

ChemGes – Update 02/2024

Version 60.0

Please note that this Update contains extensive changes to the Database.

For this reason, the Update may take a long time.

Please backup your program and data as normal before an Update.

Let the Update run completely and do not turn off your computer while the Update is running, as this can lead to massive data loss.

Installation:

You can download the update either directly in ChemGes via the update symbol in the right upper corner of the basic screen, or via the following link:

<http://dr-software.com>

Please note, that your program must be at least Version 57.0 in order for your Update to be performed. Please contact our hotline if that is not the case.

To download the update, please either go to www.dr-software.com – *Downloads* – “**Update from version 57.0 or higher to version 60.0**” or click directly on the above stated link.

Save the file “32.zip” in your program directory for ChemGes (usually \chem) and unzip the file. Please make sure that the program is not in access. Afterwards you can start the update by double-clicking **chemges.exe**.

Should you need the update on USB stick, as a download is not possible for you, please also inform us by email (info@dr-software.com). We will be happy to arrange a shipment as soon as possible.

The following description contains all changes and improvements that have been implemented in ChemGes since Version 59.0.

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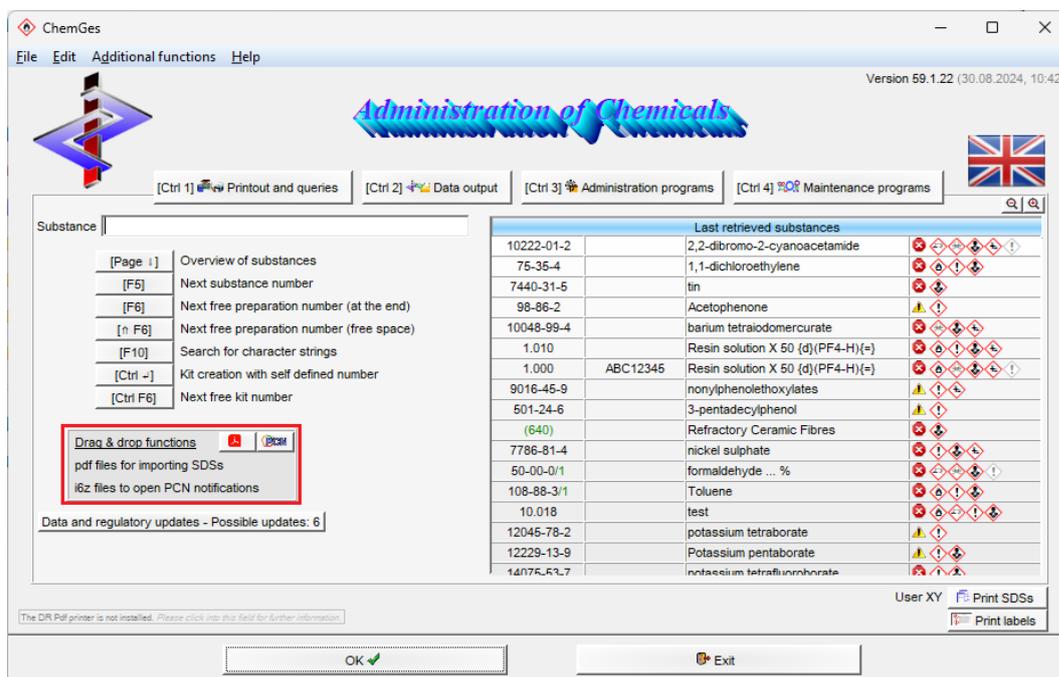
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A. New tools and functions in ChemGes

1. Import of SDSs in PDF format

With this update, we have implemented another online service that should make your work much easier:

You can now also drag and drop data from external SDSs (for example, from your supplier) in PDF format into the basic screen of ChemGes, into the main screens for raw materials and preparations, as well as directly into the screen *Formulation* by letting ChemGes extract the data from the imported SDS and transfer it into your program version. Below you will find a short summary of the new feature. For further details and examples, please also watch our new video [Import of pdf SDSs into ChemGes](#) on our YouTube channel.



This feature is available for SDSs of **raw materials**, as well as SDSs of **mixtures**. The SDS can be in any language - ChemGes first automatically analyses and translates the document into English, using internal tools, prior to further processing the data.

The transferable data includes

- **Names (main descriptions and synonyms):** If the source-SDS is not in English, the names are translated into English. If the name is not available in your own language, it is also translated in your language
- **physical/chemical data**, as usually available in ChemGes
- **GHS classifications**
- **transport classifications**
- **Tox values** (if they can be allocated to a test type in ChemGes), including organs

All further classifications are derived from this data.

Please note:

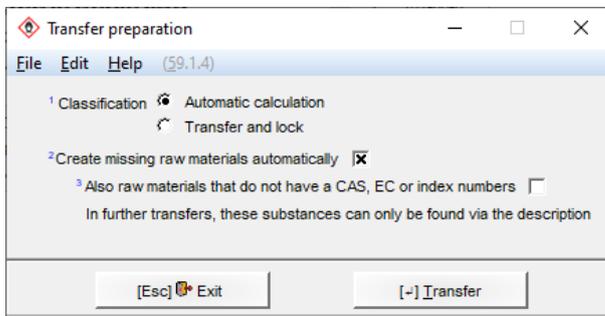
- The file must not be locked against reading. If the format is not directly readable, the text is automatically converted using OCR.

- Imported PDF files are automatically stored in the data directory /pdf. This way, imported PDFs are at your disposal anytime.
- If a raw material is not yet available in your program version, its complete classification is imported and - as done for the web research feature - displayed as the default classification (Field **Default classification** in the screen *GHS classifications*)

Default classification - Source  [2.6/2 H225 | 3.1.O/4 H302 | 3.1.D/1 H310 | 3.6/1 H350 | 3.8/1 H370 | 3.9/2 H373 | 4.1.A/1 H400 | 4.1.C/1 H410]

If a raw material is already available in your program version, ChemGes will show you a list of all existing substances with this CAS number. Here, you can select, whether you want to create a new substance, or add information to an already existing substance entry. In the latter case, you will receive an overview of all differing data, for which you can individually select what to transfer.

- For mixtures, you can additionally select, whether the classification of the ingredients shall be calculated by ChemGes, or the data from the PDF shall be imported - and whether these ingredients shall be created automatically. Ingredients, which are listed in the PDF with only little available information, can also be imported - in this case, ChemGes searches for classification data using simplified web research.



ChemGes also shows you an overview of the ingredients, which have been researched and - with this - newly created this way. You can open this overview as an xls file, which facilitates any subsequent editing.

B. GHS regulations

With this update, all necessary changes for the legal adjustments of the national GHS and SDS regulations for the USA, Canada, Brazil, Singapore and Serbia have been adopted.

As usual, ChemGes supports you fully automatically and implements all changes for you. On the following pages you will find a short summary of the changes for each country, as well as information on the changes and new options in ChemGes.

a) USA - OSHA HCS 2024

The national adaptation to UN GHS Rev 07 was published on May 20, 2024 (<https://www.federalregister.gov/documents/2024/05/20/2024-08568/hazard-communication-standard>). Die Änderungen zwischen dem *OSHA Hazard Communication Standard (HCS) 2012* und dem *HCS 2024* betreffen mehrere Aspekte der Einstufung, Kennzeichnung und Sicherheitsdatenblätter (SDB).

The changes in HCS 2024 compared to OSHA Hazard Communication Standard (HCS) 2012 affect several aspects of classification, labelling, and Safety Data Sheets (SDS).

Here are the most important changes in detail:

Classification and labelling

Adaptation to GHS Rev. 7: The HCS 2024 has been largely adapted to the seventh revised edition of the UN Globally Harmonized System (GHS) to ensure better consistency with international standards.

New Hazard classes and categories

Desensitized explosives: This new hazard class was introduced in order to cover materials that have explosive-like properties but have been made safer by desensitization

Aerosols: The classification of aerosols has been expanded, in order to include new categories that allow a more differentiated evaluation of the hazards.

Unstable gases: For Class 2.2 Flammable gases, new categories for unstable gases have been introduced to better address specific risks.

- Amended resp. new categories for Class 2.2 (*Flammable gases*, 2.2/1A, 2.2/1B, 2.2/P, 2.2/A, 2.2/B)
- Amended resp. new categories for Class 2.3. - now 2.3.1 und 2.3.2 (*Aerosols and chemicals under pressure*), which were actually only adopted with UN GHS Rev. 08
- New Class 2.17 (*Desensitized explosives*)
- Deletion of Class *Pyrophoric gases*
- Amended and new H-, P- and USH-phrases (for example, USH003, USH004 for Class *Combustible dust*)
- Amended definition of classification criteria for Classes 3.2 and 3.3

Clarifications on hazard classification: The classification criteria have been revised to clarify that hazards arising from chemical reactions during normal use must be taken into account.

Labelling requirements for small containers: Specific labelling simplifications have been introduced for containers with a volume of 100 ml or less. These simplifications are intended to improve the practicality of labelling small containers without compromising safety.

Safety Data Sheets (SDB)

Revised sections

- Sections 1-11 and 16: Safety Data Sheets have to contain the information as specified in Table D.1 (*Minimum Information for an SDS* - <https://www.osha.gov/laws-regs/federalregister/2024-05-20>). If no relevant information is available for a particular sub-item, this must be clearly stated.

Handling of trade secrets

The rules for stating concentration ranges, which are considered as trade secrets, have been revised. Manufacturers must now select a concentration range from an obligatory list, thus increasing transparency while maintaining the protection of trade secrets.

Implementation schedule (staggered compliance deadlines)

The new standards will be implemented in phases, in order to give companies sufficient time to adapt:

- For manufacturers, importers and distributors of substances: The deadline to comply with the new rules is January 2026.
- For mixtures: The deadline to comply with the new rules is July 2027.
- For employers: The deadlines for updating programs and training are July 2026 for substances and January 2028 for mixtures.

b) Canada – HPR 2024

The national adaptation to UN GHS Rev. 07 was published on January 4, 2023.

Transitional period:

Until December 14, 2025

Summary of changes:

- Amended resp. new categories for Class 2.2 (*Flammable gases*, 2.2/1A, 2.2/1B, 2.2/P, 2.2/A, 2.2/B)
- Amended resp. new categories for Class 2.3. - now 2.3.1 und 2.3.2 (*Aerosols and chemicals under pressure*), which were actually only adopted with UN GHS Rev. 08
- New Class 2.17 (*Desensitized explosives*)
- Deletion of Class *Pyrophoric gases*
- Amended and new H-, P- and USH-phrases (for example, USH003, USH004 for Class *Combustible dust*)
- Amended definition of classification criteria for Classes 3.2 and 3.3
- Extensive changes regarding content and structure of SDSs, for example, section 9 adjustments to UN GHS, Annex 4, as well as for stating hazardous components.

c) Brazil ABNT-NBR 14725-2023:

With the new standard, which now combines the previous four-part standard into a single document, the national adaptation to UN GHS Rev. 07 has been implemented.

Transitional period:

Until July 01, 2025

Summary of changes:

- Change of the term for SDS from „*Ficha de Informações de Segurança de Produtos Químicos (FISPQ)*” to “*Ficha de Dados de Segurança (FDS)*“
- Amended resp. new categories for Class 2.2 (*Gases inflamáveis*, 2.2/1A, 2.2/1B, 2.2/P, 2.2/A, 2.2/B)
- New Class 2.17 (*Explosivos dessensibilizados*)
- Changes for cut-off limits
- Amended and new H- and P -phrases
- Extensive changes regarding content and structure of SDSs, for example, section 9 adjustment to UN GHS, Annex 4

d) Singapore SS 586-2:2022, SS 586-3:2022***Transitional period:***

Until February 06, 2025

Summary of changes:

- Amended resp. new categories for Class 2.2 (*Flammable gases*, 2.2/1A, 2.2/1B, 2.2/P, 2.2/A, 2.2/B)
- New Class 2.17 (*Desensitized explosives*)
- Changes for cut-off limits

e) Serbia – Adaptation to CLP, 12. ATP (Sl.gl.40, 17.05.23) and REACH, 2020/878/EU (Sl.gl. 11, 14.02.24)***Transitional period:***

Until March 25, 2025 (CLP)

Until September 01, 2024 (SDS)

Summary of changes:

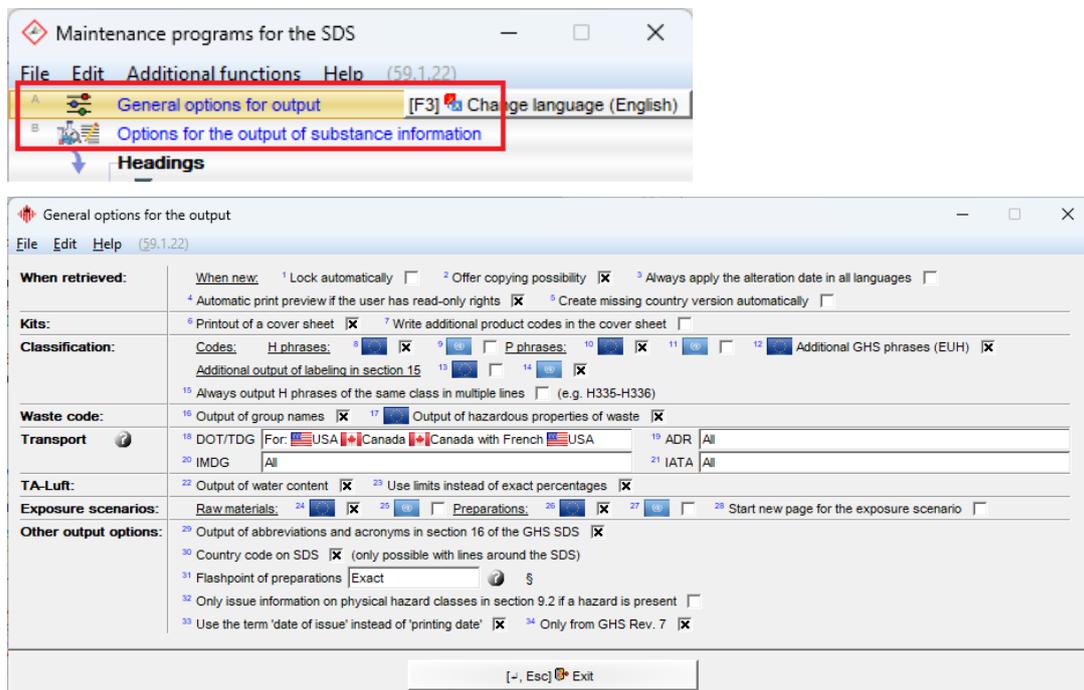
- With the Regulation *Правилник о класификацији, паковању, обележавању и оглашавању хемикалије и одређеног производа у складу са Глобално хармонизованим системом за класификацију и обележавање УН, Службени гласник РС*", бр 40 од 17. маја 2023 Serbia has implemented the revisions according to CLP, 12. ATP into national law. This was implemented accordingly in ChemGes. The amended and new GHS texts were adopted in ChemGes as well.
- In addition, the substance names according to *Правилник о Списку класификованих супстанци "Службени гласник РС"*, број 41 од 18. маја 2023 were adopted in ChemGes.

- With the amended SDS Regulation *Правилник о садржају безбедносног листа "Службени гласник РС"*, број 11 од 14. фебруара 2024 Serbia has implemented the extensive changes for the structure and content of SDSs according to 2020/878/EU into national law.

In addition to the necessary adaptation and implementation of the GHS and SDS texts, as well as classification limits and criteria for the above-mentioned countries, the following options have been newly included in ChemGes:

1) General options for the SDS

The former screen *General options (Maintenance programs – Safety Data Sheets)* has been split into two screens: *General options for output* and *Options for the output of substance information*.



The screen *General options for output* was expanded with the following new option under **Other output options**:

Only issue information on physical hazard classes in section 9.2 if a hazard is present

If this item is *activated*, the information on the physical hazard classes in section 9.2 is only output, if actual data is present. If this item is *deactivated*, the output of the information on the physical hazard classes is done in any case - if no applicable information is available, by stating, for example, "Void".

Substance data

File Edit Help (59.1.22)

Descriptions: ¹ Product description for raw materials | Defined description for the SDS | ² Use SDS substance description of your own language (if necessary)

Variants/product codes: ³ Ingredient names in EU SDSs | standard description | ⁴ Substitute language for missing substance description | English

CAS numbers: ⁵ Transfer of variant information into the SDS ⁶ Store variant information when printing a customer SDS

Section 3: ⁷ Additional product codes | No output

Section 3: ⁸ Always write the letters CAS in front of the CAS number ⁹ CAS numbers of SDS descriptions with simultaneous marking as standard or as EU designation ¹⁰ Also show CAS numbers for substances with EC number > 900-000-0

Section 3: **Percentages:** ¹¹ Limit for the treatment of the whole product as raw material | 100 % ¹² Type of percentage | Use limit tables ¹³ Percentage of proprietary descriptions ¹⁴ Decimals | 4 ¹⁵ Adapt to legal limits ¹⁶ Output of special limits (always for SDS2021) ¹⁷ Show only if the specified percentage is ≥ the limit ¹⁸ Consideration of 1% limit for non-hazardous preparations

OELVs: ¹⁹ M factors (always for SDS2021) ²⁰ Also output of 1 ²¹ Canc., muta. and repr. categories ²² One line per hazard symbol ²³ Notas

Tox values: Settings for toxicology

Endocrine substances: ²⁴ OELV and OEL-B values from | 1,000 % | Additional OELV-limits | Complete names of legislations ²⁵ Also list substances with OELVs in section 8 in section 3 ²⁶ In EU countries only consider EU limit values

Other output options: ²⁷ Output of list II ²⁸ Output of list III ²⁹ EU (always for SDS2021) ³⁰ Rest of the world

[-, Esc] Exit

2) Classification options

The screen *General classification options* (*Maintenance programs – Program adjustments – Classification options*) was expanded with the possible national selection of the **maximum number of P phrases per country**. This button lets you define the maximum number of precautionary statements to be output, separately for each GHS system.

General classification options

File Edit Help (59.1.22)

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 ⁶ Transport ⁷ Always, when a preparation is retrieved ⁸ When a new preparation is created ⁹ After alterations

¹⁰ Consider limits for each hazard separately

Special limits: ¹⁰ Consideration only for CLP classification

Classification limits: ¹¹ Consideration limits for GHS/CLP classification

Classification limits: **Maximum number of P phrases**

GHS type	Maximum number	GHS type	Maximum number
Great Britain	6	Russia	6
EU 12. ATP	6	China	6
EU 4. ATP	6	Korea	6
EU 8. ATP	6	Malaysia	6
UN Rev. 3	6	Taiwan	6
UN Rev. 4	6	Australia	6
UN Rev. 5	6	New Zealand	6
UN Rev. 6	6	South Africa	6
UN Rev. 7	6	Japan	6
UN Rev. 8	6	Brazil	6
UN Rev. 9	6	Chile	6
USA	99	Singapore	6
Canada	99	SELF Own classification	6

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

Labeling: ²⁵ Activation ²⁶ Adopt clas ²⁷ Maximum number of haz ²⁸ CLP: Labeling w ²⁹ If corrosive to the sk

EUH phrases: ³⁰ Show 'On ³¹ Only outp

³² Consideration of the OELVs for SDS available phrase: Only from EU members

Safety instructions: ³³ Maximum number per country (Phrases with priority 1 are always output) ³⁴ At least one phrase per group (always activated for Korea) ³⁵ Remove duplicates ³⁶ Sort order | Automatic

³⁷ Defaults: For the public (Leads to output of P101 - P103) ³⁸ Industry and commerce

³⁹ After modified classification message when going into SDS or label

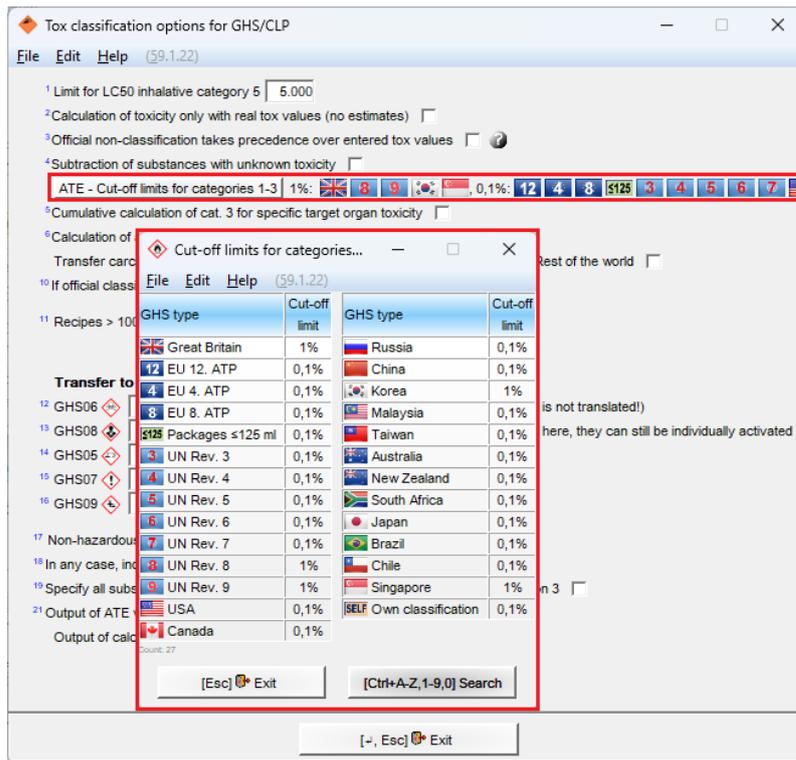
⁴⁰ GHS classification only after recalculation or other changes (in case of performance problems)

⁴¹ Overwrite locked classifications when adopting official CLP classifications ⁴² Also for non-EU countries

[-, Esc] Exit

3) Tox classification options for GHS/CLP

The screen *Tox classification options for GHS/CLP* (*Maintenance programs – Program adjustments – Toxicity– Calculation an limits*) was expanded with the following option:



Using the new button **ATE – Cut-off limits for categories 1-3**, you can define the consideration limit for categories 1-3 of class 3.1 for each GHS type.

4) Maintenance of headings

The screen *Maintenance of headings* (*Maintenance programs – Safety Data Sheets – Heading phrases*) was adjusted as follows:

The options for the output definitions according to legal requirements have been arranged more clearly. For your information, please find a detailed description of the individual options below.

Maintenance of headings (English)

File Edit Help (59.1.22)

Number 9.105.101.8

1 Self-reactive substances and mixtures

Changed wording for the SDS 2021: (for further information please point with the mouse onto the field)

2

3 Type of heading applicable (can be left empty)
 information (must be filled out, content can be a general statement)
 standard (must be filled out, content is mandatory)
 Standard only for EU-countries

4 Output as standard proposal at a new creation of an SDS

Only: ⁵for REACH-SDSs
⁶for GHS SDSs
⁷as of Safety Data Sheet 2021 ⁸as of UN GHS Rev. 07

9 Area can be filled in

10 Preceding spacing in the printed SDS None
 Space line
 Space line with divider

11 Indent of the heading (only active if no automatic indentation is defined)

12 Level 4

13 Sub-heading for EU SDSs

14 Countries All countries, as long as a translation is available

Phrase is part of DR-Software's phrase library.
 [Alt F3] Change language | [Ctrl F3] Automatic translation of all missing languages

[Esc] Exit | [1] << Previous record | [1] >> Next record | [Alt Delete] Delete | [Ctrl S] Define sort order

Here you can define for each heading separately, whether it shall be output

- *Only for REACH-SDSs*: This applies for countries, for which the setting **EU country** is activated and the setting **Output of ingredients in section 2 instead of section 3** is deactivated in the screen *Maintenance of countries* (*Maintenance programs – Various tables – Countries*).

and /or

- *Only for GHS-SDSs*: This applies for country versions of SDSs, for which one of the columns **GHS** or **CLP** (raw materials and mixtures) in the field **Type of output** in the screen *Maintenance of countries* (*Maintenance programs – Various tables – Countries*) is activated.

Furthermore, you can define, whether the heading shall be output

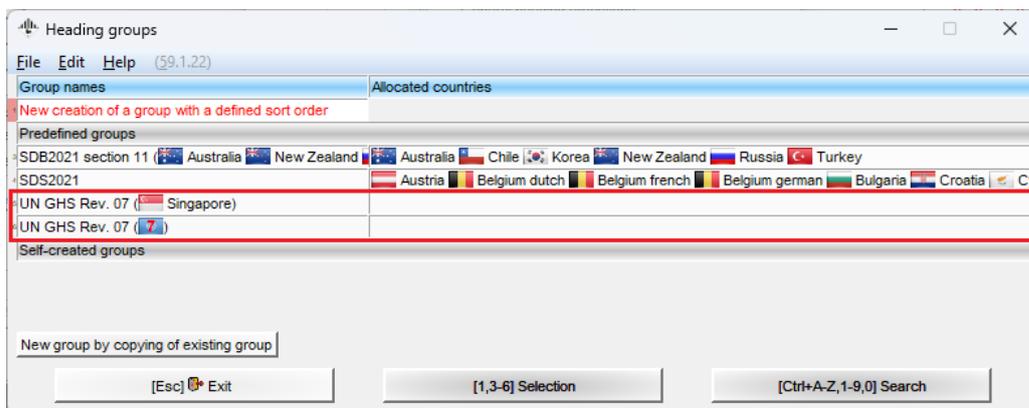
- *As of Safety Data Sheet 2021*: This concerns countries, for which the use of strict EU rules is activated (for example EU-SDSs according to 2020/878/EU, resp. Japan JIS Z7253-2019) in the screen *Maintenance of countries* (*Maintenance programs – Various tables – Countries*).

or

- *As of UN GHS Rev 07*: This concerns countries, for which UN GHS Rev 7 is selected in the field **GHS-classification type** in the screen *Maintenance of countries* (*Maintenance programs – Various tables – Countries*).

5) Maintenance of the sort order of headings:

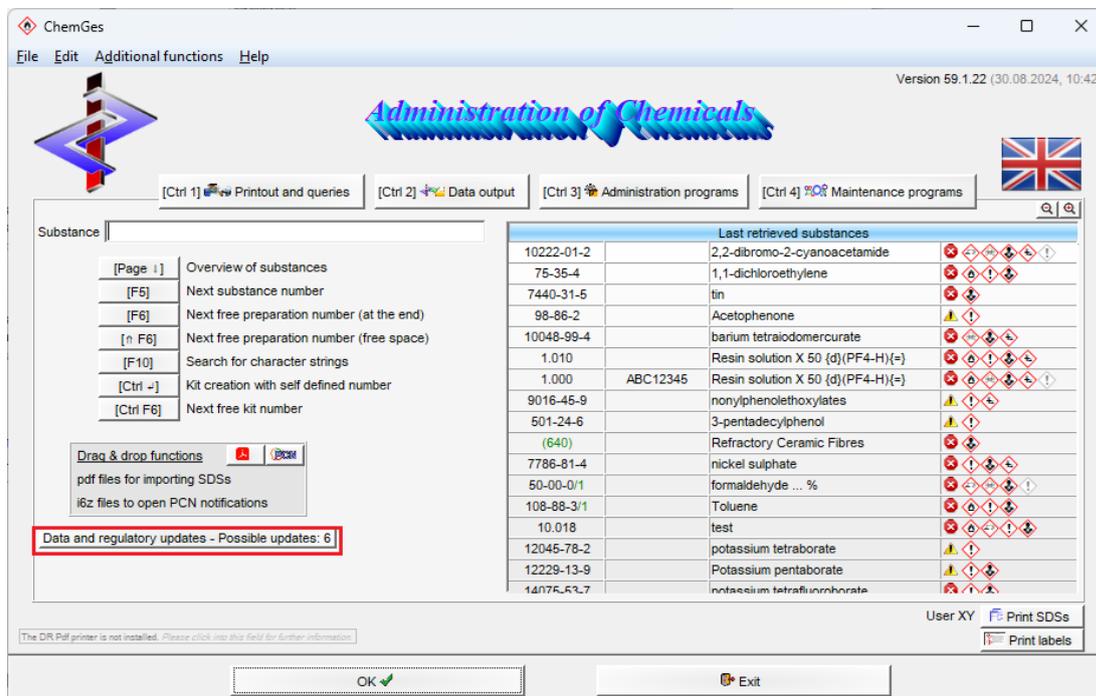
The menu for the maintenance of the **sort order of headings** (*Maintenance programs – Safety Data Sheets – Sort order of headings*) was expanded with the new groups **UN GHS Rev 07** and **UN GHS Rev 07 Singapore**.



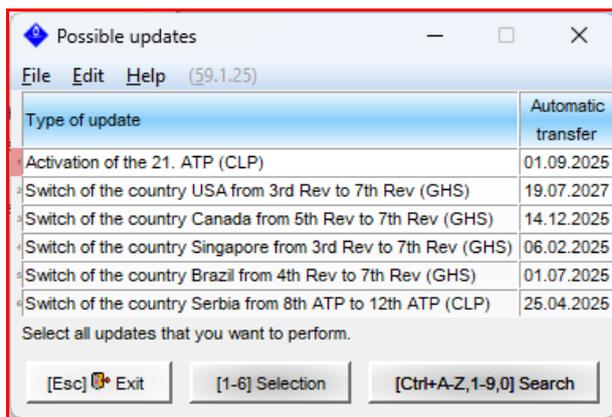
If needed, you can adjust the structure and sort order of the headings for these two new groups as usual.

6) Selection of data and regulatory updates in the basic screen

The basic screen has been expanded to include the button **Data and regulatory updates – Possible updates**. The number in brackets always indicates the number of available updates.



After clicking the button, you will receive a detailed overview of *the type of update* and the *date for the automatic transfer*. If requested, you can also manually select the updates for an earlier transfer.



C. Data update

1. Occupational exposure limits

This update implements new threshold values for Germany (TRGS 900, MAK- und BAT-Wertliste), Slovakia and France.

Furthermore the threshold values for Serbia (*Правилник о превентивним мјерама за безбједан и здрав рад при излагању хемијским материјама*) were newly adopted in ChemGes.

2. Substance listings and Chemical Inventories

a) Existing substance lists

This update implements the amendments of the following national chemical inventories and substance listings:

- A-DSL (*Aerospace and Defence Declarable Substances List*)
- PFA (*Perfluoroalkyl and Polyfluoroalkyl Substances*)
- SUSMP (*Australian Poisons Standard*)
- AIIC (*Australian Inventory of Industrial Chemicals*)
- WGK-Liste (*AwSV, Germany*)
- JISHA LP, SCS2, HMRN (*Industrial Safety and Health Act, Japan*)
- MONII/III, BioECS, SCS (CSCL, *Chemical Substances Control Law, Japan*)
- PRTR23 (*Pollutant Release and Transfer Register Law, Japan*)
- FSA (*Fire Service Act, Japan*)*
- WPCA (*Water Pollution Control Act, Japan*)
- APCL (*Air Pollution Control Act, Japan*)
- DSL (*Domestic Substance List, Canada*)
- SVHC (EU)
- Ozone Regulation (2024/590/EU)

b) New list

With this update, the new **JISHA – Skin disorders-List** with its 3 classification types *Skin irritating hazardous substance* (皮膚刺激性有害物質), *Skin-absorbable hazardous substances* (皮膚吸収性有害物質) and *Special chemical regulations* (特化則等) was newly adopted in ChemGes (substance lists JISHA-SI, JISHA-SA, JISHA-SCR).

The output in the SDS is done as Yes/No lists under the following headings:

Heading	Japanese	English
15.35.121	安衛法：皮膚等障害化学物質等及び特別規則に基づく不浸透性の保護具等の使用義務物質	ISHA: Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations

15.35.121.1	皮膚刺激性有害物質	Skin Irritating Hazardous Substances
15.35.121.2	皮膚吸收性有害物質	Skin Absorbing Hazardous Substances
15.35.121.3	特化則等	Special chemical regulations etc.

3. ADR

With this update the new and amended UN number descriptions according to ADR 2023 have been implemented in Bulgarian and Serbian.

4. REGULATION (EU) 2024/590

The Regulation (EC) No 1005/2009 was replaced by the new *Regulation (EU) 2024/590 on substances that deplete the ozone layer*. With this update the necessary changes have been implemented.