

# SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

**Product name: Stonder Epoxy Bonding Adhesive ( Component B )**

**Creation date: 19.04.2023, Revision: 16.05.2023, version: 1.0**

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

### 1.1 Product identifier

**Product name**

Stonder Epoxy Bonding Adhesive ( Component B )

**Product code**

[80907 UFI:6FQ8-2A2N-520P-A992]



<https://my.chemius.net/p/4Jrd0w/en/pd/en>

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

**Relevant identified uses**

Adhesive.

**Uses advised against**

No information.

### 1.3 Details of the supplier of the safety data sheet

**Supplier**

Rags LTD

Džūkstes str.1

LV-1004 Rīga, Latvia

+37167808780

rags@rags.lv

### 1.4 Emergency Telephone Number

**Emergency**

112

**Supplier**

+37167808780

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Skin Irrit. 2; H315 Causes skin irritation.

Skin Sens. 1; H317 May cause an allergic skin reaction.

Eye Irrit. 2; H319 Causes serious eye irritation.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

**Signal word: WARNING**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with national regulation.

**Contains:**

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

1,4-bis[(2,3- epoxypropoxy)met hyl]cyclohexane

**2.3 Other hazards****PBT/vPvB**

No information.

**Endocrine disrupting properties**

No information.

**Additional information**

No information.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

For mixtures see 3.2.

**3.2 Mixtures**

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	1675-54-3 216-823-5 603-073-00-2 01-2119456619-26	>50-<60	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	Skin Irrit. 2; H315; C ≥ 5% Eye Irrit. 2; H319; C ≥ 5%	/
Silicon dioxide (silica), vitreous	60676-86-0 262-373-8 -	>15-<25	/	/	/
1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane	14228-73-0 238-098-4 -	>10-<15	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	/	/
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	2530-83-8 219-784-2 -	>1-<2.5	Eye Dam. 1; H318 Aquatic Chronic 3; H412	/	/

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. Obtain professional medical help!

#### Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention.

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

#### Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Consult a physician. Show the physician the safety data sheet or label.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

#### Following skin contact

Itching, redness, pain. May cause sensitisation by skin contact (itching, redness, rashes).

#### Following eye contact

Redness, tearing, pain.

#### Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort. Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

Full water jet.

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

### 5.3 Advice for firefighters

#### Protective actions

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).

**Additional information**

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel****Protective equipment**

No information.

**Precautionary measures**

Ensure adequate ventilation.

**Emergency procedures**

No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

**For emergency responders**

Use personal protective equipment.

**6.2 Environmental precautions**

Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

**6.3 Methods and material for containment and cleaning up****For containment**

Stem the spill if this does not pose risks.

**For cleaning up**

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Prevent release into the sewer, water, basements or confined areas. Ventilate the premises. Clean contaminated area with plenty of water.

**OTHER INFORMATION**

No information.

**6.4 Reference to other sections**

See also sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Ensure adequate ventilation.

**Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

**Measures to protect the environment**

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

**Other measures**

No information.

**Advice on general occupational hygiene**

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse. Wear suitable protective equipment; see Section 8.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep in a cool, dry and well ventilated place. Keep away from food, drink and animal feeding stuffs.

**Packaging materials**

Store only in original container.

**Requirements for storage rooms and vessels**

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

**Storage class**

No information.

**Further information on storage conditions**

No information.

**7.3 Specific end use(s)****Recommendations**

No information.

**Industrial sector specific solutions**

No information.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Occupational Exposure limit values**

Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
Silica, fused respirable dust (60676-86-0)	0.08	/	/	/	/	/

**Information on monitoring procedures**

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

**DNEL/DMEL values****For product**

No information.

**For components**

Name	Type	Exposure route	exp. frequency	Remark	value
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Worker	inhalation	long term systemic effects	/	70.5 mg/m <sup>3</sup>
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Worker	dermal	long term systemic effects	/	10 mg/kg/day
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Consumer	oral	long term systemic effects	/	5 mg/kg

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Consumer	dermal	long term systemic effects	/	5 mg/kg
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Consumer	inhalation	long term systemic effects	/	17 mg/m <sup>3</sup>

#### PNEC values

##### For product

No information.

##### For components

Name	Exposure route	Remark	value
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	fresh water	/	0.45 mg/L
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	marine water	/	0.045 mg/L
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	fresh water sediment	/	1.6 mg/kg
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	marine water sediment	/	0.16 mg/kg
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	water treatment plant	/	8.2 mg/L
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	soil	/	0.063 mg/kg
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	water, intermittent release	/	0.45 mg/L

## 8.2 Exposure controls

### Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols.

#### Structural measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

### Personal protective equipment

#### Eye and face protection

Safety glasses with side protection (BS EN ISO 16321-1:2022).

#### Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The penetration time is determined by the protective glove manufacturer and must be observed.

### Appropriate materials

#### Skin protection

Cotton protective clothing and shoes that cover the entire foot (BS EN ISO 20345:2022). At high risk of skin exposure chemical suits (BS EN ISO 6530:2005) and boots may be required (BS EN ISO 20345:2022).

**Respiratory protection**

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

**Thermal hazards**

No information.

**Environmental exposure controls****Substance/mixture related measures to prevent exposure**

No information.

**Instruction measures to prevent exposure**

No information.

**Organisational measures to prevent exposure**

No information.

**Technical measures to prevent exposure**

Do not allow product to reach drains, sewage systems or ground water.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties****Physical state**

liquid - viscous

**Colour**

black

**Odour**

mild

**Important health, safety and environmental information**

Odour threshold	No information.
Melting point/Freezing point	No information.
Boiling point or initial boiling point and boiling range	> 150 °C
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	> 99 °C (Seta closed cup)
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	No information.
Viscosity	kinematic: > 10000 mm <sup>2</sup> /s at 40 °C
Solubility	Water: insoluble
Partition coefficient	No information.
Vapour pressure	< 0.1 hPa at 20 °C
Density and/or relative density	Relative density: 1.089 at 20 °C Density: 1.089 g/cm <sup>3</sup> at 20 °C
Relative vapour density	No information.
Particle characteristics	No information.

**9.2 OTHER INFORMATION**

Explosive properties	No information.
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**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

No information.

**10.2 Chemical stability**

Product is stable under normal conditions of use, recommended handling and storage conditions.

**10.3 Possibility of hazardous reactions**

No information.

**10.4 Conditions to avoid**

No information.

**10.5 Incompatible materials**

No information.

**10.6 Hazardous decomposition products**

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****(a) Acute toxicity****For components**

Name	Exposure route	Type	Species	Time	value	Method	Remark
2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane	oral	LD <sub>50</sub>	rat	/	> 15000 mg/kg bw	/	/
2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane	dermal	LD <sub>50</sub>	rabbit	/	> 23000 mg/kg	/	/
1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane	oral	LD <sub>50</sub>	rat	/	1098 mg/kg	/	/
1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane	oral	LD <sub>50</sub>	rat	/	2.5 g/kg	/	/
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	oral	LD <sub>50</sub>	rat	/	8025 mg/kg	/	/
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	dermal	LD <sub>50</sub>	rabbit	/	4250 mg/kg bw	/	/

**Additional information**

The product is not classified for acute toxicity.

**(b) Skin corrosion/irritation**

No information.

**Additional information**

Causes skin and eye irritation.

**(c) Serious eye damage/irritation**

No information.

**(d) Respiratory or skin sensitisation**

No information.

**Additional information**

May cause an allergic skin reaction.

**(e) (Germ cell) mutagenicity**

No information.

**(f) Carcinogenicity**

No information.

**(g) Reproductive toxicity**

No information.

**Summary of evaluation of the CMR properties**

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

**(h) STOT-single exposure**

No information.

**Additional information**

STOT SE (single exposure): Not classified.

**(i) STOT-repeated exposure**

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
1,4-bis[(2,3-epoxypropoxy)methyl]cyclohexane	oral	NOAEL	rat	/	/	/	300 mg/kg bw/day	/	/	/

**Additional information**

STOT RE (repeated exposure): Not classified.

**(j) Aspiration hazard**

No information.

**Additional information**

Aspiration hazard: Not classified.

**Symptoms related to the physical, chemical and toxicological characteristics**

No information.

**Interactive effects**

No information.

**11.2 Information on other hazards****Endocrine disrupting properties**

No information.

**Other information**

No information.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

**Acute (short-term) toxicity****For components**

Name	Type	value	Exposure time	Species	organism	Method	Remark
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LC <sub>50</sub>	55 mg/L	96 h	fish	<i>Cyprinus carpio</i>	/	/
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	EC <sub>50</sub>	324 mg/L	48 h	daphnia	<i>Daphnia magna</i>	/	/

**Chronic (long-term) toxicity****For components**

Name	Type	value	Exposure time	Species	organism	Method	Remark
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	NOEC	100 mg/l	/	crustacea	<i>Daphnia magna</i>	/	/

**12.2 Persistence and degradability****Abiotic degradation, physical- and photo-chemical elimination**

No information.

**Biodegradation**

No information.

**12.3 Bioaccumulative potential****Partition coefficient****For components**

Name	Media	value	Temperature °C	pH	Concentration	Method
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Log Pow	0.5	/	/	/	/

**Bioconcentration factor (BCF)**

No information.

**12.4 Mobility in soil****Known or predicted distribution to environmental compartments**

No information.

**Surface tension**

No information.

**Adsorption/Desorption**

No information.

**12.5 Results of PBT and vPvB assessment**

No evaluation.

**12.6 Endocrine disrupting properties**

No information.

**12.7 Other adverse effects**

No information.

## 12.8 Additional information

### For product

Toxic to aquatic organisms: may cause long-term adverse effects in the aquatic environment. Do not allow to reach ground water, water courses or sewage system.

### For components

**Silicon dioxide (silica), vitreous**

*Translation required (85149)*

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product / Packaging disposal

##### Waste chemical

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

##### Waste codes / waste designations according to LoW

No information.

##### Packaging

Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents.

##### Waste codes / waste designations according to LoW

No information.

##### Waste treatment-relevant information

No information.

##### Sewage disposal-relevant information









No information.

##### Other disposal recommendations

No information.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
<b>14.1 UN number or ID number</b>			
UN 3082	UN 3082	UN 3082	UN 3082
<b>14.2 UN proper shipping name</b>			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane, 1,4-bis[(2,3-epoxypropoxy)met hyl]cyclohexane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, 1,4-bis[(2,3-epoxypropoxy)propyl]trimethoxysilane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, 1,4-bis[(2,3-epoxypropoxy)met hyl]cyclohexane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane, 1,4-bis[(2,3-epoxypropoxy)met hyl]cyclohexane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis oxirane, 1,4-bis[(2,3-epoxypropoxy)met hyl]cyclohexane)
<b>14.3 Transport hazard class(es)</b>			
9	9	9	9

 	 	 	 
<p>14.4 Packing group</p>			
<p>III</p>	<p>III</p>	<p>III</p>	<p>III</p>
<p>14.5 Environmental hazards</p>			
<p>YES</p>	<p>Marine pollutant</p>	<p>YES</p>	<p>YES</p>
<p>14.6 Special precautions for user</p>			
<p>Limited quantities 5 L Special provisions 274, 335, 375, 601 Packing Instructions P001, IBC03, LP01, R001 Special packing provisions PP1 Transport category 3 Tunnel restriction code (-)</p>	<p>Limited quantities 5 L EmS F-A, S-F Flash point 99 °C</p>	<p>Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y964 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 30 kg G Packing Instructions (Pkg Inst) 964 Maximum Net Quantity/Package (Max Net Qty/Pkg) 450 L Cargo Aircraft Only, Packing Instructions (CAO, Pkg Inst) 964 Cargo Aircraft Only, Maximum Net Quantity/Package (CAO, Max Net Qty/Pkg) 450 L Special provisions A97, A158, A197 Excepted quantities E1 ERG code 9L</p>	<p>Limited quantities 5 L</p>
<p>14.7 Maritime transport in bulk according to IMO instruments</p>			
	<p>Goods may not be carried in bulk in bulk containers, containers or vehicles.</p>		

**SECTION 15: REGULATORY INFORMATION**

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline) not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

Indication of changes

No information.

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EW - European Waste Catalogue (replaced by LoW – see below)

GES - Generic Exposure Scenario

GHS - Globally Harmonized System

IATA - International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes

IT - Information Technology

IUCLID - International Uniform Chemical Information Database

IUPAC - International Union for Pure Applied Chemistry  
JRC - Joint Research Centre  
Kow - octanol-water partition coefficient  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
LE - Legal Entity  
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
LR - Lead Registrant  
M/I - Manufacturer / Importer  
MS - Member States  
MSDS - Material Safety Data Sheet  
OC - Operational Conditions  
OECD - Organization for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

#### List of relevant H phrases

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.