

Allocation of Variables

**Options for the Manual/Automatic Entry of
Variables contained in H-, P- and SDS Phrases**

Introduction

- ▶ Legislation provides a number of Precautionary statements and Safety Phrases, requiring the output of variable data (words /numbers). This is also the situation with SDS Phrases.
- ▶ This leads to great difficulty in the automation of the creation of SDSs as such variables need to be chosen for each substance.
- ▶ We have implemented various functions in order to facilitate automation and expedite the SDS generation process for our customers.
- ▶ This guidance document will show the processes for dealing with these variables.

**Please direct additional questions to our hotline
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Via email to info@dr-software.com**

Explanation of Variable Markers

The “missing“ variables are represented by two types of variable markers:

\$ or ...

P-Statements or S-Phrases will always have only one variable marker.

In SDS Phrases, it is possible to have up to 3 variable markers.

None of the extant SDS Phrases contain any of these markers, but it is possible to enter them for extant or newly created phrases.

Special Product Phrases also utilize such markers, but these variables are automatically filled in by ChemGes, as needed.

Keep wetted with...

Keep contents under ... (appropriate liquid to be specified by the manufacturer).

Temperature for storage not to exceed \$ C.

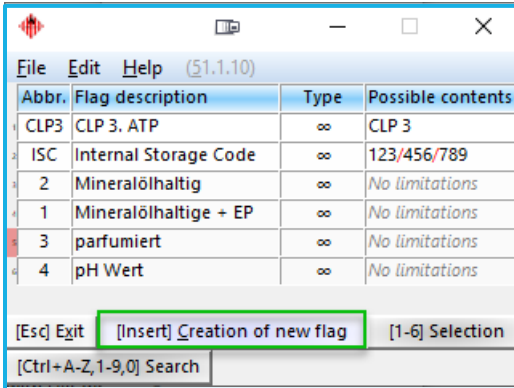
Variable Allocation using Flags

a. Generate a Flag **Maintenance programs – Various tables – Flags:**
Press [Insert] **Creation of new flag** and define the desired Flag.

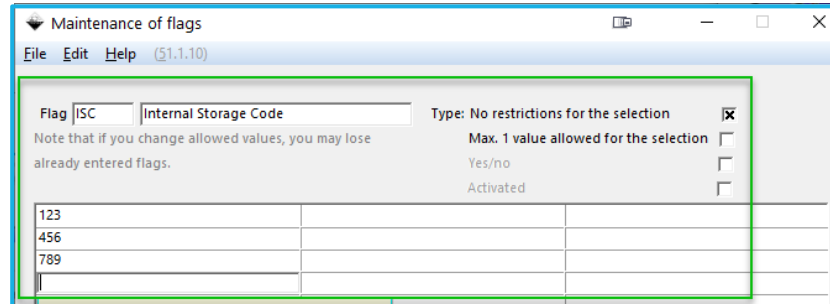
Example – Creation of Flag “Internal Storage Code”

Note:

These texts are not translated.



Abbr.	Flag description	Type	Possible contents
CLP3	CLP 3. ATP	∞	CLP 3
ISC	Internal Storage Code	∞	123/456/789
2	Mineralölhaltig	∞	No limitations
1	Mineralölhaltige + EP	∞	No limitations
3	parfümiert	∞	No limitations
4	pH Wert	∞	No limitations



Flag | ISC | Internal Storage Code | Type: No restrictions for the selection

Note that if you change allowed values, you may lose already entered flags.

Max. 1 value allowed for the selection

Yes/no

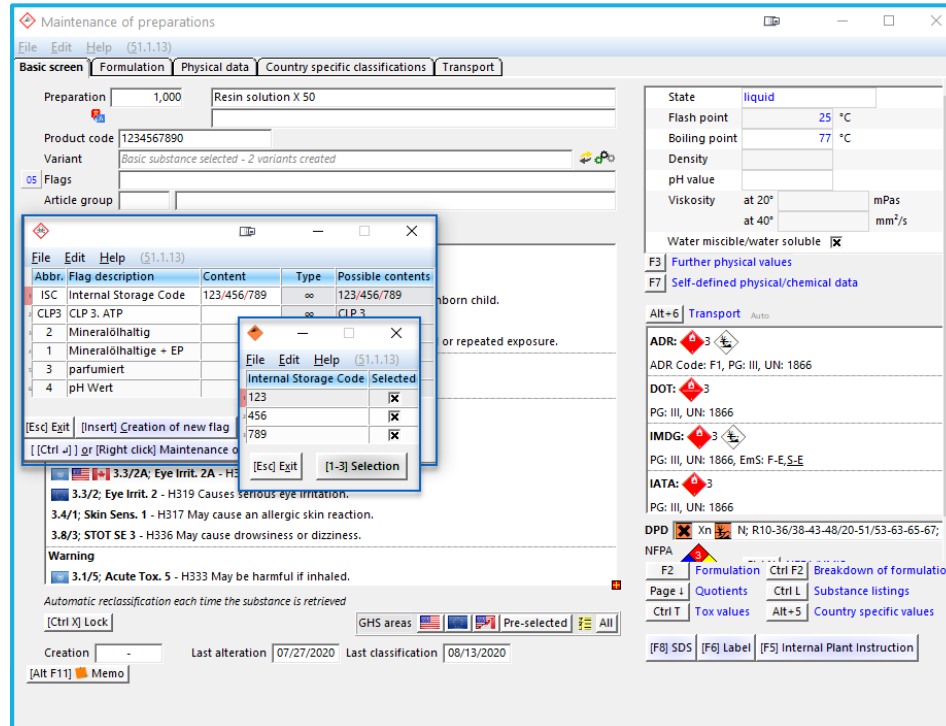
Activated

123		
456		
789		

b. Allocate the Flag to a substance:

Note:

You can create a new Flag or manage an existing one, directly from the Flag screen in the Substance entry.



Maintenance of preparations (51.1.13)

Preparation: 1,000 Resin solution X 50

Product code: 1234567890

Variant: Basic substance selected - 2 variants created

Flags

Article group

State: liquid

Flash point: 25 °C

Boiling point: 77 °C

Density:

pH value:

Viscosity: at 20° mPas, at 40° mm²/s

Water miscible/water soluble

F3 Further physical values

F7 Self-defined physical/chemical data

Alt+6 Transport Auto

ADR: 3

ADR Code: F1, PG: III, UN: 1866

DOT: 3

PG: III, UN: 1866

IMDG: 3

PG: III, UN: 1866, EmS: F-E, S-E

IATA: 3

PG: III, UN: 1866

DPD: Xn, N, R10-36/38-43-48/20-51/53-63-65-67;

NFPA

F2 Formulation Ctrl F2 Breakdown of formulation

Page 4 Quotients Ctrl L Substance listings

Ctrl T Tox values Alt+5 Country specific values

[F8] SDS [F6] Label [F5] Internal Plant Instruction

Creation: - Last alteration: 07/27/2020 Last classification: 08/13/2020

[Alt F1] Memo

Variable Allocation using Physical/Chemical Values

c. Create a new Physical/Chemical Value for your substance.

Raw Materials: Access the *Additional Physical-/Chemical Values* screen from the *Maintenance of raw materials*. via **Additional physical values.**

Preparations: Access the *Additional Physical-/Chemical Values* screen from the *Maintenance of preparations* via **Self-defined physical/chemical data.**

Value:

Enter the *Description*, *Unit* and if desired the *SDS-heading*.

Input of definition of value

File Edit Help (51.1.13)

¹ Description

² Unit (Default value)

³ SDS-heading

⁴ Output of table with values of all ingredients ⁵ From %

⁶ Only substances that are also shown in section 3

⁷ If available, also output the value of the preparation

[Esc] Exit [Alt Delete] Delete

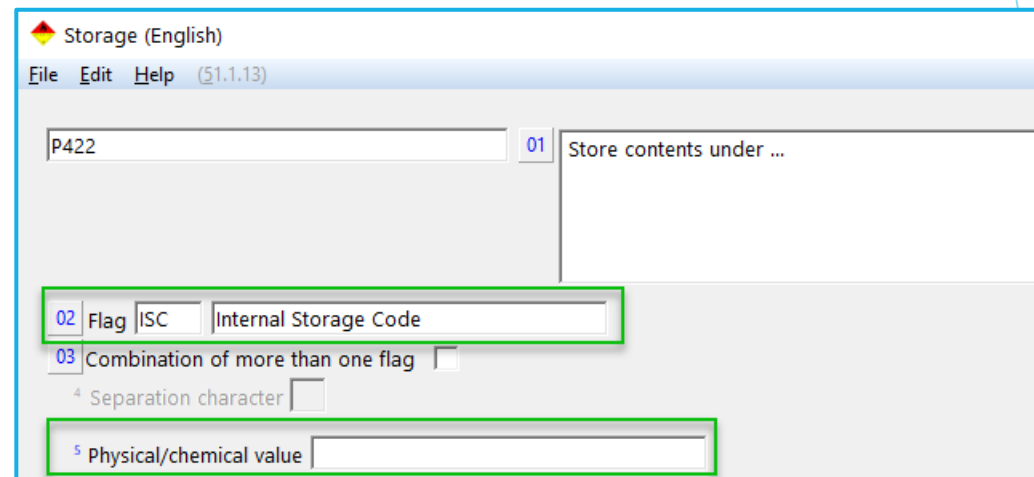
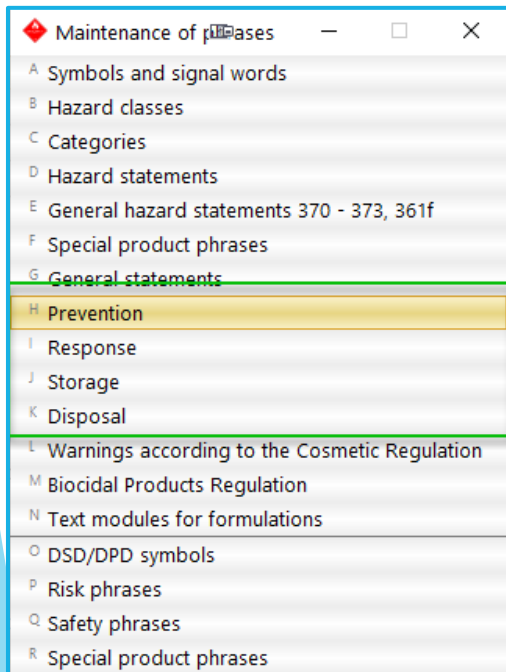
d. Allocate the Flag or Physical/Chemical Value to a Phrase

Access the phrases via *Maintenance programs – Phrases.*

Select the desired phrase grouping (*Prevention, Response, Storage, Disposal*) and enter the phrase number.

Enter the phrase number or search the *overview* via .

Input the appropriate **Flag** or **Physical/chemical value** in the corresponding fields.



Example of output of one flag

Storage (English)
File Edit Help (51.1.13)

P422

1 Store contents under ...

2 Flag |ISC| Internal Storage Code

3 Combination of more than one flag

4 Separation character

5 Physical/chemical value

Note:

When automatically output, the variable appears in **green** in the editing screen of the SDS.

P422 Store contents under 123

Example of output of combination of flags with separation character

P422 Store contents under 123-456-789

Storage (English)
File Edit Help (51.1.13)

P422

1 Store contents under ...

2 Flag |ISC| Internal Storage Code

3 Combination of more than one flag

4 Separation character | - |

5 Physical/chemical value

P411 Store at temperatures not exceeding 25°C.

If you enter the unit of the Physical/Chemical Value, then that will also be output as part of the variable.

P411 Store at temperatures not exceeding 25 C°C.

Example of output of physical-/chemical characteristic

Storage (English)
File Edit Help (51.1.13)

P411

1 Store at temperatures not exceeding \$ °C/\$ °F.



2 Flag

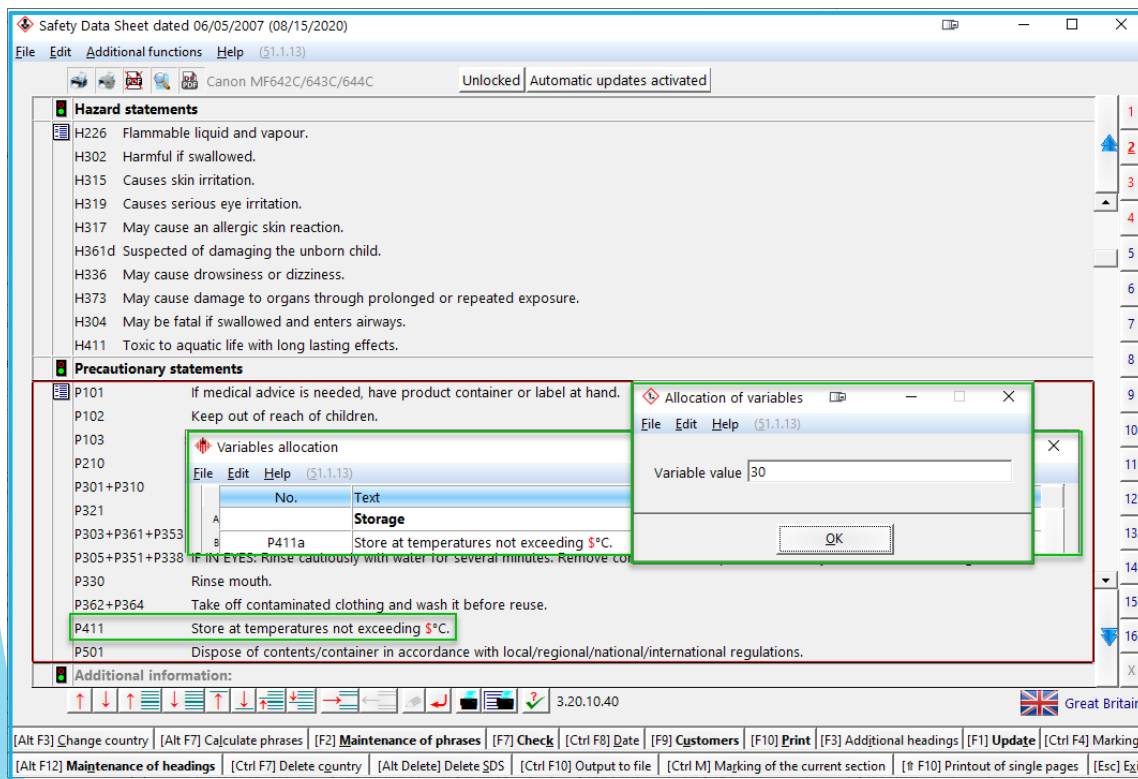
3 Combination of more than one flag

4 Separation character

05 Physical/chemical value |Storage Temperature|

Manual Entry (If none of the other options applies)

1. Place the cursor (red frame) around the phrase, by clicking on it.
2. Press  *Enter*.
3. Choose the phrase and press  *Enter*, again
4. Enter the desired variable text.



The screenshot shows a software window titled "Safety Data Sheet dated 06/05/2007 (08/15/2020)". The interface includes a menu bar (File, Edit, Additional functions, Help) and a toolbar. The main content area is divided into sections: "Hazard statements" (listing H226, H302, H315, H319, H317, H361d, H336, H373, H304, H411) and "Precautionary statements" (listing P101, P102, P103, P210, P301+P310, P321, P303+P361+P353, P305+P351+P338, P330, P362+P364, P411, P501). A red box highlights the P411 statement: "Store at temperatures not exceeding \$°C.". Overlaid on this is a "Variables allocation" dialog box with a table:

No.	Text
A	Storage
B	P411a Store at temperatures not exceeding \$°C.

The dialog box also has a "Variable value" field containing "30" and an "OK" button. A red frame around the P411 statement in the main window indicates the selection point for manual entry.

Note:

When manually output, the variable appears in **blue** in the editing screen of the SDS.

P411

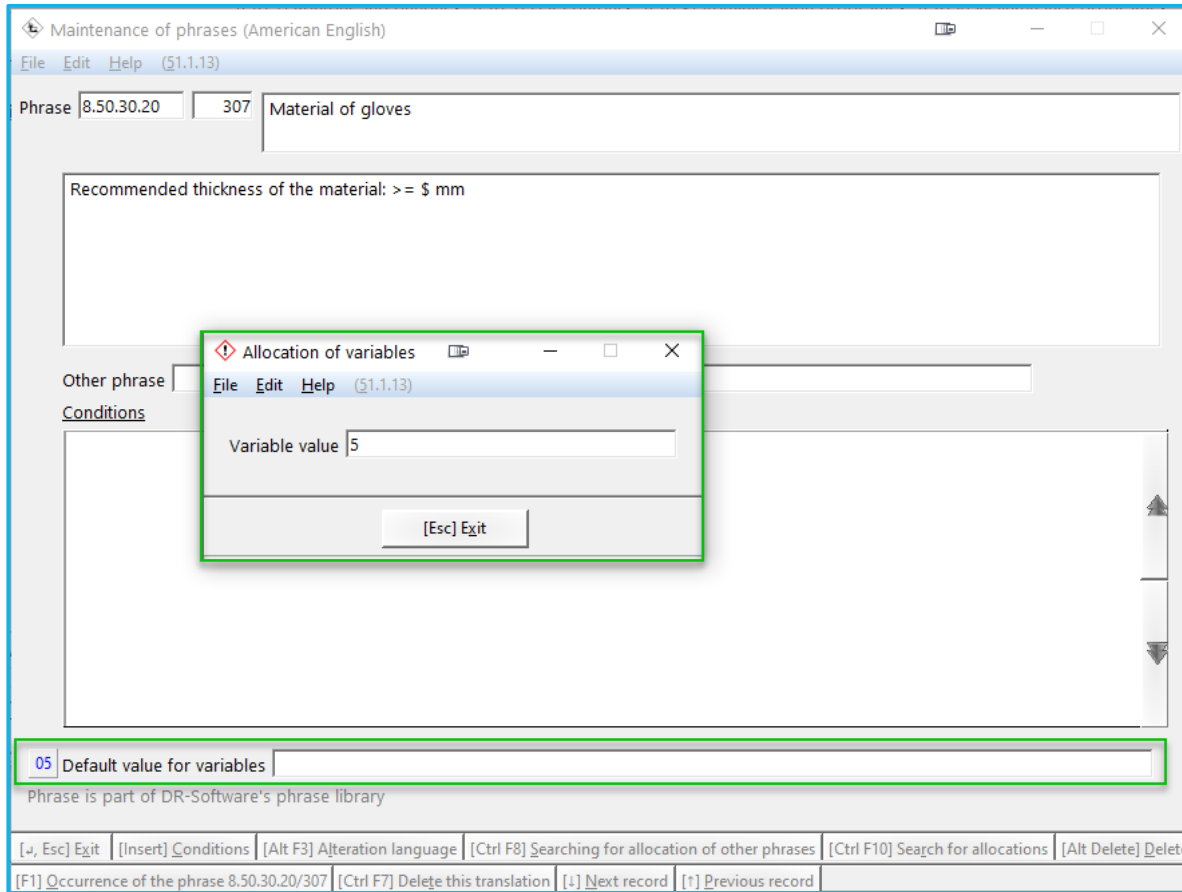
Store at temperatures not exceeding 30°C.

P411

Store at temperatures not exceeding 30°C.

Default Variable Allocation for SDS-Phrases

1. Go to **Ctrl 4** **Maintenance programs – Safety Data Sheets – Text Modules**. Here either select an existing phrase or create a new phrase.
2. Enter the variable marking \$, in the desired position, if necessary.
3. Enter the desired variable in the field **Default value for variables**.



Note:

This variable appears in blue in the editing screen of the SDS.

By selecting the phrase, the text can be manually altered in the editing screen of the SDS.

This manually altered text will not be automatically overwritten.

✔ **Material of gloves**

☰ Recommended thickness of the material: >= 5 mm

Flag and/or Physical/Chemical Value Allocation for SDS Phrases

1. Go to **Ctrl 4** **Maintenance programs – Safety Data Sheets – Text Modules**. Here either select an existing phrase or create a new phrase.
2. Enter the variable marking \$, in the desired position, if necessary.
3. Click **[Insert] Conditions** and select the condition

Maintenance of phrases (American English)

File Edit Help (51.1.13)

Phrase 7.30.10 41 Precautions for safe handling

1 Temperature for storage not to exceed (Storage Temperature) C. Internal Storage Code (Internal Storage Code)

Output automatically in every SDS

Output in every new SDS

This phrase will always be used, when no other phrase has been selected

2 Other phrase

4 Conditions

Translation not available

Non-hazardous substances	Hazardous substances	No health hazard	No fire or explosion
GHS classification	Flags	Permitted countries	
DSD/DPD classification	Article groups	Output only for GHS	
Transport	Ingredients	Only for raw materials/preparations	
NFPA (USA)	Substance groups	Copy if translation is missing	
WHMIS (Canada)	For the public/industrial use	Allocated phrases	
Water hazard classes	Product codes	Phrase to delete after transfer	
Waste codes	Physical/chemical values	Allocated exposure scenario	
	Chemical elements		
	Target organs		

5 Default value for Phrase was created by

[J, Esc] Exit [Insert] Co

[F1] Occurrence of the ph

[Esc] Exit

File Edit Help (51.1.13)

1 allocated phrases

2 Output if certain phrases are present

3 Flag

4 Physical/chemical value Storage Temperature

5 Flag ISC Internal Storage Code

6 Physical/chemical value

7 Flag

8 Physical/chemical value

9 Combination of more than one flag 10 Separation character

OK



7.1 Precautions for safe handling



Temperature for storage not to exceed 25 C. Internal Storage Code 123.

Application of the automatism to the variable output:

1. First ChemGes tries to find a **Flag** or **Physical/Chemical Value** to transfer.
2. If none is found, the default value (for SDS Phrases) will be applied.
3. If no default value is available, a red \$ sign will appear in place of the variable. Manual entry is required by pressing *Enter*.
4. A mixture of automatic, default and manual entries is also possible.

More detailed Information can be found in the Manual to ChemGes

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