

Software Updates and Automatic Updating

Introduction:

- The goal of a software such as ChemGes is to be as up-to-date on the legislation as possible and to simplify the work for the user, automating as much as possible the extremely complicated classification as well as document generation, in order to facilitate global compliance.
- While the Software Updates are extremely important in this matter, they must be done with a full understanding of their impact.
- The most important day-to-day feature of ChemGes is its' automatism (automatic updates within the software).
- Balance and Knowledge are key regarding these two matters

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

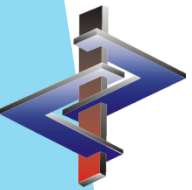
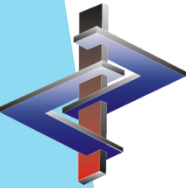


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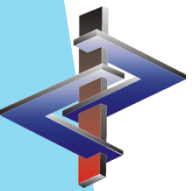
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1. Software Updates

a. Ways to Update

- Before updating ChemGes, it is absolutely necessary to ensure all instances of ChemGes are closed.
- An update may take some time, so please ensure that the timing of the update is convenient. Forcefully breaking off a running update can result in data loss.
- If the software is located on a server, the update needs to be run only from one of the computers accessing it on the server or from the server directly. Either way will result in all users who access that version, having the updated version.
- The update should be tested within an appropriate trial (testing) environment to avoid eventual problems in your configuration. Only after testing should the regular operation be started. Although our team performs extensive tests please understand that errors cannot be completely avoided. Once we are made aware of any errors, they are evaluated and repaired at once. We would like to point out that it is your own responsibility if you do not follow this instruction and install the update over your real data without testing beforehand.



ChemGes
File Edit Additional functions Help
Version 46.1.2 (02/15/2018, 11:43)
Download of the newest program version with [Ctrl+D]

Administration of Chemicals

[Ctrl 1] Printout and queries [Ctrl 2] Data output [Ctrl 3] Administration programs [Ctrl 4] Maintenance programs

Substance: 7722-84-1

Retrieval of articles: CAS number or preparation number
Description
Product code + [F1]
Index number + [F2]
EC number + [F3]
UN number + [F4]
Registration number + [Ctrl R]

[Page 1] Overview of substances
[F6] Next substance number
[F6] Next free preparation number (at the end)
[F6] Next free preparation number (free space)
[F10] Search for character strings
[Ctrl ←] Kit creation with self defined number
[Ctrl F6] Next free kit number

| Last retrieved substances | |
|---------------------------|---------------------------------------|
| 7722-84-1 | hydrogen peroxide solution |
| 1234 | Resin solution X 50 |
| 1310-73-2 | sodium hydroxide |
| 10,105 | hydrogen |
| 10,104 | Anu |
| 402-36-8 | 3-isocyanatobenzenesulphonyl fluoride |
| 10,103 | Sample Product |
| 10032-15-2 | hexyl 2-methylbutyrate |
| 50-00-0/2 | formaldehyde |
| 91-59-8 | 2-naphthylamine |
| 12468 | formaldehyde |
| 13424-46-9 | lead diazide |
| 7439-92-1/1 | lead |
| 92-67-1 | biphenyl-4-ylamine |
| 10,100 | Intermediate Substance 1 |
| 10,102 | Intermediate Substance 3 |

c:\chem\gefdat Print SDSs
The DR Pdf printer is not installed. Please click into this field for further information. Print labels

OK Exit [Ctrl U] Activation of the 9. ATP (for Europe)

DR-SoftWare, Inc.
more than 25 years on the market

Home
General description
Raw Materials Database
Preparations Database
Classifications
Safety Data Sheets
Labels
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Downloads

Program updates
The following programs are only updates for existing program installations. They will not work without prior installation of the program. Updates are made available exclusively to our customers with a valid and active maintenance contract. If you do not have an active maintenance contract, you are not authorized to download. If the maintenance contract is terminated, we cannot guarantee in any way that the installation of this update will still work properly. Furthermore, we would like to point out, that in this case no support at all will be provided.

ChemGes
Update from version 43.0 or higher to version 46.1.2
Version date: 15.2.2018 - 13:08

Please install this update only, if you have at least version 43.0 on your computer. If you install this update over an earlier version of ChemGes, the program will no longer work!

► The update files have to be unzipped into the main directory of ChemGes (usually chem). After the restart of ChemGes the update will be performed.

Manuals
ChemGes
Introduction to ChemGes
MSDS+
Update description
Exposure Scenarios
GHS & ChemGes - Overview and quick guide
Important ChemGes Facts

Graphic brief introductions for the following program parts
Raw Materials
Phrases and their conditions
Allocation of Variables
Exposure Scenarios
Labels
Creating a Preparation
Headings and Phrases

The easiest way to update ChemGes is from the main screen of ChemGes (as shown in the screenshot).

1. Simply hover the mouse over the text ,Version ###'
2. Once the *Download of the newest program version* box appears, left-click on the mouse and the update will run automatically.

It is also always possible to perform a software update from our website www.dr-software.com.

1. Download the zipped update file.
2. Place the file 32.zip into the folder containing ChemGes. (do not unzip it and do not rename it)
3. Open ChemGes.

b. Types of Updates/Frequency

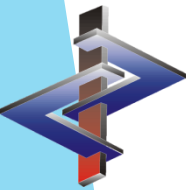
A valid *Maintenance Contract* gives access to all of the updates to ChemGes. Of these, there are two types:

1. Major Updates

- These change the main Version number of ChemGes (i.e. from Version 45 to 46).
- Customers will be notified when such an update is published.
- The usual publication periods are approximately end-of-May and end-of-November each year.
- An Update Description is provided.
- Major legislative changes, classification changes, listings, data, program features, among other things are changed in such an update.

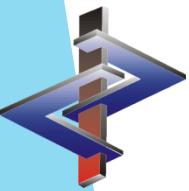
2. Minor Updates

- These are identifiable by sub-numbers (i.e. 46.1.1)
- At times the sub-number does not change (if the change in the software is very minor). All that one will see is that the update has a different date and time.
- Customers will not be notified of such updates
- The update descriptions are updated with new details regarding some minor changes (marked in blue) but this may experience a delay of a few days.
- They are usually minor changes such as spelling changes, error corrections or often changes pertaining only to a particular customer (implemented via parameter on our side).
- It is not necessary to update ChemGes on a daily basis, but this can be done both directly from within ChemGes or from our website.



c. Notable Details

- While there are no update descriptions provided for minor updates, changes that are of some significance are added into the update description that was generated for the last major update. Please be aware, that there is usually a one week delay before these changes appear in the update description, as the texts must also be translated into all four languages in which the update descriptions are output.
- It is very important that every user familiarize him or herself with the update description. Please contact us regarding anything that is unclear.
- With every major update, a file is created in the folder in which **chemges.exe** is located (most likely the CHEM folder) that lists all raw materials whose classifications were changed with the update.
 - For each update where this applies, the name of that file is specified in the Update Description.
 - Under *Ctrl 3-Administration Programs – B-Classification programs – A-Reclassification of formulations*, one can apply this file to automatically reclassify all preparations containing raw materials in that file.
 - After that:
 - Via *Ctrl 1-Printouts and queries – J-Safety Data Sheets – G-SDSs chosen by different selection criteria*, one can print all SDSs of preparations with a specific **classification date**, thus all newly classified preparations.
 - or
 - Via *Ctrl 2-Data output – C-File with Safety Data Sheets* one can generate a file containing all SDSs with a specific **classification date**.

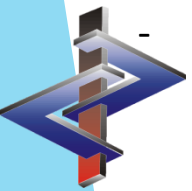


2. Automatic Updating

- The most important feature of ChemGes is the automatic updating.
- It is extremely important to understand this function and what effect it can have.
- Only that way can a balance be established between control and automatism, that makes calculations as well as the generation of documents possible with minimal input by the user.
 - When all automatic update features are activated, the user can be certain that changes are automatically implemented.
 - But, this can have the effect that manual changes can be overwritten, when the automatism follows the rules given to the program and they work opposite to a manual choice.
 - Therefore, changes can be removed and old information returned, without the user noticing.
 - On the other hand, not activating the automatic updates, requires that the user, whenever there is any change at all, remember to update manually. This can become rather complicated, as if the automatic update is run manually, and the user had in the past made manual changes that were only not overwritten because the automatic update was never run, these changes would now be overwritten and the user might not even remember that these manual changes were made in the past.

Sound confusing?

- Yes, that is the problem and that is why a balance must be established. Just about anything that one might want to change, can be done by either using the rules applied when updating (i.e. conditions for phrases) or by locking individual pieces of information (i.e. classification changes).
- Remember, we are here to help you find that balance.



a. Automatic Classifications (GHS/DPD, Transport)

- The screen *General classification Options* in *Ctrl 4-Maintenance programs – A-Program adjustments – C-General classification options*, provides the settings for classification updates.
- Our recommendation is the activation for both **GHS/DPD** and **Transport** of the classification **Always when a preparation is retrieved**. This means that everytime one opens a preparation, these classifications are recalculated, given you the most up-to-date information.
- The other options only allow for this calculation to be performed when a new preparation is created or when changes are made to the ingredients in the formulation.
- These are not ideal, as they require the user to remember to do a manual update and thus creates opportunity for error.
- Please note, that these automatic calculations refer only to the classification and transport calculations. (GHS/DPD, WHMIS, NFPA, DOT, IATA, IMDG, ADR,...) and not to the information in the *Physical Data* or *Flammability Screens*. (Please see next slide for details)

General classification options

File Edit Help (46.1.2)

Automatic classification

| | | |
|-------------------------------------------|----------------------------------------------------------|------------------------------------------------------------|
| Always when a preparation is retrieved | ¹ GHS/DPD <input checked="" type="checkbox"/> | ⁴ Transport <input checked="" type="checkbox"/> |
| After a new creation | ² GHS/DPD <input type="checkbox"/> | ⁵ Transport <input type="checkbox"/> |
| After alterations in the ingredients list | ³ GHS/DPD <input type="checkbox"/> | ⁶ Transport <input type="checkbox"/> |

Maximums

P-Phrases ⁷ UN-GHS ⁸ CLP ⁹ US-,CA-GHS

¹⁰ At least one phrase per group ¹¹ Removal of duplicates ¹² Sorting

Hazard triggers ¹³ UN-GHS ¹⁴ CLP ¹⁵ US-,CA-GHS ¹⁶ Sensitizers

Limits for data adoption without calculation: ¹⁷ Hazard statements % ¹⁸ Precautionary statements %

¹⁹ Consider the limit for ignoring a substance for each hazard separately

²⁰ Message after retrieval of SDS or label, if the classification has changed

²¹ Consideration of TLVs for 'SDS available'-phrase

- Only EU TLVs
- All TLVs in the system
- From EU members
- Own country

²² Output of 'restricted to professional users'-phrase

- Germany
- EU
- Everywhere
- Nowhere

²³ GHS-Classification only after reclassification or alteration of R-phrases (for performance problems only)

[←], [Esc] Exit

b. Manual Update of Preparation Data

Upon changing a formulation (by adding or deleting an ingredient or changing information in an ingredient), please take the following into consideration:

1. If there is a possibility that Physical Data has changed, either change it manually or go to the *Physical Data* Screen and recalculate the data by pressing *Ctrl F4* (see screenshot). Be aware that any manual changes that were previously made in this screen will also be overwritten.

Physical values and general information

File Edit Preparation screens Help (46.1.2)

Basic screen Formulation Physical data Flammability Country specific classifications Land transport Sea and air transport

1 State liquid

2 Flash point -4 °C

3 Boiling point 77 - 78 °C

4 Melting point unknown

5 Water miscible/water soluble

6 Density g/cm³

7 Bulk density kg/m³

8 pH-value 2

9 Solids 50 %

10 Flammable substances 50 %

11 Ignition temperature 390 °C

12 Chemical heat of combustion kJ/g

13 Viscosity at 20°C mPas

at 40°C mm²/s

14 Vapor pressure at 20.0 °C 97 hPa

at 60.0 °C hPa

15 Explosion limits 1.2 - 11.5 Vol%

g/m³

16 Contains ≥ 10 % nitro cellulose

Purpose: 20 Public
21 Industry or trade
22 Ready-to-use product for the final customer

23 The product will be applied by spraying or splattering
24 Product is in aerosol package or container with sealed spray attachment
25 Pressure > 29 psig
The aerosol is: 26 extremely flammable
27 flammable
28 non-flammable

29 Form 28 Fluid
30 Color 49 According to product specification
31 Odor 3 Characteristic

[Esc] End [Ctrl F4] Recalculate physical values [Ctrl P] Additional physical-chemical values [Ctrl L] Physical data of contents

2. Go to the *Flammability* Screen and recalculate it by pressing *F9*.

Fire and explosion risks

File Edit Preparation screens Help (46.1.2)

Land transport Sea and air transport

Basic screen Formulation Physical data Flammability Country specific classifications

1 The product is flammable or explosive
2 The product is explosive 3 Extremely explosive
4 The product is fire promotive or contains peroxides
5 The product contains organic peroxides
6 The product forms flammable gas with water or air
7 The product is dusty and has an explosive range with air
8 The product has its ignition range at 1 bar and room temperature
9 The gas is liquefied
10 The product is self igniting in the air at room temperature
11 Flash point -4 °C 12 Boiling point 77 - 78 °C
13 The product promotes burning
14 During use, an ignition risk exists

Black indicated fields are without significance for the calculation

[F9] Recalculation of the proposal [Esc] End

3. If you do not have the automatic update on, then press *F10* in the *Maintenance of Preparations* Screen to update the classifications.

Maintenance of preparations

File Edit Preparation screens Print programs Additional functions Help (46.1.2)

Basic screen Formulation Physical data Flammability Country specific classifications Land transport Sea and air transport

Preparation 1,000 1 Resin solution X 50
2 Test

3 Product code 1234 4 Article group 5 Flag Internal Storage Code: 123456789

6 GHS classification 7 Transport

8 Danger
2.6/2 Flam. Liq. 2 - H225 Highly flammable liquid and vapour.
ADR: 3
ADR Code: F1, PG: II, UN: 1263

9 Danger
3.4/1 Resp. Sens. 1 - H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
DOT: 3
3.6/1B Carc. 1B - H350 May cause cancer.
PG: II, UN: 1263
3.6/1A Carc. 1A - H350 May cause cancer.
IMDG: 3
PG: II, UN: 1263, EmS: F-E S-E
3.10/1 Asp. Tox. 1 - H304 May be fatal if swallowed and enters airways.
PG: II, UN: 1263, EmS: F-E S-E
3.5/2 Muta. 2 - H341 Suspected of causing genetic defects.
IATA: 3
3.7/2 Repr. 2 - H361 Suspected of damaging fertility or the unborn child.
PG: II, UN: 1263
3.7/2 Repr. 2 - H361d Suspected of damaging the unborn child.
3.9/2 STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.

10 Danger
3.2/1B Skin Corr. 1B - H314 Causes severe skin burns and eye damage.
B2, D2A, E

11 DPD classification N, R45-11-20/21/22-34-37-42/43-48/20-51/53-68-63, S53-1/2-9-13-20-23-25-26-27/28a-29/56-33-3

Creation - Last alteration 02/15/2018 Last classification 02/15/2018

[Ctrl G] GHS-Ableitung [Ctrl L] Listing status [Alt F8] PDF files (-) [F10] Classification [Ctrl N] NFPA+HMIS [F9] Texts [Alt F3] Variants (5) [Ctrl F3] Change of variant [F6] IP
[Page 1] Quotients [F6] Label [F8] SDS [F7] Tzcard [L] Next page [Ctrl T] Tox values [Ctrl X] Lock [Alt F11] Memo [Ctrl K] Copy [F1] Names [Ctrl J] End [Home] Price

c. Manual Update of individual/locked classification data

If you wish to return the GHS classification to its original settings (in order to unlock all manual changes), simply press **F10** in the *GHS Classification* Screen.

The screenshot shows the 'GHS-Classifications' window with the 'Hazards' tab selected. It displays a table with columns for Countries, Signal words, Symbols, and Classification. The table lists various GHS hazard classes and their corresponding signal words and symbols for different countries. Below the table, there are input fields for 'Direct input' and 'Exposure routes', and checkboxes for 'Additional hazards for specific target organ toxicity' and 'LC50 calculation'.

When any other field is marked in red, indicating that the information therein was changed and the field is now locked for classification, one can unlock it and thus return to its original value, by clicking into the field or by clicking into it and pressing F10 (depending on the screen – simply follow the instructions).

The screenshot shows the 'Classification' window with the 'All hazards' tab selected. It displays a detailed view of hazard classes, including 'Desensitized explosives', 'Acute toxicity - oral', 'Acute toxicity - dermal (Unlock)', and 'Acute toxicity - inhalation'. The 'Acute toxicity - dermal (Unlock)' class is highlighted in red, indicating it is locked. The interface includes a table of hazard classes and their associated hazard statements, along with a 'Direct input' section and a 'Basic screen' section.

The screenshot shows the 'Country specific classifications' window with the 'Formulation' tab selected. It displays a detailed view of classification data for a specific country, including 'BetSichV (D) Flammable liquid', 'WHC (Water hazard class)', 'Seveso III', 'Annex XVII REACH (Restrictions)', 'Disposal key numbers', 'Coating VOC value', 'Detergent Regulation', 'Cosmetic Regulation', 'Biocidal Products Regulation', and 'ECHA notification'. The 'Disposal key numbers' field is highlighted in red, indicating it is locked. The interface includes a table of classification data and a 'Basic screen' section.

The screenshot shows the 'NFPA- and HMIS-ratings' window with the 'Basic screen' tab selected. It displays a detailed view of hazard ratings, including 'Saturation concentration', 'Combustion products', 'The product forms explosive mixtures with air', 'The product is solid and burns explosive', 'The product burns in the air after heating to 515°C for 5 min', 'The product reacts explosive with water without heat input', 'Degradation or modification in air, light or damp', 'Exothermic reaction ≤150 °C, according to the DSC method', 'Exothermic reaction > 150 °C - ≤300 °C, according to the the DSC method', 'The product reacts with water', and 'The product acts oxidizing'. The 'Classification: health', 'fire', and 'reactivity' fields are highlighted in red, indicating they are locked. The interface includes a table of hazard ratings and their associated hazard statements, along with a 'Basic screen' section.

b. Safety Data Sheets

The automatic update of SDSs is activated in the screen depicted on the right. Any fields that are activated in this screen, are automatically updated every time an SDS is entered.

When in an SDS, one can run this same update simply by pressing *F1*. The same screen appears and one can choose to update everything or only select parts.

Please Note: Upon changing the settings in this 'Update Options' screen within an SDS, those settings will remain as default in that SDS. This means that only these chosen options are updated 'automatically' upon entering the SDS, disregarding the settings for this screen, in the *Maintenance Programs*.

Ctrl 4-Maintenance Programs – G-Safety Data Sheets – H-Calculation and Output Options – E-Update Options

| Item | Checked |
|---------------------------------------------------------------|-------------------------------------|
| 1 Standard phrases (1-16) | <input checked="" type="checkbox"/> |
| 2 Chemical characterisation | <input checked="" type="checkbox"/> |
| 3 Description, product code, ID-numbers | <input checked="" type="checkbox"/> |
| 4 Classification | <input checked="" type="checkbox"/> |
| 5 Threshold limit values | <input checked="" type="checkbox"/> |
| 6 Toxicological values | <input checked="" type="checkbox"/> |
| 7 Transport | <input checked="" type="checkbox"/> |
| 8 Form | <input checked="" type="checkbox"/> |
| 9 Color | <input checked="" type="checkbox"/> |
| 10 Odor | <input checked="" type="checkbox"/> |
| 11 Company data | <input checked="" type="checkbox"/> |
| 12 Application | <input checked="" type="checkbox"/> |
| 13 Physical data | <input checked="" type="checkbox"/> |
| 14 Annex: Exposure scenario | <input checked="" type="checkbox"/> |
| 15 New transfer of the percentages into the ingredient labels | <input type="checkbox"/> |
| 16 Substance listings | <input checked="" type="checkbox"/> |
| 17 Waste disposal keys | <input checked="" type="checkbox"/> |
| 18 BetrSichV and VbF | <input checked="" type="checkbox"/> |
| 19 TA-Luft | <input checked="" type="checkbox"/> |
| 20 WHC phrases | <input checked="" type="checkbox"/> |
| 21 US-VOC | <input checked="" type="checkbox"/> |
| 22 EU-VOC | <input checked="" type="checkbox"/> |
| 23 Swiss VOC | <input checked="" type="checkbox"/> |
| 24 MAL-Code | <input checked="" type="checkbox"/> |
| 25 LGK acc. to TRGS510, GIS-Code | <input checked="" type="checkbox"/> |
| 26 UFI code | <input checked="" type="checkbox"/> |
| 27 Headings (only standard phrases) | |

28 Manual phrases of this section

29 All manual phrases

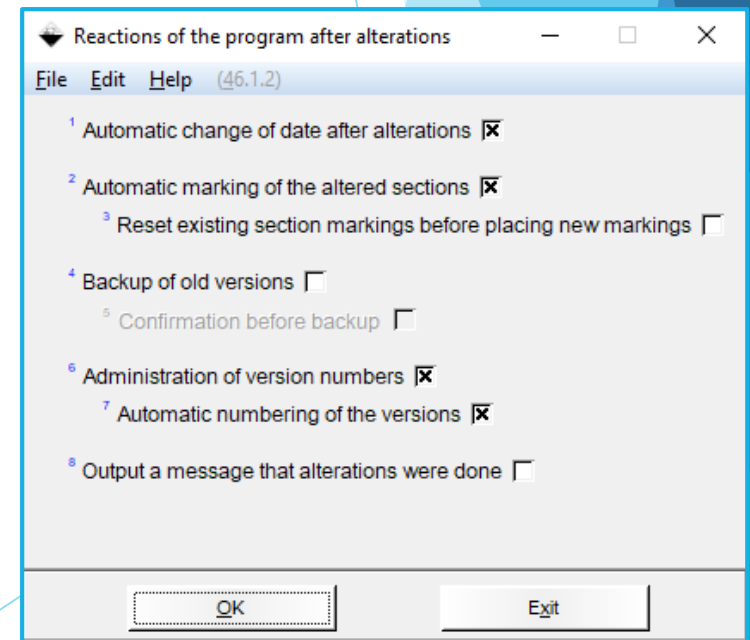
[←], [Esc] Exit [F1] All 'Yes' [F2] All 'No'

c. Effects an Update has on an SDS

- All changed data will be changed. That includes but is not limited to:
 - Classification
 - Physical Data
 - Substance Listings
 - Hazardous Ingredients Table
 - Hazard Triggers
 - Transport Classification
- Where often are the biggest surprises, is in changes to Phrases
 - Phrases have conditions assigned to them. These conditions can affect not only the output or non-output of a specific phrase but also the output or deletion of another phrase.

(See ,Headings and Phrases' PowerPoint for details)

- The screen *Reactions of the program after alterations* (Ctrl 4-Maintenance Programs – G-Safety Data Sheets – H-Calculation and output options) allows you to manage version numbering, change marking, date changes and version backups)

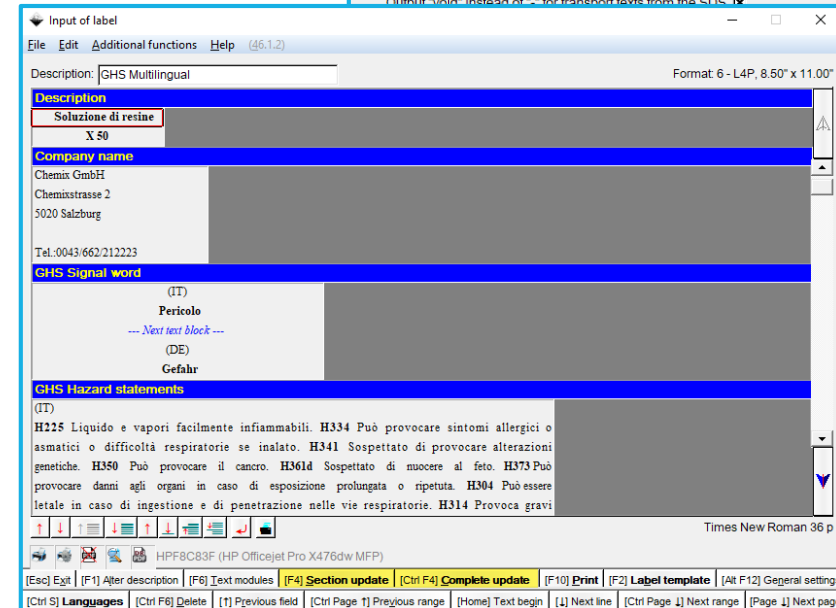
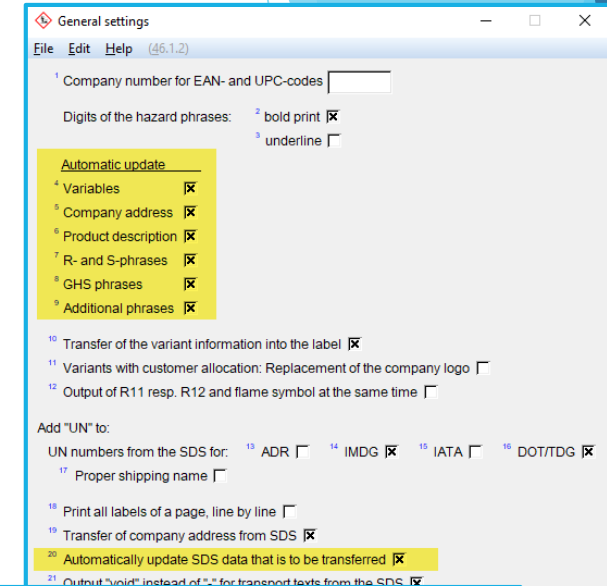


c. Labels

- The automatic update of labels is activated in the screen *General Settings*.
- The options under **Automatic Updates** allow the individual activation of automatic updates.
- We recommend that they are all activated.
- The option **Automatic updates of SDS data to be transferred** is good to have activated as well.
 - SDSs, even with the automatic updated, are updated only when opened.
 - It is therefore possible that new information was not yet updated in a country SDS, by opening it, but one wishes to create a label that has a direct link to the SDS via *Additional Phrases* (See *Labels' PowerPoint*)
 - This setting allows for such information to be updated in the SDS, without having to open it.

When in a label, it is possible to manually update it either by individual sections (F4) or via a complete update (Ctrl F4).

Ctrl 4-Maintenance Programs – J-Labels – B-Basic Settings



**More detailed Information can be found in the Manual to
ChemGes**

@ www.dr-software.com Downloads

