ETHYLACETAT

Version: *10*.01 **Revision Date 25.06.2018**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name	**Ethylacetat**
REACH No.	01-2119475103-46-0001
Substance name (REACH / CLP)	Ethyl acetate

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

Use	Industrial use Solvent raw material for pharmaceutical products raw material for adhesives and binders
Uses advised against	

1.3 Details of the supplier of the safety data sheet

Company	Sasol Chemie GmbH & Co. KG Anckelmannsplatz 1 20537 Hamburg Germany Telephone: +49 40 63684-1000 Telefax: +49 40 63684-3700
Information (Product safety):	Telephone: + 49 (0) 23 65 - 49 47 05 Telefax: + 49 (0) 23 65 - 49 92 40
E-mail address	solvents.germany.msds@de.sasol.com

1.4 Emergency telephone number

Emergency telephone number	+44 (0)1235 239 670 (Europe, Israel, Africa, Americas) +44 (0)1235 239 671 (Middle East, Arabic African countries) +65 3158 1074 (Asia Pacific) +86 10 5100 3039 (China) +27 (0)17 610 4444 (South Africa) +61 (2)8014 4558 (Australia)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids Category 2	Highly flammable liquid and vapour.
Eye irritation Category 2	Causes serious eye irritation.
Specific target organ toxicity - single exposure Category 3 (Inhalation Central nervous system)	May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P312	Call a POISON CENTER/doctor if you feel unwell.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Supplemental Hazard Statements

EUH066	Repeated exposure may cause skin dryness or cracking.

Hazardous components which must be listed on the label:

- Ethyl acetate

2.3 Other hazards

Vapours may form explosive mixture with air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a substance in the meaning of regulation (EC) 1907/2006.

COMPONENTS TO BE NAMED IN ACCORDANCE WITH REGULATION (EC) 1907/2006 AS WELL AS OTHER HAZARDOUS INGREDIENTS AND CONTAINED SUBSTANCES WITH WORK PLACE LIMIT VALUES

ethyl acetate

content: >= 90 - <= 100 % **component type:** Active ingredient

EC-No.: 205-500-4 **Index-No.:** 607-022-00-5 **CAS-No.:** 141-78-6
REACH No.: 01-2119475103-46-0001
Substance name (REACH / CLP): Ethyl acetate

Classification (Regulation (EC) No 1272/2008):	Flam. Liq.	2	H225
	Eye Irrit.	2	H319
	STOT SE	3 (Inhalation Central nervous system)	H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Monitor breathing, give oxygen if necessary. Consult a physician.
In case of skin contact	Wash off with plenty of water. Take off all contaminated clothing immediately.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Immediately give plenty of water (if possible charcoal slurry). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Indication of any immediate medical attention and special treatment needed	Treatment: For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Dry powder, Alcohol-resistant foam, Carbon dioxide (CO2) in enclosed spaces
Unsuitable extinguishing media	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	Dangerous gases or fumes may occur in case of fire. When fighting fires in enclosed spaces: caution, danger of suffocation!

5.3 Advice for firefighters

Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus.
Further information	In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not breathe vapours or spray mist. Keep away from sources of ignition - No smoking. Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Explosive properties

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation. Keep away from sources of ignition - No smoking. Vapours are heavier than air and may spread along floors.
Advice on protection against fire and explosion	Take precautionary measures against static discharges. Vapours may form explosive mixtures with air.
Temperature class	T1
Fire-fighting class	B: Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	Keep containers tightly closed in a cool, well-ventilated place.
Storage class (TRGS 510)	3: Flammable liquids

7.3 Specific end use(s)

Specific use(s)	Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

National occupational exposure limits

Control parameters / Substance name	Typ	Control parameters	Update	Basis
ETHYL ACETATE	TWA	400 ppm	03 2018	ACGIH
ETHYL ACETATE	REL REL	1.400 mg/m3 400 ppm	2016 2016	NIOSH Pocket Guide to Chemical Hazards
ETHYL ACETATE	PEL PEL	1.400 mg/m3 400 ppm	01 2017 01 2017	OSHA Table Z-1
ETHYL ACETATE	TWA TWA	1.400 mg/m3 400 ppm	1989 1989	OSHA Table Z-1-A
ETHYL ACETATE	TWA PEL TWA PEL	1.400 mg/m3 400 ppm	02 2012 02 2012	US - California OELs
ETHYL ACETATE	ST ESL	1400	02 2013	TX ESL
ETHYL ACETATE	ST ESL	390	02 2013	TX ESL
ETHYL ACETATE	AN ESL	1440	02 2013	TX ESL
ETHYL ACETATE	AN ESL	400	02 2013	TX ESL
ETHYL ACETATE	TWA TWA	1.400 mg/m3 400 ppm	06 2008 06 2008	TN OEL

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

Control parameters / Substance name	Typ	Control parameters	Update	Basis
ETHYL ACETATE	TWA TWA	734 mg/m3 200 ppm	2014 2014	EU SCOELS
ETHYL ACETATE	STEL STEL	1.468 mg/m3 400 ppm	2014 2014	EU SCOELS
ETHYL ACETATE	TWA TWA	734 mg/m3 200 ppm	02 2017 02 2017	EU Exposure Limit Values
	Indicative			
ETHYL ACETATE	STEL STEL	1.468 mg/m3 400 ppm	02 2017 02 2017	EU Exposure Limit Values
	Indicative			

DERIVED NO EFFECT LEVEL (DNEL)

Substance name: Ethyl acetate			
End Use	**Exposure routes**	**Value**	**Note**
Workers	dermal, Acute/short-term exposure - systemic effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - systemic effects	1468 mg/m3	
	dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - local effects	1468 mg/m3	
	dermal, long-term exposure - systemic effects	63 mg/kg Body weight/day	
	Inhalation, long-term exposure - systemic effects	734 mg/m3	
	dermal, long-term exposure - local effects		Not relevant / not applicable
	Inhalation, long-term exposure - local effects	734 mg/m3	
Consumers	dermal, Acute/short-term exposure - systemic effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - systemic effects	734 mg/m3	
	Oral, Acute/short-term exposure - systemic effects		Not relevant / not applicable
	dermal, Acute/short-term exposure - local effects		Not relevant / not applicable
	Inhalation, Acute/short-term exposure - local effects	734 mg/m3	
	dermal, long-term exposure - systemic effects	37 mg/kg Body weight/day	
	Inhalation, long-term exposure - systemic effects	367 mg/m3	
	Oral, long-term exposure - systemic effects	4,5 mg/kg Body weight/day	
	dermal, long-term exposure - local effects		Not relevant / not applicable
	Inhalation, long-term exposure - local effects	367 mg/m3	

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Substance name: Ethyl acetate		
Environmental Compartment	**Value**	**Note**
Fresh water	0,24 mg/l	
Marine water	0,024 mg/l	
intermittent release	1,65 mg/l	
treatment plant	650 mg/l	
Fresh water sediment	1,15 mg/kg	based on dry weight
Marine sediment	0,115 mg/kg	based on dry weight
Soil	0,148 mg/kg	based on dry weight
food	200 mg/kg	

8.2 Exposure controls

ENGINEERING MEASURES

Provide sufficient air exchange and/or exhaust in work rooms.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141.

Hand protection

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).

gloves suitable for splash protection:
Material: butyl-rubber
Break through time: >= 60 min
Layer thickness: 0,5 mm

unsuitable gloves
Material: Natural rubber/natural latex, Polychloroprene, Fluorinated rubber, Nitrile rubber/nitrile latex, Polyvinylchloride

Eye protection

Tightly fitting safety goggles

Skin and body protection

Wear suitable protective equipment.

Hygiene measures

Take off all contaminated clothing immediately. Preventive skin protection

Protective measures

General industrial hygiene practice.

ENVIRONMENTAL EXPOSURE CONTROLS

General advice

Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

Explosive properties

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	liquid; 20 °C; 1.013 hPa
Form	liquid
Colour	colourless
Odour	ester-like
Odour Threshold	No valid method available
pH	Not applicable
Melting point/range	ca. -83 °C
Boiling point/boiling range	75 - 77,5 °C
Flash point	-4 °C
Evaporation rate	No data available
Flammability (solid, gas)	not applicable (liquid)
Lower explosion limit	2,1 %(V)
Upper explosion limit	11,5 %(V)
Vapour pressure	103 hPa; 21 °C
Relative vapour density	1,20
Density	0,90 g/cm3; 20 °C
Solubility/qualitative	miscible with most organic solvents
Water solubility	ca. 86 g/l; 20 °C
	80 g/l; 25 °C
Partition coefficient: n-octanol/water	log Pow: 0,68; 25 °C
Auto-ignition temperature	426 °C; 1.013 hPa
Viscosity, dynamic	0,45 mPas; 20 °C
Explosive properties	not expected based on structure and functional groups
Oxidizing properties	not expected based on structure and functional groups
Molar mass	88,11 g/mol

9.2 Other data

Refractive index	1,370 - 1,373 at 20 °C
Additional advice	no data

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Note	No hazards to be specially mentioned.

10.2 Chemical stability

Note	No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	None known.

10.4 Conditions to avoid

Conditions to avoid	Heat, flames and sparks.

10.5 Incompatible materials to avoid

Materials to avoid	Alkali metals; Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products	None known.
Thermal decomposition	None known.
Further information	Vapours may form explosive mixtures with air.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity	ethyl acetate: LD50 Rabbit: > 2.000 mg/kg; OECD Test Guideline 401 (literature value) Based on available data, the classification criteria are not met.
Acute inhalation toxicity	ethyl acetate: LCLo Rat: > 6000 ppm; 6 h Test atmosphere: vapour (literature value) Based on available data, the classification criteria are not met.
Acute dermal toxicity	ethyl acetate: LD50 Rabbit: > 5.000 mg/kg; (literature value) Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation	ethyl acetate: Rabbit: not irritating; OECD Test Guideline 404 (literature value) Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation

ethyl acetate:
Rabbit: not irritating; OECD Test Guideline 405
(literature value)
Based on available data, the classification criteria are not met.

ethyl acetate:
Causes serious eye irritation.
Derived from the classification according to Annex VI of Regulation (EC) 1272/2008.

Respiratory or skin sensitisation

Sensitisation

ethyl acetate:
Maximisation Test Guinea pig: not sensitizing; OECD Test Guideline 406
(literature value)
Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro

ethyl acetate:
In vitro tests did not show mutagenic effects
(literature value)

Genotoxicity in vivo

ethyl acetate:
In vivo tests did not show mutagenic effects
(literature value)

Carcinogenicity

Carcinogenicity

ethyl acetate:
Based on available data, the classification criteria are not met.
(literature value)

Reproductive toxicity

Reproductive toxicity

ethyl acetate:
Based on available data, the classification criteria are not met.
(literature value)

Teratogenicity

ethyl acetate:
Based on available data, the classification criteria are not met.
(literature value)

STOT - single exposure

Remarks

ethyl acetate:
May cause drowsiness or dizziness.

STOT - repeated exposure

Remarks

ethyl acetate:
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

ethyl acetate:
Rat; Subchronic toxicity
NOAEL: 900 mg/kg (based on body weight and day)
LOAEL: 3.600 mg/kg (based on body weight and day)
Symptoms: reduced body weight gain, reduced food consumption
(literature value)

ethyl acetate:
Rat; Subchronic toxicity; NOAEC: 1,28 mg/l
Symptoms: reduced body weight gain, reduced food consumption
(literature value)

Aspiration hazard

Aspiration toxicity

ethyl acetate:

Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	ethyl acetate: LC50 (96 h) Pimephales promelas (fathead minnow): > 100 mg/l ; flow-through test; US EPA E03-05 (literature value)
Toxicity to fish - Chronic toxicity	ethyl acetate: Chronic Toxicity Value (32 d) Fish: 6,9 mg/l; QSAR (literature value)
Toxicity to daphnia and other aquatic invertebrates	ethyl acetate: EC50 (48 h) Daphnia magna (Water flea): > 100 mg/l (literature value)
Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity	ethyl acetate: EC10 (21 d) Daphnia magna (Water flea): 2,4 mg/l; reproduction rate; (literature value)
Toxicity to aquatic plants	ethyl acetate: EC10 (72 h) Desmodesmus subspicatus (green algae): > 100 mg/l ; static test; OECD Test Guideline 201; (literature value)
	ethyl acetate: EC50 (72 h) Desmodesmus subspicatus (green algae): > 100 mg/l ; static test; OECD Test Guideline 201; (literature value)
Toxicity to bacteria	ethyl acetate: EC10 (16 h) Pseudomonas putida: 650 mg/l; DIN 38 412 Part 8 (literature value)
Toxicity to soil dwelling organisms	ethyl acetate: The study is not necessary. Not expected to adsorb on soil. (literature value)
Toxicity to terrestrial flora	ethyl acetate: The study is not necessary. Not expected to adsorb on soil.
Toxicity for other terrestrial non-mammalian fauna	ethyl acetate: The study is not necessary.

12.2 Persistence and degradability

Biodegradability	ethyl acetate: Readily biodegradable.; > 60 %; 28 d; aerobic (literature value)

12.3 Bioaccumulative potential

Bioaccumulation	ethyl acetate: Leuciscus idus (Golden orfe); 3 d; Bioconcentration factor (BCF): 30 No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil

Mobility	ethyl acetate: Highly mobile in soils low potential for absorption

(literature value)

12.5 Results of PBT and vPvB assessment

Results of PBT assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Results of PBT assessment	ethyl acetate: Based on available data, the classification criteria are not met.

12.6 Other adverse effects

General advice	ethyl acetate: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product	Following pre-treatment and observing the regulations for hazardous wastes, it must be taken to a permitted hazardous wastes landfill or hazardous wastes incinerator.
Contaminated packaging	Contaminated packaging should be emptied optimally and after being suitably cleaned returned for re-use., Packaging that cannot be cleaned must be disposed of in the same way as the material itself.
waste code of the European Union: EWC	A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR	1173
RID	1173
ADN	1173
IMDG	1173
ICAO/IATA	1173

14.2 Proper shipping name

ADR	ETHYL ACETATE
RID	ETHYL ACETATE
ADN	ETHYL ACETATE
IMDG	ETHYL ACETATE
ICAO/IATA	ETHYL ACETATE

14.3 Transport hazard class

ADR	3
RID	3
ADN	3
IMDG	3

ICAO/IATA	3

14.4 Packing group

ADR	II
RID	II
ADN	II
IMDG	II
ICAO/IATA	II

14.5 Environmental hazards

ADR	Environmentally hazardous	no
RID	Environmentally hazardous	no
ADN	Environmentally hazardous	no
IMDG	Marine pollutant	no
ICAO/IATA	Environmentally hazardous	no

14.6 Special precautions for user

ADR	Hazard Identification Number		33
	Labels		3
	Tunnel restriction code		(D/E)
IMDG	Labels 3		
	EmS Number 1	F-E	
	EmS Number 2	S-D	
ICAO/IATA	Labels	3	

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks	No information available.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Occupational restrictions Employment restrictions for children and young workers in accordance with Directive 94/33/EC and the respective national provisions are to be observed.

NATIONAL/OTHER REGULATIONS

Legislation on the control of major-accident hazards involving dangerous substances

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

list entry in the directive:: FLAMMABLE LIQUIDS; P5c

Qualifiying quantity 1: 5.000 t; Qualifiying quantity 2: 50.000 t;

NOTIFICATION STATUS

Switzerland. Consolidated Inventory	CH INV	listed (product or constituents are listed)
US. Toxic Substances Control Act	TSCA	listed (product or constituents are listed)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	DSL	listed (product or constituents are listed)
Australia. Industrial Chemical (Notification and Assessment) Act	AICS	listed (product or constituents are listed)
Japan. Kashin-Hou Law List	ENCS (JP)	listed (product or constituents are listed)
Japan. Industrial Safety & Health Law (ISHL) List	ISHL (JP)	listed (product or constituents are listed)
Korea. Existing Chemicals Inventory (KECI)	KECI (KR)	listed (product or constituents are listed)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	PICCS (PH)	listed (product or constituents are listed)
China. Inventory of Existing Chemical Substances	INV (CN)	listed (product or constituents are listed)

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Safety datasheet sections which have been updated:

8. Exposure controls/personal protection
9. Physical and chemical properties
12. Ecological information

Further information:

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
AICS	Australian Inventory of Chemical Substances
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials (US)
BCF	Bioconcentration factor
CLP	Regulation on Classification, Labelling and Packaging of Substances and Mixtures
DIN	Deutsches Institut für Normung
DNEL	Derived No-Effect Level
DSL	Domestic Substances List
EC…	Effect concentration ... %
ENCS	Existing Notified Chemical Substances (Japan)
EWC	European Waste Catalogue
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISHL	Industrial Safety and Health Law (Japan)
ISO	International Organization for Standardization
IUAPC	International Union of Pure and Applied Chemistry
KECI	Korea Existing Chemicals Inventory
LC…	Lethal Concentration, ...%
LD…	Lethal Dose, ...%
MARPOL	International Convention for the Prevention of Pollution From Ships
NDSL	Non-Domestic Substances List
NOAEL	no observable adverse effect level
NOEL/NOEC	No Observed-effect level/concentration
NZIoC	New Zealand Inventory of Chemicals
OECD	Organisation for Economic Co-operation and Development
PBT	persistent, bioaccumulative, toxic
PICCS	Philippine Inventory of Chemicals and Chemical Substances
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport international ferroviaire de marchandises dangereuses
TG	Test Guideline
TRGS	Technische Regeln für Gefahrstoffe
TSCA	Toxic Substances Control Act
vPvB	very persistent, very bioaccumulative
WGK	Wassergefährdungsklasse

Annex

Attachments to the safety data sheet and/or lists of the identified uses for the listed substances can be downloaded using the internet links below.

http://www.sasolgermany.de/fileadmin/doc/productsafety/Annex/000000006994_EN_01.pdf