

Safety Data Sheets as communication instrument

Recap regarding SDS “new style”
Compliance check: practical experiences

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Part 1

Recap SDS “new style”

Requirements for the “new” SDS according to REACH



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Function of the Safety Data Sheet

The SDS is the key instrument for the information flow down the supply chain, because:

- it informs the downstream user about the dangerous properties & potential hazards during normal handling and use
- it recommends necessary measures to manage the risk to health & environment (storage, use, disposal)
- it provides the basis for the assessment of hazards / risks

**Fulfillment of all legal requirements of Article 31 REACH
addressed to suppliers & downstream users**

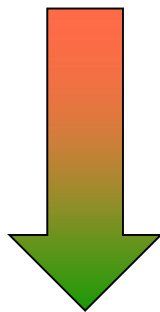


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When should a Safety Data Sheet be provided?



System:

- unsolicitedly - Art. 31(1) REACH
- on request - Art. 31(3) REACH
- on a voluntary basis

“to be made available” →

**Customers must be informed about
down-load options in written form!**

Means in this context, that
it is not sufficient to simply
offer the SDS via the Internet!

**SDS complete and in correct format in accordance with
REACH Art. 31 and Annex II (Amended 453/2010)**




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When should a SDS be provided unsolicitedly? (REACH Art. 31.1)

Requirements for SDSs:

- a) if a substance / mixture meets the criteria for classification as hazardous according to (EC) No 1272/2008 or 1999/45/EC
- b) if a substance is PBT or vPvB 
- c) if the substance was identified as an SVHC and was taken up in the candidate list, according to the criteria in Art. 57.f



Example: Endocrine Disrupting Chemicals

The SDS has to be provided at the latest at the time of first delivery



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When should a SDS be provided upon request? (REACH Art. 31.3)

Requirements for SDSs

The consumer may request a SDS if a mixture is not classified by DPD (1999/45/EC) as dangerous, but contains:

- a) a harmful or environmentally hazardous material in a concentration ≥ 1 weight percent for non-gaseous mixtures or ≥ 0.2 percents by volume for gaseous mixtures
- b) PBT- or vPvB material in an individual concentration ≥ 0.1 weight percent for non-gaseous mixtures respectively $> 0,2$ volume percent for gaseous mixtures
- c) a substance for which a Community workplace exposure limit has been established

the consumer may request a SDS.



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When will it be useful to draft and provide a SDS on voluntary basis?

A SDS may be provided for mixtures which are not classified as dangerous, but:

- which - based on experience - often prompt questions
- which call for the communication of other dangers (suffocation frostbite, inclination for formation of dust ... (see selection 2.3 "other hazards")
- are descendants of other information duty, if not required by SDS
- as basis for its own assessment of dangers.

**an SDS can be provided on voluntary basis
or
a free format sufficient for communicating essential information**



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When to update an SDS ? (REACH Art. 31.9)

- **Suppliers have to modify an SDS (Annex 31(9)) if:**
 - new information is available, which may have effects on risk management measures!
 - an authorization for SVHC was given or denied!
 - a limitation for the substance was issued

The correct version must be made available to all customers who were served within the last 12 months

- **But minor changes, like changed address of the Producer, do not trigger requirement to inform all customers**



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Part 2

SDS Control Steps

Step 1: Control of general requirements

Step 2: Control of hazard identification and composition

Step 3: Consistency check of the information in the different sections of SDS

Step 4: Consistency check with Exposure Scenario sections



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Step 1: Control of general requirements

- Language requirement;
- Number of sections;
- Date of issue of the current version of SDS;
- Identification of the substance/mixture in section 1 of SDS;
- Registration number of substance, if applicable;
- Identified uses and uses advised against in section 1 of SDS;
- Is the attached ES relevant for this concrete use?
- Details of the supplier of the SDS
- Emergency phone number



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SDS example of Xylene for formulator of varnishes


Safety data sheet


MIXED-XYLENE


Product : ATOF-010

Version (en) nr : 11-1

Page : 1/15
Revised : 15/11/2010
Supersedes : 17/11/2009


GHS02


GHS07


GHS08

1. Identification of the substance / preparation and of the company / undertaking

IDENTIFICATION OF THE SUBSTANCE

Aromatic hydrocarbons, C8

Trade name: MIXED-XYLENE

SDS number: ATOF-010

CAS number: 90089-38-1

EINECS or ELINCS number: 292-694-9

INDEX nr: 648-010-00-X

Reach Number: TP France UGO (01-2119486136-34-0000) - Petrofina (01-2119486136-34-0001)

MATERIAL USE

Manufacture of substance

Distribution of substance

Formulation & (re)packing of substances and mixtures

Synthesis intermediate product

Uses in Coatings

~~House Cleaning Agents~~

Use as binders and release agents

Propellants

Agrochemical uses

Polymer production

Restricted to professional users

Recommended uses and restrictions

RESPONSIBLE FOR PLACING ON THE MARKET

Trade name of the firm: see below this page.

EMERGENCY NUMBER

Email address: Petrochemicals.felr-sds@total.com

Emergency call TOTAL PETROCHEMICALS:

- for English speaking countries: +44 (0) 1235 239 670
- for Europe (in local languages): + 33 1 49 00 00 49
- for Africa and Middle East: + 44 (0) 1235 239 671
- for China: + 86 10 5100 3039
- for Asia Pacific (Hong-Kong, Singapore, Taiwan, Philippines, India, Viet Nam, ~~Sri Lanka~~, Korea, Malaysia, Indonesia, Thailand): + 65 3158 1074

Official advisory body

The UK National Poisons Emergency number is 0870 600 6266 (Outside the UK: +44 870 600 6266)

Step 2: Control of hazard identification and composition

Example of Xylene for formulator of varnishes

Section 3. Composition / information on ingredients				
Identification name	CAS nr.	Weight % content (or range)	EC-GHS Class	67/548/EEC & 1999/45/EC Class
Ethylbenzene	100-41-4	< 20%	Flam. Liq. 2, H225 Acute Tox. 4, H332	F; Xn R - 11-20
Xylene (mixture of isomers)	1330-20-7	> 80%	Flam. Liq. 3, H226 Acute Tox. 4, H312, H332 Skin Irrit. 2, H315	Xn R - 10-20/21-38
Toluene	108-88-3	< 0.5%	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit.2, H315 STOT SE 3, H336	F; R11 Repr.Cat.3;R63 Xn; R48/20-65 Xi; R38 R67

Investigation of sections 3 & 2 – control of classification and labeling

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Regional Accession Network **ECRAN**

2. Hazards identification

Classification & Labelling		Label elements	
EC-GHS	Classification according to the regulation EC 1272/2008 (EC-GHS) and ATP The substance contains less than 0.1 % benzene (Einescs 200-753-7); it needs not to be classified as T, R-45: "May cause cancer" (nota J & P)	EC-GHS	Classification according to the regulation EC 1272/2008 (EC-GHS) and ATP The substance contains less than 0.1 % benzene (Einescs 200-753-7); it needs not to be classified as T, R-45: "May cause cancer" (nota J & P)
Class	Flam. Liq. 3 Asp. Tox. 1 Acute Tox. 4 Skin Irrit. 2	Signal word	Danger
H Phrase(s)	H226, H304, H312, H315, H332	Pictogram(s)	GHS02, GHS07, GHS08
67548/EEC & 1999/45/EC	Classification according to directives 67548/EEC and 1999/45/EC: The substance contains less than 0.1 % benzene (Einescs 200-753-7); it needs not to be classified as T, R-45: "May cause cancer" (nota J & P)	H Phrase(s)	H226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H332 - Harmful if inhaled.
Symbols EC	Flammable Xn - Harmful	P Phrase(s)	P210 - Keep away from heat/sparks/open flames/hot surfaces. —No smoking. P262 - Do not get in eyes, on skin, or on clothing. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P301/P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 - Do NOT induce vomiting. P309/P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
R Phrase(s)	R 10: Flammable. R 20/21: Harmful by inhalation and in contact with skin. R 38: Irritating to skin. R 65: Harmful may cause lung damage if swallowed.	Other hazards	no information available
S Phrase(s)	S 16: Keep away from sources of ignition - No smoking. S 24/25: Avoid contact with skin and eyes. S 62: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.		



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Step 3: Consistency check of the information in the different sections of SDS (few examples)

Each example will be introduced by illustrating the links between the different sections of the SDS

**As example will be used the SDS of
Almaredge 51 FF, supplier Castrol, version 1.01
of 3 June 2014**



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SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1 Product identifier	
Product name	Aimadeg 51 FF
Product code	464962-DE02
SDS no.	464962
Product type	Liquid
1.2 Relevant identified uses of the substance or mixture and uses advised against	
Use of the substance/mixture	Marine/working fluid - additive For specific application advice see appropriate Technical Data Sheet or consult our company representative.
1.3 Details of the supplier of the safety data sheet	
Supplier	Castrol Industrial divisie van BP Europa SE - BP Nederland Rivium Boulevard 301 2909 LX Capelle a/d IJssel The Netherlands Telephone Number: 010-2494434 Fax Number: 010-2494430 MSDSadvise@bp.com
E-mail address	
1.4 Emergency telephone number	
EMERGENCY	Careshem: +44 (0) 1235 239 870 (24 hours)
TELEPHONE NUMBER	Netherlands: NVIC 030 274 8888 (Only to inform medical personnel (physicians, veterinarians, pharmacists) about symptoms and treatment of acute intoxications.)
SECTION 2: Hazards identification	
2.1 Classification of the substance or mixture	
Product definition	Mixture
Classification according to Regulation (EC) No. 1272/2008 (CLP/DHS)	
Skin Irrit. 2, H315	
Eye Irrit. 2, H319	
Aquatic Chronic 3, H412	
Classification according to Directive 1999/45/EC (DSD)	
The product is classified as dangerous according to Directive 1999/45/EC and its amendments.	
Classification	R25/33
Additional information	CLP: Not classified as hazardous when diluted below 30%.
See Section 10 for the full text of the R-phrases and H-statements declared above. See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.	
2.2 Label elements	
Hazard pictograms	
Signal word	Warning
Hazard statements	H319 - Causes serious eye irritation. H315 - Causes skin irritation. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	P201 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment.
Product name	Aimadeg 51 FF
Version	1.01
Date of issue	3 June 2014
Product code	464962-DE02
Format	Netherlands (Netherlands)
Page	1/11
Language	ENGLISH

First page of a 11 pages SDS showing sections 1 and 2

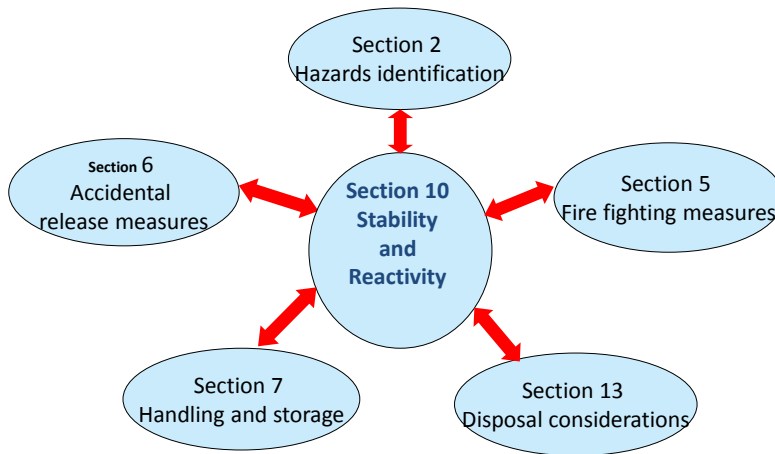


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SDS section 10 - Stability and Reactivity needs to be checked for consistency in particular with the following sections :



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Section 10: No decomposition under normal conditions

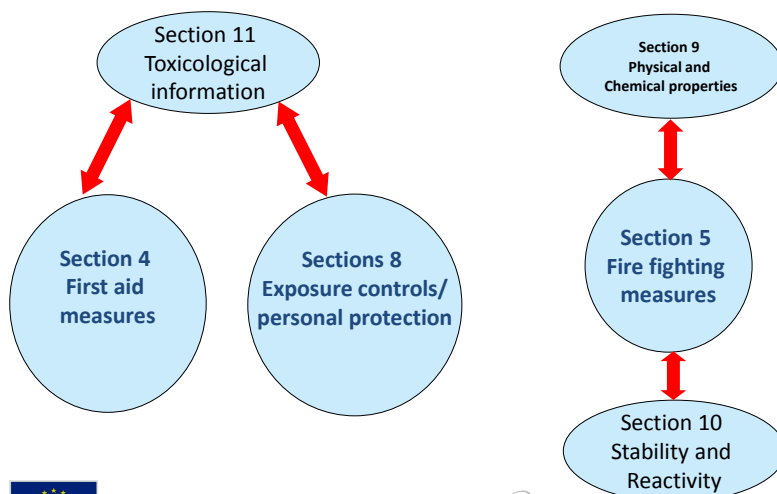
Section 11: Exposure to decomposition products may cause health hazard.

Reason for concern? Might be inconsistent

SECTION 11: Toxicological information	
11.1 Information on toxicological effects	
Acute toxicity estimates	
Route	ATE value
Oral	5580.4 mg/kg
Information on the likely routes of exposure	
Routes of entry anticipated: Dermal, Inhalation.	
Potential acute health effects	
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Irritating to mouth, throat and stomach.
Skin contact	Cause skin irritation. Reddening to the skin.
SECTION 10: Stability and reactivity	
10.1 Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
10.4 Conditions to avoid	High temperatures
10.5 Incompatible materials	Reactive or incompatible with the following materials: oxidising materials. Slightly reactive or incompatible with the following materials: acids.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SDS sections 4, 5 & 8 needs to be checked for consistency with the following sections:



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Section 8.1: Some specific OELs shown, but may not be applicable
 Section 8.2: Provide exhaust ventilation to keep concentration below
 respective OELs

Is this clear for the DU? Which OELs to be used? What must be the ventilation
 rate?

SECTION 8: Exposure controls/personal protection

Base oil - unspecified

MinSZW Wettelijke Grenswaarden (Netherlands).

OEL 8-h TWA: 5 mg/m³ 8 hours. Issued/Revised: 1/2007 Form: mist

Distillates (petroleum), hydrotreated, light naphthenic

MinSZW Wettelijke Grenswaarden (Netherlands).

OEL 8-h TWA: 5 mg/m³ 8 hours. Issued/Revised: 1/2007 Form: mist

Boric acid

ACGIH TLV (United States).

STEL: 6 mg/m³ 15 minutes. Issued/Revised: 1/2005 Form: Inhalable fraction

TWA: 2 mg/m³ 8 hours. Issued/Revised: 1/2005 Form: Inhalable fraction

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

8.2 Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated.

Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

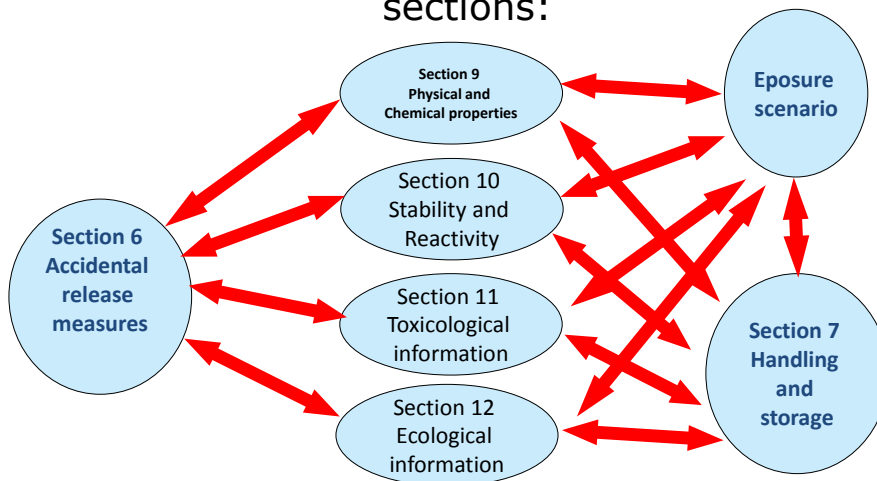


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SDS sections 6, 7 and ES needs to be
 checked for consistency with the following
 sections:



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Where is the Exposure Scenario?

7.3 Specific end use(s)

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/ mixture

Metalworking fluid - soluble.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

Section 7.3 referred to section 1.2 for details about use recommendations
but
Section 1.2 referred to a not attached technical data sheet
and
No Exposure Scenario has been attached



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THANKS FOR YOUR ATTENTION

QUESTIONS?



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