

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019
Print date : 06.02.2019

Version (Revision) : 4.0.2 (4.0.1)

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Lithofin RSG

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

Mixture containing hydrofluoric

Remark

The product is intended for professional use.

1.3 Supplier (manufacturer/importer/only representative/downstream user/distributor)

Contact :

Supplier :

Lithofin AG

Street :

Heinrich-Otto-Str. 36

Postal code/city :

73240 Wendlingen

Telephone :

+49 (0)7024 9403-0

Telefax :

+49 (0)7024 9403-40

Contact :

Technical Department
E-mail: info@lithofin.de

Emergency telephone number:

+49 (0)7024 9403-0

(Only available during office hours)

1.4 Emergency telephone number

see section 1.3

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Corr. 1B ; H314 - Skin corrosion/irritation : Category 1B ; Causes severe skin burns and eye damage.

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Remark

Full text of H- and EUH-phrases: see section 16.

2.2 Label elements

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

Hazard pictograms



Corrosion (GHS05) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

AMMONIUM BIFLUORIDE ; CAS No. : 1341-49-7

FLUOROSILIC ACID ; CAS No. : 16961-83-4

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

Hazard statements

H314 Causes severe skin burns and eye damage.
H302 Harmful if swallowed.

Precautionary statements

P102 Keep out of reach of children.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local and national regulations.

Other labelling

2.3 Other hazards

Adverse human health effects and symptoms

Due to its pH value (see section 9), irritation of the skin and eyes cannot be ruled out.

2.4 Additional information

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

AMMONIUM BIFLUORIDE ; REACH registration No. : 01-2119489180-38-xxxx ; EC No. : 215-676-4; CAS No. : 1341-49-7

Weight fraction : $\geq 5 - < 10$ %

Classification 1272/2008 [CLP] : Acute Tox. 3 ; H301 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318

FLUOROSILIC ACID ; REACH registration No. : 01-2119488906-19-xxxx ; EC No. : 241-034-8; CAS No. : 16961-83-4

Weight fraction : $\geq 1 - < 3$ %

Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318

Additional information

All ingredients of this mixture are (pre)registered according to REACH regulation.

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Wash immediately with: Ca-Gluconate solution Immediately remove any contaminated clothing, shoes or stockings. Do not wash with: Cleaning agent, acidic Cleaning agent, alkaline Solvents/Thinner

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

After ingestion

Call a physician immediately. Keep at rest. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

Self-protection of the first aider

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

Treat symptomatically.

Special treatment

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray ABC-powder Foam

Unsuitable extinguishing media

Full water jet Strong water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide Carbon dioxide (CO₂) Hydrogen fluoride

5.3 Advice for firefighters

Use suitable breathing apparatus.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. The product itself does not burn. Coordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (refer to section 8). Provide adequate ventilation. Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For cleaning up

Suitable material for taking up: Universal binder

Clean contaminated articles and floor according to the environmental legislation. Retain contaminated washing water and dispose it. Dispose of waste according to applicable legislation.

Other information

Clear spills immediately.

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

When using do not eat, drink, smoke, sniff.

Protective measures

Trade name : Lithofin RSG

Revision date : 30.01.2019
Print date : 06.02.2019

Version (Revision) : 4.0.2 (4.0.1)

All work processes must always be designed so that the following is excluded: Inhalation of vapours or spray/mists
Skin contact Eye contact Wear personal protection equipment (refer to section 8). Always close containers tightly after the removal of product. Do not breathe gas/fumes/vapour/spray. Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

Measures to prevent fire

The product is not: Flammable Usual measures for fire prevention.

Fire class : -

Shake well before use nein

Advices on general occupational hygiene

P362+P364 - Take off contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep/Store only in original container. The floor should be leak tight, jointless and not absorbent. Ensure adequate ventilation of the storage area.

Hints on joint storage

Storage class (TRGS 510) : 8B

Protect from frost nein

Recommended storage temperature 5 - 25 °C

Further information on storage conditions

Keep locked up and out of reach of children. Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

Recommendation

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

AMMONIUM BIFLUORIDE ; CAS No. : 1341-49-7

Limit value type (country of origin) : TRGS 900 (D)

Parameter : E: inhalable fraction

Limit value : 2,5 mg/m³

Peak limitation : 2(II)

Version : 01.03.2018

Limit value type (country of origin) : TRGS 903 (D)

Parameter : Fluoride / Urine (U) / End of exposure or end of shift

Limit value : 7 mg/g Kr

Version : 01.03.2018

Limit value type (country of origin) : TRGS 903 (D)

Parameter : Fluoride / Urine (U) / Before next shift

Limit value : 4 mg/g Kr

Version : 01.03.2018

Limit value type (country of origin) : TWA (EC)

Limit value : 2,5 mg/m³

Version : 31.01.2018

FLUOROSILIC ACID ; CAS No. : 16961-83-4

Limit value type (country of origin) : TWA (EC)

Limit value : 2,5 mg/m³

Version : 31.01.2018

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation of the storage area.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protection equipment

Eye/face protection

Suitable eye protection

Eye glasses with side protection goggles

Required properties

DIN EN 166

Skin protection

Hand protection

Suitable gloves type : Gloves with long cuffs

Suitable material : Data apply to the main component. Butyl caoutchouc, 0,5mm, >8h; FKM (fluoro rubber), 0,7mm, >8h;

Recommended glove articles : Manufacturer KCL GmbH/Eichenzell-Germany; Ansell/Yarra City-Australia Or comparable articles from other companies.

Additional hand protection measures : Check leak tightness/impermeability prior to use.

Remark : Breakthrough times and swelling properties of the material must be taken into consideration. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams are not substitutes for body protection.

Body protection

Protective clothing.

Suitable protective clothing : Chemical protection clothing Chemical resistant safety shoes

Required properties : acid-resistant.

Protective clothing. : DIN EN ISO 20345 DIN EN 13034 DIN EN 14605

footwear : DIN EN 14404

Remark : Barrier creams are not substitutes for body protection.

Respiratory protection

Usually no personal respiratory protection necessary. Respiratory protection necessary at: insufficient ventilation aerosol or mist formation. high concentrations spray application

Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Half-face mask (DIN EN 140) ABEK-P1

Remark

Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

General health and safety measures

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

When using do not eat, drink, smoke, sniff. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Wash contaminated clothing prior to re-use. Wash hands before breaks and after work. Apply skin care products after work. Do not breathe gas/fumes/vapour/spray.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : colourless

Odour : odourless

Safety relevant basis data

Melting point/melting range : (1013 hPa) -3 °C

Initial boiling point and boiling range : (1013 hPa) approx. 100 °C

Decomposition temperature : (1013 hPa) not determined

Flash point : not applicable closed cup (EN ISO 3679)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019
Print date : 06.02.2019

Version (Revision) : 4.0.2 (4.0.1)

Ignition temperature :				not determined	
Sustaining combustion				No	UN Test L2:Sustained combustibility test
Lower explosion limit :				not determined	
Upper explosion limit :				not determined	
Vapour pressure :	(50 °C)	<	3000	hPa	
Density :	(20 °C)		1,05	g/cm ³	Pyknometer (DIN EN ISO 2811-1)
Solvent separation test :	(20 °C)	<	3	%	Test L1: Solvent separation test (UN)
Water solubility	(20 °C)			miscible	
pH :		approx.	2		DIN 19268
log P O/W :				not determined	(Mixture)
Flow time :	(23 °C)	<	15	s	ISO cup 4 mm (DIN EN ISO 2431)
Odour threshold :				not determined	
Vapourisation rate :				not determined	
VOC content-EC		approx.	0	Wt %	*
VOC-France				not applicable	Décret no 2011-321 du 23 mars 2011

(* VOC-EC = „Volatile organic compound (VOC)“ means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa; VOC-value in g/L)

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Stable under recommended storage and handling conditions.

10.5 Incompatible materials

The product develops hydrogen in an aqueous solution in contact with metals.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

There are no data available on the preparation/mixture itself. Data apply to the main component.

Acute oral toxicity

Parameter :	LD50 (AMMONIUM BIFLUORIDE ; CAS No. : 1341-49-7)
Exposure route :	Oral
Species :	Rat
Effective dose :	130 mg/kg
Method :	OECD 401

Acute inhalation toxicity

Parameter :	LC50 (AMMONIUM BIFLUORIDE ; CAS No. : 1341-49-7)
Exposure route :	Inhalation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

Species : Mouse
Effective dose : 342 mg/l
Exposure time : 1 h

Specific symptoms in animal studies

There are no data available on the preparation/mixture itself.

Irritant and corrosive effects

Assessment/classification

Causes serious eye damage. Causes severe burns.

Sensitisation

There are no data available on the preparation/mixture itself.

Repeated dose toxicity (subacute, subchronic, chronic)

There are no data available on the preparation/mixture itself.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

There are no data available on the preparation/mixture itself.

Other information

No indication of human carcinogenicity.

Germ cell mutagenicity

There are no data available on the preparation/mixture itself.

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

There are no data available on the preparation/mixture itself.

Other information

No indications of human reproductive toxicity exist.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

STOT-single exposure

See SECTION 2.1 (classification).

STOT-repeated exposure

See SECTION 2.1 (classification).

Aspiration hazard

See SECTION 2.1 (classification).

SECTION 12: Ecological information

12.1 Toxicity

Data apply to the main component. There are no data available on the preparation/mixture itself.

Effects in sewage plants

Observe local regulations concerning effluent treatment. Before discharge into sewage plants the product normally needs to be neutralised.

12.2 Persistence and degradability

There are no data available on the preparation/mixture itself.

Biodegradation

The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

There are no data available on the preparation/mixture itself.

12.4 Mobility in soil

There are no data available on the preparation/mixture itself.

12.5 Results of PBT and vPvB assessment

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

There are no data available on the preparation/mixture itself.

12.7 Additional ecotoxicological information

Additional information

The product has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose according to legislation.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

Waste code (EWC/AVV) : 16 03 03*

Waste code packaging

Waste code packaging: 15 01 10*

Waste treatment options

29/35 - Do not empty into drains; dispose of this material and its container in a safe way. Delivery to an approved waste disposal company.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

UN 1760

14.2 UN proper shipping name

Land transport (ADR/RID)

CORROSIVE LIQUID, N.O.S. (AMMONIUM BIFLUORIDE · FLUOROSILICIC ACID)

Sea transport (IMDG)

CORROSIVE LIQUID, N.O.S. (AMMONIUM BIFLUORIDE · FLUOROSILICIC ACID)

Air transport (ICAO-TI / IATA-DGR)

CORROSIVE LIQUID, N.O.S. (AMMONIUM BIFLUORIDE · FLUOROSILICIC ACID)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 8
Classification code : C9
Hazard identification number (Kemler No.) : 80
Tunnel restriction code : E
Special provisions : LQ 11 · E 2
Hazard label(s) : 8

Sea transport (IMDG)

Class(es) : 8
EmS-No. : F-A / S-B
Special provisions : LQ 11 · E 2 · IMDG-Code segregation group 1 - Acids
Hazard label(s) : 8

Air transport (ICAO-TI / IATA-DGR)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

Class(es) : 8
Special provisions : E 2
Hazard label(s) : 8

14.4 Packing group

II

14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

not required.

SECTION 15: Regulatory information

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

EU legislation

REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Directive 2008/98/EC of the European Parliament and of the Council on waste (2000/532/EC)

EN 2:1992 (DIN EN 2:2005-01)

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : None, if handled according to order.

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Other regulations (EU)

Regulation (EC) No. 648/2004 (Detergents regulation)

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work. (Directive 2000/39/EC, Directive 2006/15/EC, Directive 2009/161/EC)

REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the export and import of hazardous chemicals [PIC-Regulation]

REGULATION (EU) No 98/2013 on the marketing and use of explosives precursors: Not applicable.

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer

Not applicable.

Contains the following substances that deplete the ozone layer: -

Regulation (EC) No 850/2004 [POP-Regulation]

Not applicable.

Name of the persistent organic pollutant (POP): -

National regulations

Observe in addition any national regulations!

Germany:

TRGS 400 (Risk assessment for activities involving hazardous substances)

TRGS 500 (Protective measures)

TRGS 510 (Storage of hazardous substances in non-stationary containers)

TRGS 555 (Working instruction and information for workers)

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to AwSV

Other regulations, restrictions and prohibition regulations

Switzerland

VOCV-Regulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

Maximum VOC content (Switzerland) : < 3 Wt % according to VOCV

15.2 Chemical safety assessment

For this substance/mixture a chemical safety assessment has not been carried out.

15.3 Additional information

SECTION 16: Other information

16.1 Indication of changes

07. Hints on joint storage - Storage class

16.2 Abbreviations and acronyms

ABC-Pulver	Extinguishing powder for fire class A, B and C
ABEK-P1	combination filter
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AVV	Abfallverzeichnis-Verordnung (Waste Regulation)
AWSV	Ordinance on facilities for the handling of substances hazardous to water
BGR	BG rules and regulations
ca.	circa
CAS	Chemical Abstract Service
CLP	classification, labelling and packaging
CMR	Carcinogen, mutagen or toxic for reproduction
DIN	German Institute for Standardization
DNEL	Derived No-Effect Level
EAK/EWC/EAC/CWR/CER	European Waste Catalogue
EC50 / CE50	Effective Concentration 50%
EG / EC / CE	European Community
EN	European Standard
EUH	supplemental hazard statement of the european union
GefStoffV	Gefahrstoffverordnung (Hazardous Substances Ordinance)
GHS / SGH	Globally Harmonised System
H-Sätze	hazard statements
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization-Technical Instructions
IMDG-Code	International Maritime Dangerous Goods Code
ISO	International Organization for Standardization
LC50 / CL50	Lethal Concentration 50%
LD50 / DL50	Lethal Dose 50%
log P O/W	Partition coefficient n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (marine pollution)
NOAEL (DSET)	No observed adverse effect level
NOEC (CSEO)	No observed effect concentration
Nr.	Number
OECD	Organisation for Economic Co-operation and Development
PBT	persistent, bioaccumulative and toxic
pH	Potentia hydrogenii
PIC	prior informed consent
PNEC	Predicted No-Effect Concentration

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(EN / D)

Trade name : Lithofin RSG

Revision date : 30.01.2019

Version (Revision) : 4.0.2 (4.0.1)

Print date : 06.02.2019

POP	Persistent organic pollutants
P-Sätze	precautionary statements
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International Carriage of Dangerous Goods by Rail
STEL / LECT	short-term exposure limit
TRGS	Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
TWA / MPT	time-weighted average
UN/ONU	United Nations
VOC/COV/VOS/LZO	Volatile Organic Compound
VOCV	Ordinance on the Incentive Tax on Volatile Organic Compounds (SR 814.018)
vPvB	very persistent and very bioaccumulative
WGK	Wassergefährdungsklasse (Water hazard class)

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>. For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

16.3 Key literature references and sources for data

Regulation (EC) No 1272/2008 (GHS)

ECHA: Registered substances (<https://echa.europa.eu/information-on-chemicals/registered-substances>)

REACH Art. 59: -Candidate List of substances of very high concern for Authorisation

(<https://www.echa.europa.eu/candidate-list-table>)

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard statements for physical hazards : On basis of test data.

Hazard statements for health hazards : Calculation method.

Hazard statements for environmental hazards : Calculation method.

16.5 Relevant H- and EUH-phrases (Number and full text)

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
