Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Heat resistance silicone red 80 ml
Art.: 43181

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

Relevant identified uses of the substance or mixture:
Sealant

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

NL

Berner Produkten b.v., Vogelzankweg 175, 6374 AC Landgraaf, Netherlands
Phone: +31 45 53 39 133, Fax: +31 45 53 14 588
info@berner.nl, www.berner.nl

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (BRC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)
The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
When hardening:
Developement of:
Acetic acid

SECTION 3: Composition/information on ingredients

3.1 Substance
n.a.
3.2 Mixture

Propyltriacetoxysilane	
Registration number (REACH)	01-2119966899-07-XXXX
Index	---
EINECS, ELINCS, NLP	241-816-9
CAS	17865-07-5
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Corr. 1B, H314 Eye Dam. 1, H318

Methyltriacetoxysilane	
Registration number (REACH)	01-2119962266-32-XXXX
Index	---
EINECS, ELINCS, NLP	224-221-9
CAS	4253-34-3
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

Skin contact
Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Consult doctor immediately - keep Data Sheet available.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed
n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water jet spray/foam/CO2/dry extinguisher
Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Formaldehyde
Acetic acid
Toxic gases

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions

Prevent from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
Avoid contact with eyes or skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Protect against moisture and store closed.
Store in a well ventilated place.
Store cool.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Acetic acid	Content %:
WEL-TWA: 10 ppm (25 mg/m3) (EU)	WEL-STEL: 20 ppm (50 mg/m3) (EU)	---
Monitoring procedures:	- Compur - KITA-216 S (549 194) - Draeger - Acetic Acid 5/a (67 22 101) - OSHA ID-186SG (Acetic acid and formic acid in workplace atmospheres) - OSHA PV2119 (Acetic acid) - 2003 - EU project - BC/CEN/ENTR/000/2002-16 card 64-5 (2004) - NIOSH 1603 (Acetic acid in workplace atmospheres) - 1994	
BMGV: ---	Other information: ---	

GB **Chemical Name**	Silica, amorphous	Content %:

WEL-TWA: 6 mg/m3 (total inh. dust), 2,4 mg/m3 (resp. dust)	WEL-STEL: ---	---
Monitoring procedures: ---		
BMGV: ---	Other information: ---	

GB **Chemical Name**	Iron(III)oxide	Content %:
WEL-TWA: 5 mg/m3 (fume, as Fe) / Rouge: 4 mg/m3 (resp. dust), 10 mg/m3 (total inh. dust)	WEL-STEL: 10 mg/m3 (fume, as Fe)	---
Monitoring procedures: ---		
BMGV: ---	Other information: ---	

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Propyltriacetoxysilane

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		DNEL	0,02441	mg/l	
	Environment - sewage treatment plant		PNEC	10,55	mg/l	
	Environment - soil		PNEC	0,00336	mg/kg dw	
	Environment - marine		PNEC	0,002441	mg/l	
	Environment - sediment, marine		PNEC	0,001457	mg/kg dw	
	Environment - sediment, freshwater		PNEC	0,01457	mg/kg dw	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,05	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	6,05	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	21,06	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	85,39	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	12,11	mg/kg bw/d	

Methyltriacetoxysilane						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Human - inhalation	Long term, systemic effects	DNEL	6,3	mg/m3	
	Environment - freshwater		PNEC	1	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - soil		PNEC	0,145	mg/kg dw	
	Environment - marine		PNEC	0,1	mg/l	
	Environment - sediment, marine		PNEC	0,34	mg/kg dw	
	Environment - sediment, freshwater		PNEC	3,4	mg/kg dw	
	Environment - water, sporadic (intermittent) release		PNEC	10	mg/l	
Consumer	Human - oral	Short term, systemic effects	DNEL	1	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	1	mg/kg bw/d	
Consumer	Human - dermal	Short term, systemic effects	DNEL	7,2	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	7,2	mg/kg bw/d	
Consumer	Human - inhalation	Short term, local effects	DNEL	5,1	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	6,3	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	5,1	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	31	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	25	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	31	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	25	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	14,5	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	14,5	mg/kg bw/d	

Acetic acid

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	3,058	mg/l	
	Environment - marine		PNEC	0,3058	mg/l	
	Environment - periodic release		PNEC	30,58	mg/l	
	Environment - sediment, freshwater		PNEC	11,36	mg/kg dry weight	
	Environment - sediment, marine		PNEC	1,136	mg/kg dry weight	
	Environment - soil		PNEC	0,478	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	85	mg/kg dry weight	
Consumer	Human - inhalation	Short term, local effects	DNEL	25	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	25	mg/kg	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	25	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	25	mg/m3	

Silica, amorphous						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
Workers / employees	Human - inhalation	Long term, local effects	DNEL	4	mg/m3	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Protective goggles (EN 166)

Skin protection - Hand protection:
Protective hand cream recommended.
with long-term contact:
Safety gloves made of natural rubber latex (EN 374).
Permeation time (penetration time) in minutes:
> 480
Suitable are, e.g., safety gloves from KCL GmbH
Co., D-36124 Eichenzell, e-mail vertrieb@kcl.de,
following specifications:
Product name/part number:
Lapren / 706
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:
>= 0,4
Permeation time (penetration time) in minutes:
> 480
Suitable are, e.g., safety gloves from KCL GmbH
Co., D-36124 Eichenzell, e-mail vertrieb@kcl.de,
following specifications:
Product name/part number:
Dermatril / 740
The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
Normally not necessary.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Paste
Colour:	Red
Odour:	Acetic acid
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point:	>100 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	n.a.
Upper explosive limit:	n.a.
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	1,08 g/cm3 (20°C)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	n.a.
Explosive properties:	Product is not explosive.
Oxidising properties:	No

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	0 % (Organic solvents)

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Strong heat

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 28.06.2017 / 0007
Replacing version dated / version: 05.08.2016 / 0006
Valid from: 28.06.2017
PDF print date: 20.09.2017
Heat resistance silicone red 80 ml
Art.: 43181

10.5 Incompatible materials

Bases
Acid halide
Alcohols
Amines
Water

10.6 Hazardous decomposition products

In case of contact with water:
Acetic acid

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

Heat resistance silicone red 80 ml
Art.: 43181

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Methyltriacetoxysilane

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1600	mg/kg	Rat		
Symptoms:						mucous membrane irritation

Acetic acid

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3310	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	11,4	mg/l/4 h	Rat		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Corrosive
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Corrosive
Respiratory or skin sensitisation:						Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:						Negative
Symptoms:						acidosis, respiratory distress, burning of the membranes of the nose and throat, diarrhoea, disturbed heart rhythm, cornea opacity, cramps, circulatory collapse, stomach cramps, shock, nausea and vomiting.

Silica, amorphous

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		

Acute toxicity, by inhalation:	LC50	>0,139	mg/l/4 h	Rat		References, Maximum achievable concentration.
Skin corrosion/irritation:				Rabbit		Not irritant, References
Serious eye damage/irritation:				Rabbit		Not irritant, Mechanical irritation possible., References
Respiratory or skin sensitisation:				Guinea pig		Not sensitizising
Germ cell mutagenicity:						Negative
Carcinogenicity:						No indications of such an effect.
Reproductive toxicity (Developmental toxicity):						No indications of such an effect.
Symptoms:						eyes, reddened

Iron(III)oxide

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		Analogous conclusion
Skin corrosion/irritation:				Rabbit		Not irritant, Analogous conclusion, Mechanical irritation possible.
Serious eye damage/irritation:				Rabbit		Not irritant, Analogous conclusion, Mechanical irritation possible.
Symptoms:						respiratory distress, coughing, mucous membrane irritation

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Heat resistance silicone red 80 ml Art.: 43181							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.
Other information:							According to the recipe, contains no AOX.
Other information:							DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.

Acetic acid							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	75	mg/l	Lepomis macrochirus		
12.1. Toxicity to fish:	LC50	96h	88	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	>300,82	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	EC50	24h	47	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	>300,82	mg/l	Skeletonema costatum		

12.2. Persistence and degradability:		30d	>99	%			
12.2. Persistence and degradability:		20d	98	%			Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		-0,17				
12.3. Bioaccumulative potential:	BCF		<1				Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	15min	11	mg/l	Photobacterium phosphoreum		
Toxicity to bacteria:	EC5	16h	2850	mg/l	Pseudomonas putida		
Other information:	BOD5		0,88	g/g			

Silica, amorphous							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	>10000	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	24h	>10000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EL50	72h	>10000	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:							Abiotically degradable.
12.3. Bioaccumulative potential:							Not to be expected
12.4. Mobility in soil:							Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Iron(III)oxide							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Leuciscus idus		Analogous conclusion

12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to bacteria:	EC50	3h	>10000	mg/l	activated sludge	ISO 8192	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
07 02 17 waste containing silicones other than those mentioned in 07 02 16
08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. dispose at suitable refuse site.
E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:
14.3. Transport hazard class(es): n.a.
14.4. Packing group: n.a.
Classification code: n.a.
LQ: n.a.
14.5. Environmental hazards: Not applicable
Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:
14.3. Transport hazard class(es): n.a.
14.4. Packing group: n.a.
Marine Pollutant: n.a
14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
14.5. Environmental hazards:	Not applicable

14.6. Special precautions for user
Unless specified otherwise, general measures for safe transport must be followed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:
General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): 0 %

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 3, 8

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):
Not applicable

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Skin Corr. — Skin corrosion
Eye Dam. — Serious eye damage
Acute Tox. — Acute toxicity - oral

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Any abbreviations and acronyms used in this document:

AC Article Categories
acc., acc. to according, according to
ACGIH American Conference of Governmental Industrial Hygienists
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOEL Acceptable Operator Exposure Level
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
BMGV Biological monitoring guidance value (EH40, UK)
BOD Biochemical oxygen demand
BSEF Bromine Science and Environmental Forum
bw body weight
CAS Chemical Abstracts Service
CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
CIPAC Collaborative International Pesticides Analytical Council
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
COD Chemical oxygen demand
CTFA Cosmetic, Toiletry, and Fragrance Association
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
DT50 Dwell Time - 50% reduction of start concentration
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEA European Economic Area
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ERC Environmental Release Categories
ES Exposure scenario
etc. et cetera
EU European Union
EWC European Waste Catalogue
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
HET-CAM Hen's Egg Test - Chorionallantoic Membrane
HGWP Halocarbon Global Warming Potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC Intermediate Bulk Container
IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform ChemicaL Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAEL Lowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute of Occupational Safety and Health (United States of America)
NOAEC No Observed Adverse Effective Concentration
NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
NOEL No Observed Effect Level
ODP Ozone Depletion Potential
OECD Organisation for Economic Co-operation and Development
org. organic
PAH polycyclic aromatic hydrocarbon
PBT persistent, bioaccumulative and toxic
PC Chemical product category
PE Polyethylene
PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential
ppm parts per million
PROC Process category
PTFE Polytetrafluorethylene
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SADT Self-Accelerating Decomposition Temperature
SAR Structure Activity Relationship
SU Sector of use
SVHC Substances of Very High Concern
Tel. Telephone
ThOD Theoretical oxygen demand
TOC Total organic carbon
TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
WHO World Health Organization
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are
not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.