

# SAFETY DATA SHEET

 ACCORDING TO REGULATION (EC) 1907/2006

**Product name:** Ecoclean Delete

**Creation date:** 15.07.2024, **Revision:** 26.07.2024, **version:** 3.1

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

### 1.1 Product identifier

Product name

Ecoclean Delete

Product code

[9NPU-H94K-YTKV-YSDN]

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

Relevant identified uses

Stain-removing agent.

Uses advised against

For professional use only.

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

Supplier

Ominent Sdn Bhd

No.7, Jalan Majistret U1/26, Hicom-Glenmarie Industrial Park, Seksyen U1,

40150 Shah Alam, Malaysia

+60355690980

regulations@iglcoatings.com

### 1.4 Emergency Telephone Number

Emergency

111

Supplier

+60355690980

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Acute Tox. 3; H301 Toxic if swallowed.

Acute Tox. 2; H310 Fatal in contact with skin.

Skin Corr. 1A; H314 Causes severe skin burns and eye damage.

Acute Tox. 3; H331 Toxic if inhaled.

### 2.2 Label elements

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



**Signal word: DANGER**

H301 Toxic if swallowed.  
H310 Fatal in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H331 Toxic if inhaled.  
P102 Keep out of reach of children.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with national regulation.

Contains:  
hydrofluoric acid  
fluorosilicic acid  
sulphuric acid

2.3 Other hazards

PBT/vPvB  
No information.

Endocrine disrupting properties  
The product does not contain substances with the potential for endocrine disorders.

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
water	7732-18-5 231-791-2 -	90-100	/	/	/
hydrofluoric acid	7664-39-3 231-634-8 009-003-00-1	2.5-5	Acute Tox. 2; H300 Acute Tox. 1; H310 Skin Corr. 1A; H314 Acute Tox. 2; H330	Skin Corr. 1A; H314; C ≥ 7% Skin Corr. 1B; H314; 1% ≤ C < 7% Eye Irrit. 2; H319; 0.1% ≤ C < 1%	B
fluorosilicic acid	16961-83-4 241-034-8 009-011-00-5 01-2119488906-19-0000	1-2.5	Skin Corr. 1B; H314	/	B

sulphuric acid	7664-93-9 231-639-5 016-020-00-8 01-2119458838-20-0000	1-2.5	Skin Corr. 1A; H314	Skin Corr. 1A; H314; C ≥ 15% Skin Irrit. 2; H315; 5% ≤ C < 15% Eye Irrit. 2; H319; 5% ≤ C < 15%	B
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#### Notes for substances

B	<p>Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.</p> <p>In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %".</p> <p>In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.</p>
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## 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. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. When it is suspected, that there may still be harmful vapours/fumes present in the air, respiratory protection (mask; self contained breathing apparatus) must be used. Wash contaminated clothing with water before removing or use gloves.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. In case of unconsciousness bring patient into stable side position and seek medical attention. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Keep at rest in a position comfortable for breathing. Seek medical help immediately.

#### 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. Immediately obtain professional medical help!

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. After 5 minutes of rinsing, remove contact lenses, if present, and continue rinsing. Consult a physician immediately!

#### Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Immediately consult a doctor. 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. Symptoms include: headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Toxic by inhalation.

#### Following skin contact

Skin burns: Signs/symptoms may include localised redness, swelling, itching, dryness, blistering. Fatal in contact with skin.

#### Following eye contact

Redness, pain, burning sensation, tearing, can cause permanent damage to the eyes.

#### Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort. If ingested, may cause burns of the mouth and throat, as well as perforation of the esophagus and stomach. Toxic if swallowed.

#### 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. Avoid exposure - obtain special instructions before using.

### 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 temperature**

10 - 40 °C

**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
Hydrogen fluoride (as F) (7664-39-3)	1.5	1.8	2.5	3	/	/
Sulphuric acid (mist) (7664-93-9)	0.05	/	/	/	The mist is defined as the thoracic fraction	/

### 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
hydrofluoric acid	Worker	inhalation	long term systemic effects	/	1.5 mg/m <sup>3</sup>
hydrofluoric acid	Worker	inhalation	short term systemic effects	/	2.5 mg/m <sup>3</sup>
hydrofluoric acid	Worker	inhalation	long term local effects	/	1.5 mg/m <sup>3</sup>
hydrofluoric acid	Worker	inhalation	short term local effects	/	2.5 mg/m <sup>3</sup>
hydrofluoric acid	Consumer	inhalation	long term systemic effects	/	0.03 mg/m <sup>3</sup>
hydrofluoric acid	Consumer	inhalation	short term systemic effects	/	0.03 mg/m <sup>3</sup>
hydrofluoric acid	Consumer	inhalation	long term local effects	/	0.2 mg/m <sup>3</sup>
hydrofluoric acid	Consumer	inhalation	short term local effects	/	1.25 mg/m <sup>3</sup>
hydrofluoric acid	Consumer	oral	long term systemic effects	/	0.01 mg/kg bw/day
hydrofluoric acid	Consumer	oral	short term systemic effects	/	0.01 mg/kg bw/day

### PNEC values

#### For product

No information.

#### For components

Name	Exposure route	Remark	Value
hydrofluoric acid	fresh water	/	0.89 mg/L
hydrofluoric acid	marine water	/	0.089 mg/L
hydrofluoric acid	water treatment plant	/	51 mg/L
hydrofluoric acid	fresh water sediment	dry weight	3.38 mg/kg
hydrofluoric acid	marine water sediment	dry weight	0.338 mg/kg
hydrofluoric acid	soil	dry weight	10.6 mg/kg

## 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. 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. Keep away from food, drink and animal feeding stuffs.

#### Personal protective equipment

##### Eye and face protection

Wear tight fitting protective goggles and/or face protection (EN 166).

##### Hand protection

Protective gloves (EN ISO 374-1:2016). 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 (EN ISO 20345:2022). At high risk of skin exposure chemical suits (BS EN 13034:2005+A1:2009) and boots may be required (BS EN ISO 20345:2022+A1:2024).

##### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard BS EN 137, BS EN 138.

#### 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

#### Important health, safety and environmental information

Physical state	liquid
Shape	clear
Colour	colourless
Odour	Slight sour
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	100 °C
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	100 °C
Auto-ignition temperature	No information.
Decomposition temperature	No information.

pH	1 — 2
Viscosity	No information.
Solubility (Organic solvent)	Completely soluble
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Relative density	1.02 g/cm <sup>3</sup>
Relative vapour/gas density	No information.
Particle characteristics	No information.

## 9.2 Other information

Information with regard to physical hazard classes

No information.

Other safety characteristics

No information.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Reacts with alkalis. Keep away of heat sources.

### 10.2 Chemical stability

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

### 10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4 Conditions to avoid

Avoid alkalis, extreme temperature and direct sunlight.

### 10.5 Incompatible materials

Strong oxidizing agents, alkalis and metals.

### 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
sulphuric acid	oral	LD <sub>50</sub>	rat	/	2140 mg/kg	/	/



sulphuric acid	inhalation	LC <sub>50</sub>	rat	4 h	0.375 mg/l	/	/
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**Additional information**

Fatal in contact with skin. Toxic by inhalation. Toxic if swallowed.

**(b) Skin corrosion/irritation****For components**

Name	Species	Time	result	Method	Remark
fluorosilicic acid	/	/	Corrosive	/	/

**Additional information**

Causes severe skin burns and eye damage.

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

Name	Exposure route	Species	Time	result	Method	Remark
fluorosilicic acid	/	/	/	Corrosive	/	/

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

Name	Exposure route	Species	Time	result	Method	Remark
fluorosilicic acid	-	/	/	Non sensitising.	/	/

**Additional information**

The product is not classified as sensitising.

**(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****For components**

Name	Exposure route	Type	Species	Time	Exposure	organ	Value	result	Method	Remark
fluorosilicic acid	-	-	/	/	/	/	/	Symptoms: drop in blood pressure, diarrhoea, thirst, cornea opacity, cramps, muscle weakness, mucous membrane irritation, sweating, salivation, nausea, Gastric perforation, Oesophageal perforation	/	/

**Additional information**

STOT SE (single exposure): Not classified.

**(i) STOT-repeated exposure**

No information.

**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

The product does not contain substances with the potential for endocrine disorders.

## 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
hydrofluoric acid	EC <sub>50</sub>	48 mg/L	96 h	crustacea	/	/	/
sulphuric acid	LC <sub>50</sub>	> 500 mg/L	96 h	fish	<i>Brachydanio rerio</i>	/	static system

## Chronic (long-term) toxicity

No information.

## 12.2 Persistence and degradability

## Abiotic degradation, physical- and photo-chemical elimination

No information.

## Biodegradation

No information.

## 12.3 Bioaccumulative potential

## Partition coefficient n-octanol/water (log value)

No information.

## Bioconcentration factor (BCF)

## For components

Name	Species	organism	Value	Duration	Evaluation	Method	Remark
hydrofluoric acid	BCF	/	53 - 58	/	/	/	/

## 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

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information

- For product
- Product is not classified as hazardous for environment. Do not allow to reach ground water, water courses or sewage system.
- For components
- fluorosilicic acid**
- It is miscible with water.

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
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.

<b>14.2 UN proper shipping name</b>			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
<b>14.3 Transport hazard class(es)</b>			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
<b>14.4 Packing group</b>			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
<b>14.5 Environmental hazards</b>			
NO	NO	NO	NO
<b>14.6 Special precautions for user</b>			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
<b>14.7 Maritime transport in bulk according to IMO instruments</b>			
	Not given/not applicable		

## 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  
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**

H300 Fatal if swallowed.  
H310 Fatal in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.

**Further information / Responsible person**

This version replaces all previous versions. The information provided in this Safety Data Sheet is correct to the best of our knowledge, in formation and belief at the date of its publication. The information given is designed only as 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 use in combination with any other materials or any process, unless specified.