

BW Industrial - EHS for BO (WBP)

- 1- Requirement
- 2- Files location
- 3- Files description
 - 3-1 BW_PPS_EHS_LIBSUBST.TXT
 - 3-2 BW_PPS_EHS_SUBSTCAS.TXT
 - 3-3 BW_PPS_EHS_COMPO_STD.TXT
- 4- Program description
- 5- Data Flow modifications
- 6- Frequency
- 7- In case of loading error

1- Requirement

EHS users need to have sales information with EHS characteristics.

EHS data have to be sent from BW to BO using 3 flat file using the ";" as field separator:

BW_PPS_EHS_LIBSUBST.TXT

BW_PPS_EHS_SUBSTCAS.TXT

BW_PPS_EHS_COMPO_STD.TXT

2- Files location

Files are placed in the folder: /exploit/BW/CIS.

3- Files description

3-1 BW_PPS_EHS_LIBSUBST.TXT

3-1-1 Brief description

This file contains all the specifications that have a long description and a substance nature.

3-1-2 Logical file name

Z_EHS_FILENAME

3-1-3 Source

Specification InfoObject (0EHS_SPEC)

Characteristic Edit Goto Extras Environment System Help

Display Characteristic 0EHS_SPEC: Details

Version Comparison Business Content

Characteristic: 0EHS_SPEC

Long description: Specification

Short description: Specification

Version: ☒ Active ☐ Saved

Object Status: ☒ Active, executable

Business Explorer Master data/texts Hierarchy Attribute Compoundi...

Navigation Attribute InfoProvider

Attributes: Detail/Navigation Attributes

Attribute	Long description	Ty.	Ti.	Or.	N.	Au.	Te.	Navigation att. des.
0EHS_SUBC	Specification Type	NAV	☐	1			☒	Specification Type
0EHS_SUCH	Identification of Substance	NAV	☐	2			☒	Identification of Substance
0EHS_AUTH	Authorization Group	NAV	☐	3			☒	Authorization Group
0EHS_WGK	Water Pollution Class	NAV	☐	4			☒	Water Pollution Class
0EHS_VCI	Storage Class According to	NAV	☐	5			☒	Storage Class According to
0EHS_VBF	Combustible Liquids Hazard	NAV	☐	6			☒	Combustible Liquids Hazard
0EHS_R01	R Phrase 01	NAV	☐	7			☒	R Phrase 01
0EHS_R02	R Phrase 02	NAV	☐	8			☒	R Phrase 02
0EHS_R03	R Phrase 03	NAV	☐	9			☒	R Phrase 03
0EHS_R04	R Phrase 04	NAV	☐	10			☒	R Phrase 04
0EHS_R05	R Phrase 05	NAV	☐	11			☒	R Phrase 05

3-1-4 Fields

:

Field	Technical name	Type
Specification	/BI0/PEHS_SPEC-EHS_SPEC	char 12
Substance Nature of the specification	/BI0/PEHS_SPEC-EHS_SUCH	char 10
Specification long description	/BI0/TEHS_SPEC-TXTLG	char 60

3-1-5 Conditions for the loading

The specification has a substance nature,

The specification has a long description,

The specification code is between '100000000000' and '200000000000',

Only English descriptions are loaded.

3-1-6 Example

100000000019;Z_SUB_MONO;Ultramarine blue

100000000053;Z_SUB_MONO;terephthalic acid

100000000054;Z_SUB_MONO;ethylbenzene

3-2 BW_PPS_EHS_SUBSTCAS.TXT

3-2-1 Brief description

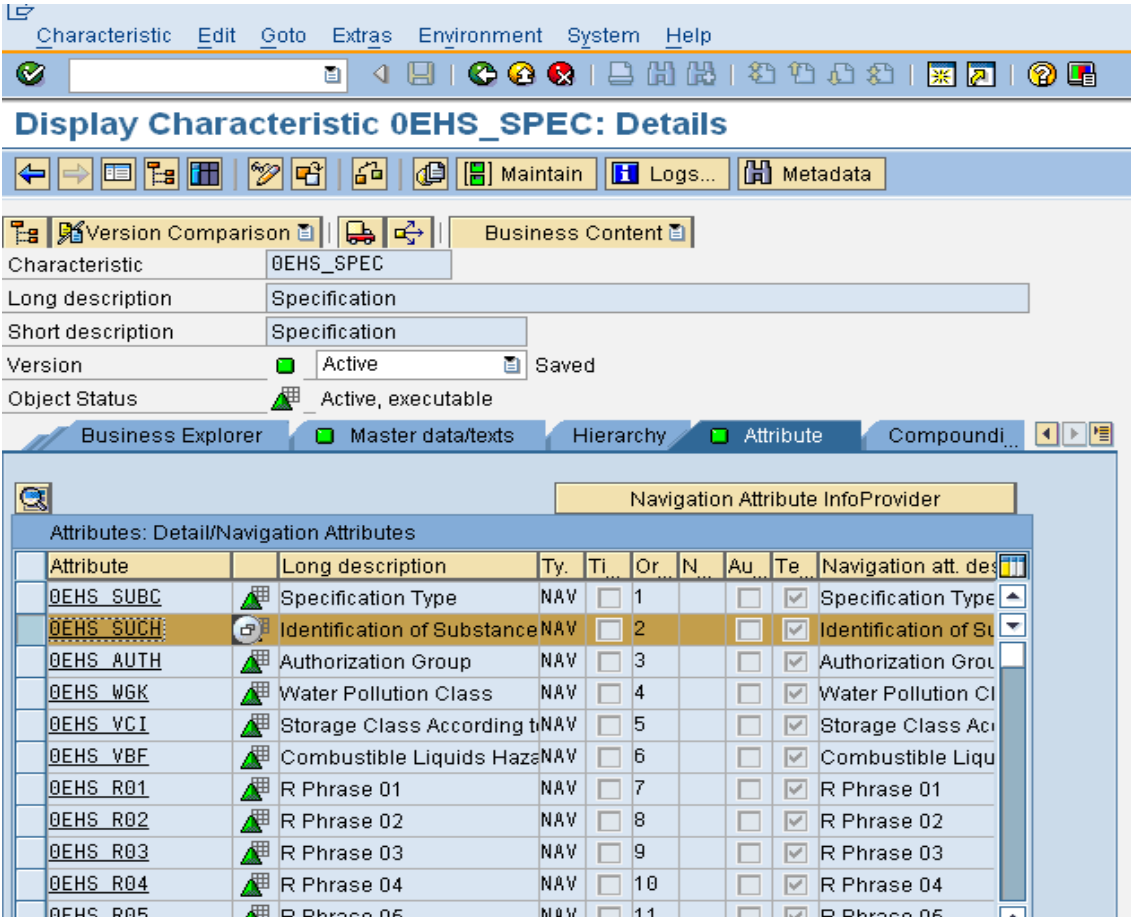
This file contains all the specifications that have a short description.

3-2-2 Logical file name

Z_EHS_FILENAME2

3-2-3 Source

Specification InfoObject (0EHS_SPEC)



3-2-4 Fields

:

Field	Technical name	Type
Specification	/BI0/PEHS_SPEC-EHS_SPEC	char 12
Substance Nature of the specification	/BI0/PEHS_SPEC-EHS_SUCH	char 10
Specification short description	/BI0/TEHS_SPEC-TXTSH	char 20

3-2-5 Conditions for the loading

The specification has a short description,

The specification code is between '100000000000' and '200000000000',

Only English descriptions are loaded.

3-2-6 Example

100000000019;Z_SUB_MONO;57455-37-5
100000000053;Z_SUB_MONO;100-21-0
100000000054;Z_SUB_MONO;100-41-4

3-3 BW_PPS_EHS_COMPO_STD.TXT

3-3-1 Brief description

This file contains the percentage of specifications in the commercial products for a selected month.

3-3-2 Logical file name

Z_EHS_FILENAME3

3-3-3 Source

Material-Specification Mapping Datastore Object (DSO_EHS1),

Version Comparison		Business Content										
DataStore Object	Techn. name / value	Fu...	O...	Data ...	L	Key Fi...	C...	N...	Ag...	Ex...	Reference...	Un...
Material-Specificatio DSO_EHS1												
Object Information												
Version	In Process											
Save	Saved											
Revised Ver:	Active Version											
Object Status:	Active, executable											
Settings												
Key fields												
Plant	0PLANT	CHAR	04					0PLANT				
Specification	0EHS_SPEC	CHAR	12					0EHS_SP...				
Commercial C_PROD		CHAR	18					C_PROD				
Calendar Ye	0CALMONTH	NUMC	06					0CALMON...				
Authorization	0EHS_AUTH	CHAR	10					0EHS_AUTH				
Data Fields												
Percentage	0EHS_SPMA	FLTP	08	Numb...	☒	☐	SUM	SUM				
Unit of meas	0UNIT	UNIT	03					0UNIT				
Last change	0CH_ON	DATS	08					0DATE				
Navigation Attrib												
Indexes												

Commercial Product InfoObject (C_PROD)

Characteristic Edit Goto Extras Environment System Help

Display Characteristic C_PROD: Details

Version Comparison Business Content

Characteristic: C_PROD

Long description: Commercial Product

Short description: Commercial Product

Version: ☒ Active Saved

Object Status: ☒ Active, executable

Business Explorer Master data/texts Hierarchy Attribute Compoundi...

Navigation Attribute InfoProvider

Attributes: Detail/Navigation Attributes

Attribute	Long description	Ty.	Ti	Or	N	Au	Te	Navigation att. des
0EHS_SUCH	Identification of Substance	NAV	☐	0		☐	☒	Identification of Su

3-3-4 Fields

:

Field	Technical name	Type
Commercial Product	/BIC/ADSO_EHS100-/BIC/C_PROD	char 18
Specification	/BIC/ADSO_EHS100-EHS_SPEC	char 12
Authorization Group	/BIC/ADSO_EHS100-EHS_AUTH	char 10
Substance Nature of the Commercial Product	/BIC/PC_PROD-EHS_SUCH	char 10
Percentage Specification in Material	/BIC/ADSO_EHS100-EHS_SPMA	

Number

8 decimals

3-3-5 Conditions for the loading

The specification is not like 'PRCO*' or the percentage specification in material <> 100%,

Data are limited to the specified month (input criteria)

3-3-6 Particular handling

'0's on the left of the commercial product code are deleted,

Negative sign '-' in the percentage must be on the left of the number,

Before the loading a screen allows the user to choose a specific month for the extraction

3-3-7 Example

90000317;100000000000;ZZ_BU_00;;100.00000000;%

90001679;100000002090;ZZ_BU_10;;89.00000000;%

90001679;100000001974;ZZ_BU_10;;11.00000000;%

4- Program description

Name: Z_DOWNLOAD_FILE_EHS

For each file, here are the steps followed by the program:

- Data structure definition,
- Data extraction into internal table,

BW_PPS_EHS_LIBSUBST.TXT

```
{{code language="abap"}}SELECT SPECEHS_SPEC SPECEHS_SUCH SPECTTXTLG
FROM /BI0/PEHS_SPEC AS SPEC
JOIN /BI0/TEHS_SPEC AS SPECT ON SPECEHS_SPEC = SPECTEHS_SPEC
AND SPECTLANGU = 'E' AND SPECTTXTLG <> "
INTO TABLE itb_spec
WHERE SPECEHS_SUCH <> "
AND SPECEHS_SPEC >= '100000000000'
AND SPECEHS_SPEC < '200000000000'/code
```

BW_PPS_EHS_SUBSTCAS.TXT

```
{{code language="abap"}}SELECT SPECEHS_SPEC SPECEHS_SUCH SPECTTXTSH
FROM /BI0/PEHS_SPEC AS SPEC
JOIN /BI0/TEHS_SPEC AS SPECT ON SPECEHS_SPEC = SPECTEHS_SPEC
AND SPECTLANGU = 'E' AND SPECTTXTSH <> "
INTO TABLE itb_spec2
WHERE SPECEHS_SPEC >= '100000000000'
AND SPECEHS_SPEC < '200000000000'/code
```

BW_PPS_EHS_COMPO_STD.TXT

```
{{code language="abap"}}SELECT DSO/BIC/C_PROD DSOEHS_AUTH CPRODEHS_SUCH DSOEHS_SPEC DSOEHS_SPMA
FROM /BIC/ADSO_EHS100 AS DSO
JOIN /BIC/PC_PROD AS CPROD ON CPROD/BIC/C_PROD = DSO/BIC/C_PROD
INTO TABLE itb_spec3
WHERE DSO/BIC/C_PROD <> " AND DSOEHS_SPEC <> "
AND ( DSOEHS_SPEC NOT LIKE 'PRCO%' OR DSOEHS_SPMA <> 100 )
AND DSOCALMONTH = P_MONTH{{/code}}
```

- Getting the physical file name,
- Opening the dataset (physical file),
- Handling of internal table data,
- Transferring data into the file,
- Closing the dataset (physical file)

5- Data Flow modifications

Some adjustments have been done on BW:

The substance nature (0EHS_SUCH) was added as a navigational attribute of the commercial product (C_PROD) which has been populated by the specification extractor (0EHS_SPEC_ATTR) with specifications that are beginning by "PRCO". The substance nature of a commercial product is populated by the substance nature of the specification in the extractor as show below.

Transformation Display

Transformation: 0EHS_SPEC_ATTR -> C_PROD

Source: Specification (0EHS_SPEC_ATTR)

Target: Commercial Product (C_PROD)

Version: Active

Active Version: Executable

Edited Version: Edited Version

Transformation: 0EHS_SPEC_ATTR -> C_PROD

Pos	Key	Field	Descript.
1		UPDDATS	Changed on
2		SUBID	Specification
3		SUBCAT	Spec. Type
4		AUTHGRP	Authoriz. group
5		SUBCHAR	SubstanceNature
6		ESE_BW_WGK	Phrase key
7		ESE_BW_VCI	Phrase key
8		ESE_BW_VBF	Phrase key
9		ESE_BW_R01	Phrase key
10		ESE_BW_R02	Phrase key
11		ESE_BW_R03	Phrase key
12		ESE_BW_R04	Phrase key
13		ESE_BW_R05	Phrase key

Rule	Rule Name	Pos	Key	InfoObject	Icon	Descript.	Inte
	C_PROD	1		C_PROD		Commercial Product	
	0EHS_SUCH	2		0EHS_SUCH		Identification of Substance Nature	

In the start routine, specifications that are not like 'PRCO*' are deleted from the source package.

The commercial product is calculated with a formula by concatenating '0000000000' on the left of the eight right last characters of the specification: '0000000000' & RIGHT(8, SUBID).

The DTP which load C_PROD was added in "Performance RCS EHS KPI" process chain.

6- Frequency

Before running Z_DOWNLOAD_FILE_EHS program, the loadings of 0EHS_SPEC (texts an attributes), C_PROD and DSO_EHS1 have to be completed. So it was decided to trigger an event (PC_GENERATE_EHS_FILES event) at the end of "Performance RCS EHS KPI" process chain which runs monthly on the 1st month day. "GENERATE EHS FILES" process chain was created and it starts on this event.

7- In case of loading error

The program could be executed manually by choosing a month in the user screen.