

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

silco®**Product name: 3270 Fiberplast+ komp A****Creation date: 18.11.2020, Revision: 17.03.2023, version: 2.3**

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

1.1 Product identifier

Product name

3270 Fiberplast+ komp A

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

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

Relevant identified uses

Polyester resin. Reserved for industrial and professional use.

Uses advised against

No information.

1.3 Details of the supplier of the safety data sheet

Manufacturer

SILCO, D.O.O.

Šentrupert 5 a

3303 Gomilsko, Slovenia

+386 3 703 3180

msds@silco.si

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+386 3 703 3180

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Flam. Liq. 3; H226 Flammable liquid and vapour.

Skin Irrit. 2; H315 Causes skin irritation.

Eye Irrit. 2; H319 Causes serious eye irritation.

STOT SE 3; H335 May cause respiratory irritation.

Repr. 2; H361d Suspected of damaging the unborn child.

STOT RE 1; H372 Causes damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

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



Signal word: DANGER

- H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist/vapours.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents and container in accordance with all local, regional, national and international regulations.

Contains:
styrene

- 2.3 Other hazards
- PBT/vPvB
No information.
- Endocrine disrupting properties
No information.
- Additional information

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.

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 Conc. Limits	Notes for substances
styrene	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	>= 30 - < 50	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332 STOT SE 3; H335 Repr. 2; H361d STOT RE 1; H372 Aquatic Chronic 3; H412	/	/

1,4-naphthoquinone	130-15-4 204-977-6 - 01-2120760462-57	>= 0,025 - < 0,1	Acute Tox. 3; H301 Skin Corr. 1C; H314 Skin Sens. 1; H317 Eye Dam. 1; H318 Acute Tox. 1; H330 STOT SE 3; H335 Aquatic Acute 1; H400; M = 10 Aquatic Chronic 1; H410; M = 1	/	/
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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off all contaminated clothing immediately. Symptoms of poisoning may even occur after several hours; therefore medical observation is required at least 48 hours after the event. Person who provides first aid should wear protective gear.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Victim should rest in a warm place. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Seek medical help immediately.

Following skin contact

Immediately remove contaminated clothing. Wash affected skin areas immediately with plenty of water and soap. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical help.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Immediately consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Can cause irritation of respiratory system. Coughing, sneezing, nasal discharge, labored breathing.

Following skin contact

Itching, redness, pain.

Following eye contact

Redness, tearing, pain.

Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

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. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂). Smoke.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area.

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 must be disposed of in accordance with the regulations; do not allow to reach the sewage system. 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

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation. Keep away sources of ignition. Prohibited to smoke!

Emergency procedures

Prevent access to unprotected personnel. Avoid contact with skin, eyes and clothing. Do not breathe vapour or mist.

For emergency responders

No information.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

No information.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Do not rinse contaminated area with water or aqueous cleansing agents.

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. Protect from open fire and other sources of ignition or heat. Keep away from sources of ignition - no smoking. Take precautionary measures against static discharges. Vapours and air form explosive mixtures. Use explosively safe equipment (ventilators, lighting, working instruments and devices,...);

Measures to prevent aerosol and dust generation

Ensure good ventilation and extraction.

Measures to protect the environment

No information.

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. Avoid contact with skin and eyes. Do not breathe vapours/mist.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in tightly closed container. Keep in cool and well ventilated area. Keep in a dry place. Protect from open fire, heat and direct sunlight. Keep away from moisture. Store below 30°C. Keep away from oxidising substances. Keep away from food, drink and animal feeding stuffs.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

No information.

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 ³	ml/m ³	Short-term value mg/m ³	Short-term value ml/m ³	Remark	Biological Tolerance Values
Styrene (100-42-5)	430	100	1080	250	/	/

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
styrene	Consumer	oral	long term systemic effects	/	2.1 mg/kg bw/day
styrene	Consumer	dermal	long term systemic effects	/	343 mg/kg bw/day
styrene	Worker	dermal	long term systemic effects	/	406 mg/kg bw/day
styrene	Consumer	inhalation	long term systemic effects	/	10.2 mg/m ³
styrene	Worker	inhalation	long term systemic effects	/	85 mg/m ³
styrene	Consumer	inhalation	short term systemic effects	/	174.25 mg/m ³
styrene	Worker	inhalation	short term systemic effects	/	289 mg/m ³
styrene	Consumer	inhalation	short term local effects	/	182.75 mg/m ³
styrene	Worker	inhalation	short term local effects	/	306 mg/m ³

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
styrene	fresh water	/	0.028 mg/L
styrene	marine water	/	0.0028 mg/L
styrene	water, intermittent release	/	0.04 mg/L
styrene	fresh water sediment	/	0.614 mg/kg
styrene	marine water sediment	/	0.0614 mg/kg
styrene	water treatment plant	/	5 mg/L
styrene	soil	/	0.2 mg/kg dw

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. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols. Avoid contact with eyes and skin. Keep away from foodstuffs, beverages and feed.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Store protective clothing separate from regular clothing. Keep eyewash bottles or personal eyewash units and emergency showers available.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

Personal protective equipment

Eye and face protection

Tight fitting protective goggles (EN 166).

Hand protection

Protective gloves (EN 374). Protect hands with barrier cream. 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. Unsuitable gloves: Natural rubber, Nitrile rubber, Butyl rubber.

Appropriate materials

Material	Thickness	Penetration Time	Remark
Viton (fluorinated rubber)	≥ 0.4 mm	≥ 480 min	EN 374 -6

- Skin protection

Cotton protective clothing and shoes that cover the entire foot (BS EN ISO 20345:2022).
- Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. In case of insufficient ventilation wear mask (EN 136) with filter A-P (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

No information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state
liquid

Colour
amber

Odour
characteristic

Important health, safety and environmental information

Odour threshold	No information.
Melting point/Freezing point	-31 °C (styrene)
Boiling point or initial boiling point and boiling range	145 °C (styrene)
Flammability	490 °C (styrene)
Lower and upper explosion limit	1.1 — 6.1 vol % (Styrene)
Flash point	31 °C (styrene)
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	No information.
Viscosity	Dynamic: 750 mPas at 23 °C kinematic: 750 mm ² /s at 23 °C
Solubility	Water: Insoluble
Partition coefficient	Octanol-water (log Pow): 2.96 at 25 °C
Vapour pressure	6 hPa at 20 °C
Density and/or relative density	Density:
Relative vapour density	No information.
Particle characteristics	No information.

9.2 OTHER INFORMATION

Weight organic solvents	250 g/l (VOC) 250 g/l (VOC (RFU))
Explosive properties	No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Risk of exothermic polymerization. Reacts with peroxides and other radical forming substances.

10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks.

10.5 Incompatible materials

Strong acids.
Oxidants.
Copper, brass;
Peroxide.

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 product

Exposure route	Type	Species	Time	value	Method	Remark
inhalation (vapours)	/	/	4 h	> 20 mg/l	/	calculated value

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
styrene	oral	LD ₅₀	rat	/	5000 mg/kg	/	/
styrene	dermal	LD ₅₀	rat	/	> 2000 mg/kg	OECD 402	/
styrene	inhalation (vapours)	LC ₅₀	rat	4 h	11.8 mg/l	/	/
1,4-naphthoquinone	oral	LD ₅₀	rat	/	124 mg/kg	/	/
1,4-naphthoquinone	inhalation	LC ₅₀	rat	4 h	0.046 mg/l	OECD 403	/

Additional information

The product is not classified for acute toxicity.

(b) Skin corrosion/irritation

For components

Name	Species	Time	result	Method	Remark
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styrene	rabbit	/	Irritating.	/	/
1,4-naphthoquinone	/	/	Causes burns.	/	/

Additional information

Causes skin irritation.

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

Name	Exposure route	Species	Time	result	Method	Remark
styrene	/	rabbit	/	Irritating.	/	/
1,4-naphthoquinone	/	/	/	Danger of serious eye injury.	/	/

Additional information

Causes serious eye irritation.

(d) Respiratory or skin sensitisation**For components**

Name	Exposure route	Species	Time	result	Method	Remark
styrene	/	guinea pig	/	Non sensitising.	/	/
1,4-naphthoquinone	/	/	/	May cause sensitisation by skin contact.	/	/

Additional information

The product is not classified as sensitising.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity**For components**

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
styrene	Reproductive toxicity	/	/	/	/	May cause harm to the unborn child.	/	/

Summary of evaluation of the CMR properties

Suspected of damaging the unborn child.

(h) STOT-single exposure**For components**

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
styrene	/	/	/	/	/	/	/	Irritates respiratory system.	/	/
1,4-naphthoquinone	/	/	/	/	/	/	/	May cause respiratory irritation.	/	/

Additional information

STOT - single exposure: May cause respiratory irritation.

(i) STOT-repeated exposure**For components**

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
styrene	inhalation	/	/	/	/	/	/	Causes damage to organs through prolonged or repeated exposure.	/	/

Additional information

Causes damage to the hearing organs through prolonged or repeated exposure if inhaled.

(j) Aspiration hazard**For components**

Name	result	Method	Remark
styrene	May be fatal if swallowed and enters airways.	/	/

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
styrene	EC ₅₀	4.7 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
styrene	EC ₅₀	4.9 mg/L	72 h	algae	<i>Selenastrum capricornutum</i>	/	/
styrene	EC ₅₀	ca. 500 mg/L	30 min	microorganisms	Activated sludge	OECD 209	/
styrene	LC ₅₀	4.02 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
1,4-naphthoquinone	EC ₅₀	0.42 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	/	/
1,4-naphthoquinone	EC ₅₀	0.0261 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
1,4-naphthoquinone	/	0.045 mg/L	96	fish	<i>Oryzias latipes</i>	OECD 203	/

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

Name	Type	value	Exposure time	Species	organism	Method	Remark
styrene	NOEC	1.01 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	/

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

No information.

Biodegradation**For components**

Name	Type	Rate	Time	Evaluation	Method	Remark
styrene	/	70.9 %	28 days	readily biodegradable	/	/
1,4-naphthoquinone	biodegradability	0 %	28 days	Non-biodegradable	OECD 301	/

12.3 Bioaccumulative potential

Partition coefficient
For product

Media	value	Temperature °C	pH	Concentration	Method
Octanol-water (log Pow)	2.96	25	/	/	/

For components

Name	Media	value	Temperature °C	pH	Concentration	Method
styrene	Octanol-water (log Pow)	2.96	25	/	/	/
1,4-naphthoquinone	Octanol-water (log Pow)	1.77	25	/	/	/

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
For components

Name	Type	Criterion	value	Evaluation	Method	Remark
styrene	Soil	log KOC	2.55	/	/	/

12.5 Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances in percentages greater than 0.1%.

12.6 Endocrine disrupting properties

No information.

12.7 Other adverse effects

No information.

12.8 Additional information

For product
Do not allow to reach ground water, water courses or sewage system. Harmful to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal
Waste chemical

Dispose according to regulations. Do not dispose together with household garbage. 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
07 02 08* - other still bottoms and reaction residues

Packaging
Deliver completely emptied containers to approved waste disposal authorities. Dispose of in accordance with applicable waste disposal regulation.

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
14.1 UN number or ID number			
UN 1866	UN 1866	UN 1866	UN 1866
14.2 UN proper shipping name			
RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION	RESIN SOLUTION
14.3 Transport hazard class(es)			
3	3	3	3
			
14.4 Packing group			
III	III	III	III
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			

Limited quantities 5 L Packing Instructions P001, IBC03, LP01, R001 Special packing provisions PP1 Transport category 3 Tunnel restriction code (D/E)	Limited quantities 5 L EmS F-E, <u>S-E</u> Flash point 31 °C	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y344 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 10 L Packing Instructions (Pkg Inst) 355 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 L Special provisions A3	Limited quantities 5 L
14.7 Maritime transport in bulk according to IMO instruments			
	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

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

Regulation EC 648/2004 on detergents
No information.

Special instructions

Regulation (EC) No. 1907/2006 (REACH) Annex XVII - Terms of restriction: 3.
Seveso P5c: FLAMMABLE LIQUIDS.

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

2.2 Label elements 8.2 Exposure controls 9.1 Information on basic physical and chemical properties

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
 EWC - 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

H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.



- ☑ Provided correct labelling of the product
- ☑ Compliance with the local legislation
- ☑ Provided correct classification of the product
- ☑ Provided adequate transport data

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.