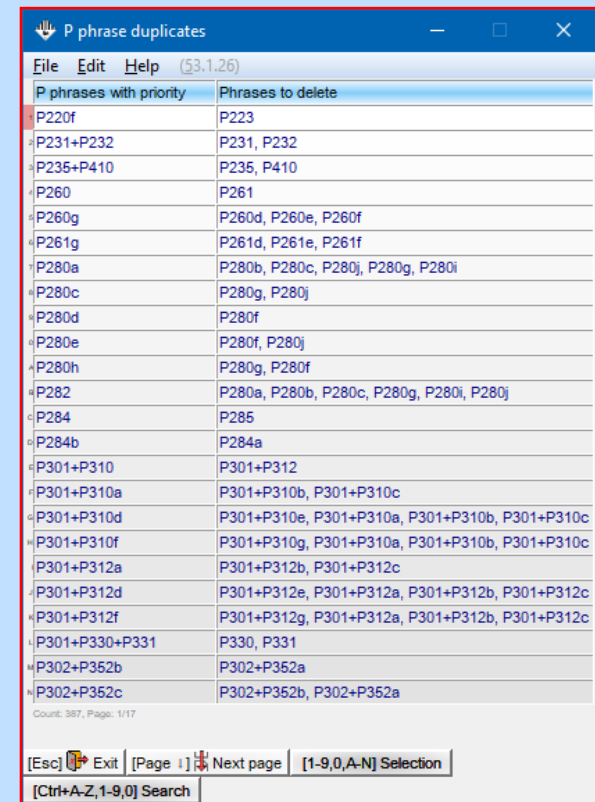
Note: Further information on the options can be found in the Online helpfile and the manual to ChemGes.

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:

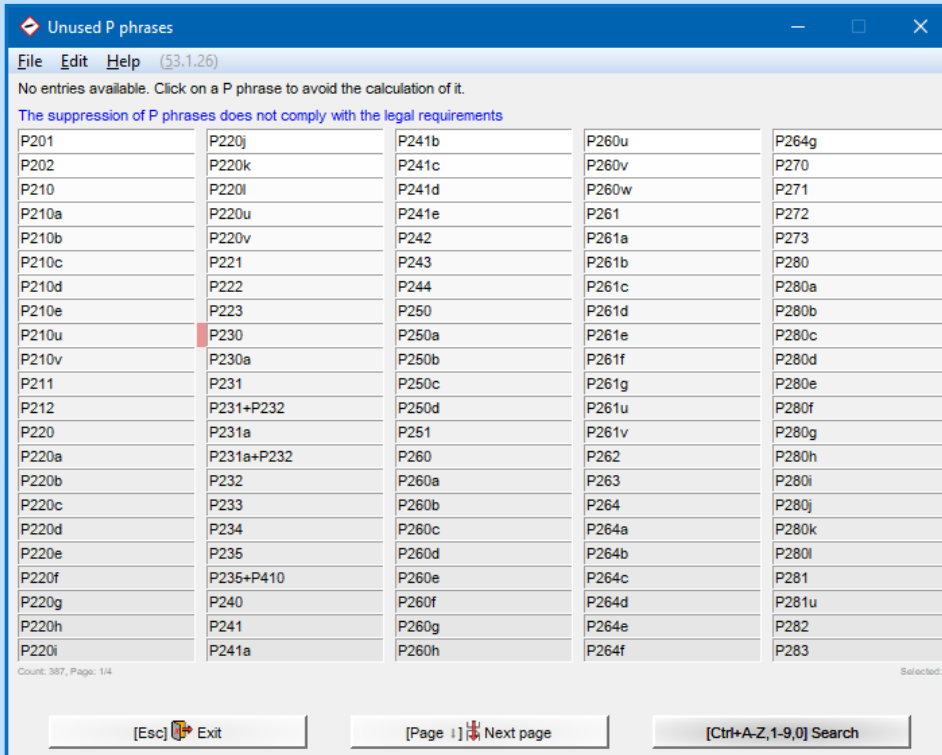
This screen provides an overview of P-phrases with similar information. If you have activated the item **Removal of duplicates** in the screen **General classification options**, the phrase „duplicates” listed in the column **Phrases to delete** are no longer output, if the raw material / mixture is 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).

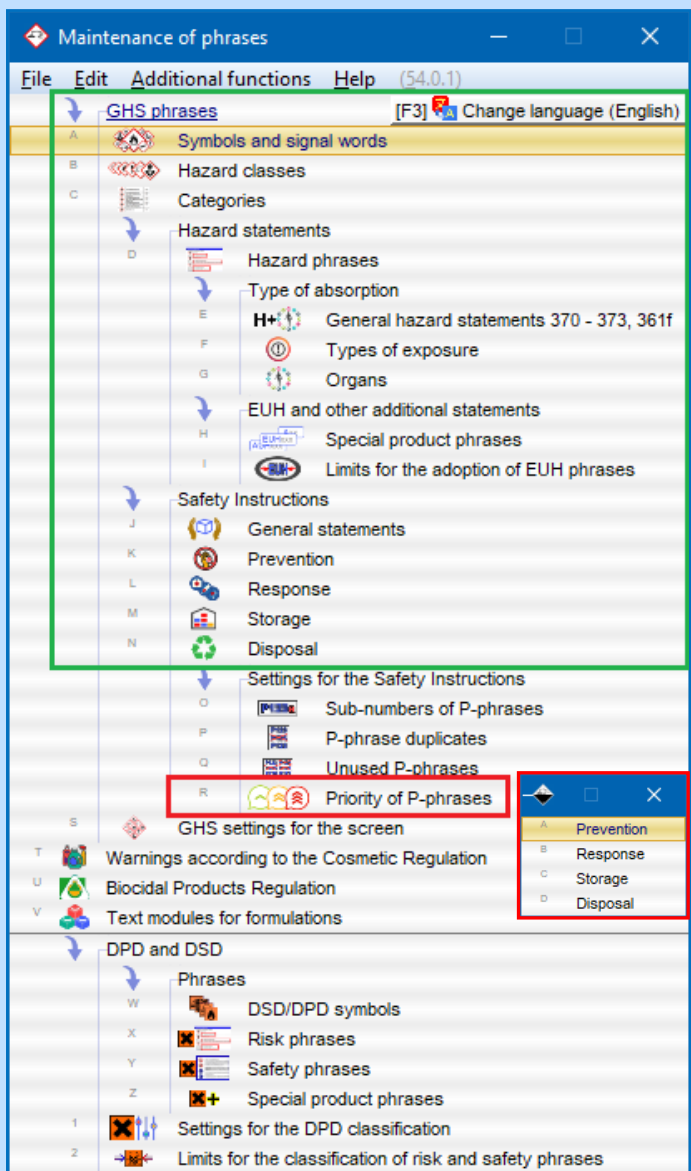
Please note that this option was implemented on customer request and does not comply with the legal requirements.



The screenshot shows a software window titled "Unused P phrases" with a menu bar (File, Edit, Help) and version (53.1.26). The main area contains a message: "No entries available. Click on a P phrase to avoid the calculation of it." Below this is a warning: "The suppression of P phrases does not comply with the legal requirements". The main content is a grid of P-phrases arranged in 5 columns and 20 rows. The first column contains P201 through P220i. The second column contains P220j through P241a. The third column contains P241b through P260h. The fourth column contains P260u through P264f. The fifth column contains P264g through P283. At the bottom, there are three buttons: "[Esc] Exit", "[Page 1] Next page", and "[Ctrl+A-Z,1-9,0] Search".

P201	P220j	P241b	P260u	P264g
P202	P220k	P241c	P260v	P270
P210	P220l	P241d	P260w	P271
P210a	P220u	P241e	P261	P272
P210b	P220v	P242	P261a	P273
P210c	P221	P243	P261b	P280
P210d	P222	P244	P261c	P280a
P210e	P223	P250	P261d	P280b
P210u	P230	P250a	P261e	P280c
P210v	P230a	P250b	P261f	P280d
P211	P231	P250c	P261g	P280e
P212	P231+P232	P250d	P261u	P280f
P220	P231a	P251	P261v	P280g
P220a	P231a+P232	P260	P262	P280h
P220b	P232	P260a	P263	P280i
P220c	P233	P260b	P264	P280j
P220d	P234	P260c	P264a	P280k
P220e	P235	P260d	P264b	P280l
P220f	P235+P410	P260e	P264c	P281
P220g	P240	P260f	P264d	P281u
P220h	P241	P260g	P264e	P282
P220i	P241a	P260h	P264f	P283

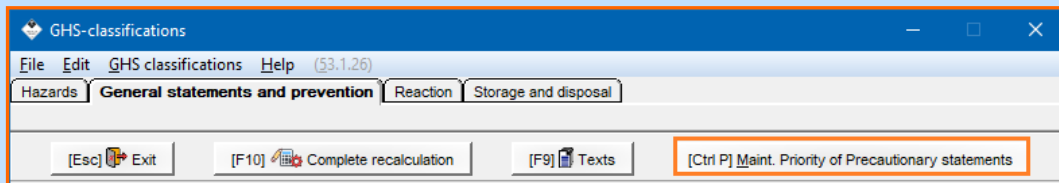
D. Maintenance of GHS texts



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 Maintenance programs – Safety Data Sheets – General options) you can define the output of GHS information in the SDS.

Calculations (56.0.21)

File Edit Help

When retrieved: When new: ¹ Lock automatically ² Offer copying possibility ³ Always apply the alteration date in all languages
⁴ Automatic print preview if the user has read-only rights ⁵ Create missing country version automatically

Descriptions: ⁶ Product description for raw materials Defined description for the SDS ⁷ Use SDS substance description of your own language (if necessary)
⁸ Substitute language for missing substance description

Variants/product codes: ⁹ Transfer of variant information into the SDS ¹⁰ Store variant information when printing a customer SDS
¹¹ Additional product codes

Kits: ¹² Printout of a cover sheet ¹³ Write additional product codes in the cover sheet

CAS numbers: ¹⁴ Always write the letters CAS in front of the CAS number
¹⁵ CAS numbers of SDS descriptions with simultaneous marking as standard or as EU designation
¹⁶ Also show CAS numbers for substances with EC number > 900-000-0

Classification: Codes:
Additional output of labeling in section 15
²⁴ Always output H phrases of the same class in multiple lines (e.g. H335-H336)

Section 3: Percentages: ²⁵ Limit for the treatment of the whole product as raw material %
²⁶ Type of percentage ²⁷ Percentage of proprietary descriptions
²⁸ Decimals ²⁹ Adapt to legal limits
³⁰ Output of special limits (always for SDS2021) ³¹ Show only if the specified percentage is ≥ the limit
³² Consideration of 1% limit for non-hazardous preparations
³³ M factors (always for SDS2021) ³⁴ Also output of 1 ³⁵ Canc., muta. and repr. categories ³⁶ One line per hazard symbol ³⁷ Notas

OELVs ³⁸ OELV and OEL-B values from %
³⁹ Also list substances with OELVs in section 8 in section 3 ⁴⁰ In EU countries only consider EU limit values

Tox values: ⁴¹ Output of calculated tox values (ATE) (requires automatic update of the SDS) ⁴² Output of estimated raw material tox values according to GHS

Endocrine substances: ⁴³ Output of list II ⁴⁴ Output of list III

Waste code: ⁴⁵ Output of group names ⁴⁶ Output of hazardous properties of waste

Transport ⁴⁷ DOT/TDG For:
⁴⁸ ADR
⁴⁹ IMDG
⁵⁰ IATA

TA-Luft: ⁵¹ Output of water content ⁵² Use limits instead of exact percentages

Exposure scenarios: Raw materials: Preparations: ⁵⁷ Start new page for the exposure scenario

Other output options: ⁵⁸ Output of abbreviations and acronyms in section 16 of the GHS SDS
⁵⁹ Country code on SDS (only possible with lines around the SDS)
⁶⁰ Flashpoint of preparations
Output of substances, from which the physical value has been taken over directly ⁶¹ EU (always for SDS2021) ⁶² Rest of the world

[-, Esc] Exit

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**).

Settings (56.0.21)

File Edit Help

Zero for all other positions ¹ left 0,00 cm ² top 0,00 cm

³ Basic country

⁴ Used languages English

⁵ Order phrase / all languages Titles in all languages
 language / all phrases Adopt other phrases in all languages
 Dividing into text blocks Language flag before each phrase / language / text block

⁹ Output of the matching country symbol instead of the language abbreviation
¹⁰ No line break after the language flag

¹¹ GHS information Depending on the basic country/first language

Numbers for hazard phrases: ¹² Output ¹³ Only numbers without text ¹⁴ New line per number

¹⁵ Output of P phrases ¹⁶ Maximum number per group 99 ¹⁷ Output of general P-phrases together with the other P-phrases

GHS signal word ¹⁸ Bold print ¹⁹ Inverted color output ²⁰ Output of the signal word directly in front of the H phrases

Headings for GHS phrases ²¹ Signal word ²² H phrases ²³ General P phrases ²⁴ P phrases ²⁵ Subheadings

Space line between ²⁶ H and P phrases ²⁷ P phrase groups

A07 (hint for adequate training) ²⁸ Bold print ²⁹ Yellow background

³⁰ Bold descriptions ³² Output of the SDS-hint (if necessary)

³¹ Adoption of the synonym of preparations as name 2 ³³ Output of warnings according to Regulation 1223/2009/EC

(otherwise the synonym will be added as line 2 at name 1) ³⁴ Disposal symbols only on labels for the public

³⁰ Printer No special printer allocated

[Esc] Exit

Positions of symbols (53.1.26)

File Edit Help

Symbol	left	top	Size in cm
¹ Hazard symbol 1			
² Hazard symbol 2			
³ Hazard symbol 3			
⁴ Hazard symbol 4			
⁶ Garbage can			
⁶ Toilet			
⁷ Transport symbol 1	1,02	6,28	1,32
⁸ Transport symbol 2			
⁹ Transport symbol 3			
¹⁰ Transport symbol 4			
¹¹ NFPA			
¹² HMIS			

¹⁷ Symbol position lapses top at text

¹⁸ Font: Type Times New Roman
 Minimum size 7
 Maximum size 7
 Color

¹⁹ Symbol text bottom right defined position

²⁰ Position of symbol texts
 left cm
 top cm
 alignment

²¹ Output in all languages

Frame: ¹³ Hazard symbols ¹⁴ Transport symbols

¹⁵ Transport symbol substitutes hazard symbol

¹⁶ Company logo
 Position: left cm top cm length cm

General table of GHS symbols

	Position		optimized	Size			Number		Center symbols	
	left	top		symbol	column	line	columns	lines	horizontally	vertically
²²	10,04	0,49	<input type="checkbox"/>	3,97	4,56	4,56	3	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
²³			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁴			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁵			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁶			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁷			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁸			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
²⁹			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
³⁰			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
³¹			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
³²			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
³³			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
³⁴			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>

²³ Output of GHS symbol texts ²⁴ Maximum number of GHS symbols 4

²⁵ Blacken unused symbols up to the maximum number (at your own risk) ²⁶ Magnification %

[Esc] Exit [Ctrl G] Graphical label design [F1] Positions for additional symbols [F2] Positioning of GHS symbols

Positioning of GHS Symbols (53.1.26)

File Edit Help

¹ Method for positioning of GHS Symbols Positioning by table definition [Additional information](#)

	Position			Size			Number		Center symbol / table	
	left	top	optimized	symbol	column	line	columns	lines	horizontally	vertically
²	10,04	0,49	<input type="checkbox"/>	3,97	4,56	4,56	3	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
³			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁴			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁵			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁶			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁷			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁸			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
⁹			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
¹⁰			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>
¹¹			<input type="checkbox"/>						<input type="checkbox"/>	<input type="checkbox"/>

OK [Ctrl G] Graphical label design