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

SCHAEFER PRECAL® - Ca(OH)2 Suspension in water **Preparation of calcium hydroxide with water**

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

Relevant identified uses of the substance or mixture:

Building material industry:
mortar, rendering
Chemical industry:
neutralisation, pH-adjustment, catalyst
Environmental protection:
flue gas treatment, waste water treatment, sludge treatment
Drinking water treatment:
pH-value, decarbonisation, softening, hardening
Uses advised against:
Biocide applications

1.3 Details of the supplier of the safety data sheet

SCHAEFER KALK GmbH & Co. KG
Louise-Seher-Strasse 6
65582 Diez
Tel.: +49-6432-503-0
Fax: +49-6432-503-269
Email: info@schaeferkalk.de

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 (SKC)
+1 872 5888271 (SKC)

SECTION 2: Hazards identification

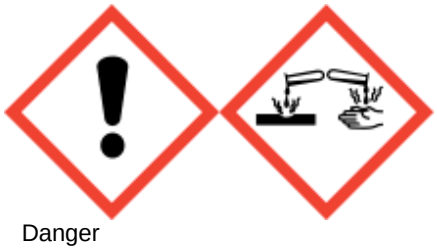
2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
STOT SE	3	H335-May cause respiratory irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Eye Dam.	1	H318-Causes serious eye damage.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H335-May cause respiratory irritation. H315-Causes skin irritation. H318-Causes serious eye damage.

P102-Keep out of reach of children.
P261-Avoid breathing vapours or spray. P280-Wear protective gloves / protective clothing / eye protection / face protection.
P302+P352-IF ON SKIN: Wash with plenty of water and soap. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310-Immediately call a POISON CENTER / doctor.
P501-Dispose of contents / container in accordance with all local, regional, national and international laws.

Calcium dihydroxide

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 %).
The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances
n.a.
3.2 Mixtures

Calcium dihydroxide	**Substance for which an EU exposure limit value applies.**
Registration number (REACH)	01-2119475151-45-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	215-137-3
CAS	1305-62-0
content %	10-50
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

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 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.
The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

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
Supply person with fresh air and consult doctor according to symptoms.
Skin contact
Carefully and gently brush the contaminated body surfaces in order to remove all traces of product.
Wash affected area immediately with plenty of water for 15 to 20 minutes. Take off contaminated clothing.
If applicable, consult doctor if necessary.
Eye contact
Rinse eyes with special adsorption solution such as, for example, Previn or any other suitable eye wash solution for at least 3 minutes or at least with one litre.
If not at hand, rinse with water for 10 minutes. If symptoms persist, repeat the procedure. Visit an ophthalmologist.
Ingestion
Wash mouth with water an drink copious quantities of water. Do not induce vomiting. Seek medical advice immediately.
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
Eye-rinse bottle
No known delayed effects. Consult a physician for all exposures except for minor instances.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
The product does not burn.
Adapt to the nature and extent of fire.
Extinction powder
Foam
CO2
Unsuitable extinguishing media
None
5.2 Special hazards arising from the substance or mixture
None
5.3 Advice for firefighters
For personal protective equipment see Section 8.
Protective respirator with independent air supply.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Keep unprotected persons away.
Ensure sufficient supply of air.
Do not breathe spray.
Avoid contact with skin an eyes.
6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.
6.2 Environmental precautions
Contain the spillage.

Avoid uncontrolled spills to watercourses and drains (pH rising).
Inform the competent authorities when water or canalisation has been infiltrated.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.
Or:
Soak up with absorbent material (e.g. universal binding agent) 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

Avoid aerosol formation.
Avoid contact with skin an eyes.
Wear protective equipment (see section8).
Separate storage of protective clothing.
Handling systems should preferably be enclosed. When handling container usual precautions should be paid to the risks outlined in the Council Directive 90/269/EEC.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
There should be an eyewash station and safety shower located near the area of use.
Do not wear contact lenses when handling this product.

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

Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Keep away from acids, significant quantities of paper, straw, and nitro compounds.
Keep out of the reach of children.
Do not use uncoated aluminium for transport or storage.

7.3 Specific end use(s)

No information available at present.
Observe the instructions for good working practice and the recommendations for risk assessment.
Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries, depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Calcium dihydroxide	
WEL-TWA: 1 mg/m3 (9) (WEL, EU)	WEL-STEL: 4 mg/m3 (9) (WEL, EU)	---
Monitoring procedures:	ISO 15202 (Workplace air - Determination of metals and metalloids in airborne particulate matter by Inductively Coupled Plasma Atomic Emission Spectrometry), Part 1-3 - 2012(Part 1), 2012(Part 2), 2004 (Part 3) - NIOSH 7020 (CALCIUM and compounds, as Ca) - 1994 - OSHA ID-121 (Metal and metalloid particulates in workplace atmospheres (Atomic absorption)) - 2002 - EU project BC/CEN/ENTR/000/2002-16 card 42-4 (2004) - OSHA PV2121 (Gravimetric Determination) - 2003	
BMGV: ---	Other information: ---	

Calcium dihydroxide

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,49	mg/l	
	Environment - soil		PNEC	1080	mg/kg dw	
	Environment - marine		PNEC	0,32	mg/l	
	Environment - sewage treatment plant		PNEC	3	mg/l	
	Environment - sporadic (intermittent) release		DMEL	0,49	mg/l	
Consumer	Human - inhalation	Short term, local effects	DNEL	4	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	4	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	1	mg/m3	

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 (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/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.
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

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:
Tight fitting protective goggles with side protection (EN 166).
Face protection (EN 166).
Do not wear contact lenses when handling this product.

Skin protection - Hand protection:
Protective nitrile gloves (EN ISO 374).
The breakthrough times determined in accordance with EN 16523-1 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).
Clothing fully covering skin.
Full length pants, long sleeved overalls, with close fittings at openings.
Wear acid-proof, resp. alkali-resistant and dust-tight shoes.

Respiratory protection:
Normally not necessary.

Thermal hazards:
If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).
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.

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:	Liquid
Colour:	White
Odour:	Odourless
Melting point/freezing point:	0 °C (water)
Boiling point or initial boiling point and boiling range:	100 °C (water)
Flammability:	Not combustible., Not flammable
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	n.a.
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	580 °C (decompostion to CaO and H2O)
pH:	12,4 (20°C, saturated solution Ca(OH)2)
Kinematic viscosity:	There is no information available on this parameter.
Solubility:	1844,9 (Regulation (EC) 440/2008 A.6. (WATER SOLUBILITY), Calcium dihydroxide)
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	2,3 kPa (20°C)
Density and/or relative density:	1,06 - 1,38 g/ml
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	There is no information available on this parameter.
Oxidising liquids:	No

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.
Avoid contact with alkali sensitive materials.
Avoid contact with strong acids (exothermic reaction possible).
10.2 Chemical stability
Stable with proper storage and handling.
10.3 Possibility of hazardous reactions
Exothermic reaction possible with:
Acids
When heated above 580°C, calcium hydroxide decomposes to produce calcium oxide (CaO) and water (H2O).
Ca(OH)2 => CaO + H2O

10.4 Conditions to avoid
None known
10.5 Incompatible materials
Calcium hydroxide reacts with carbon dioxide to form Calcium carbonate:
$Ca(OH)2 + CO2 => CaCO3 + H2O$
Calcium hydroxide reacts with acids to form Calcium salts.
Calcium hydroxide reacts with aluminium and brass in the presence of moisture under formation (or release) of hydrogen gas:
$Ca(OH)2 + 2 Al + 6 H2O => Ca[Al(OH)4]2 + 3 H2$
10.6 Hazardous decomposition products
See also section 5.2
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Possibly more information on health effects, see Section 2.1 (classification).

SCHAEFER PRECAL® - Ca(OH)2 Suspension in water				Preparation of calcium hydroxide with water		
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						The product can cause serious damage to the skin upon longer periods of contact.
Serious eye damage/irritation:						Risk of serious damage to eyes.
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.

Calcium dihydroxide						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 425 (Acute Oral Toxicity - Up-and-Down Procedure)	
Acute toxicity, by dermal route:	LD50	>2500	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:					OECD 431 (In Vitro Skin Corrosion - Human Skin Model Test)	Non-caustic
Skin corrosion/irritation:				Rabbit		Irritant, in vivo
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						breathing difficulties, abdominal pain, drowsiness, thirst, fever, sore throat, cornea opacity, coughing, headaches, mucous membrane irritation, fatigue

11.2. Information on other hazards

SCHAEFER PRECAL® - Ca(OH)2 Suspension in water				Preparation of calcium hydroxide with water		
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

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

SCHAEFER PRECAL® - Ca(OH)2 Suspension in water Preparation of calcium hydroxide with water							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	160	mg/l	Gambusia affinis		
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							No
12.4. Mobility in soil:							Calcium hydroxide reacts with carbon dioxide to form calcium carbonate, which is sparingly soluble, and so presents a low mobility in most ground.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.

Calcium dihydroxide							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	160	mg/l	Gambusia affinis	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	457	mg/l			marine water
12.1. Toxicity to fish:	LC50	96h	50,6	mg/l			freshwater
12.1. Toxicity to daphnia:	NOEC/NOEL	14d	32	mg/l			marine water
12.1. Toxicity to daphnia:	LC50	96h	158	mg/l			marine water
12.1. Toxicity to daphnia:	EC50	48h	49,1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	184,57	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	48	mg/l			freshwater
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.3. Bioaccumulative potential:							Not relevant for inorganic substances.
12.4. Mobility in soil:							Calcium dihydroxide, which is sparingly soluble, presents a low mobility in most soils.
12.5. Results of PBT and vPvB assessment							Not relevant for inorganic substances.
12.6. Endocrine disrupting properties:							Not to be expected
12.7. Other adverse effects:							pH-value of > 12 will rapidly decrease as result of dilution and carbonation., Even though this product can be used to neutralise over-acidified water, when 1g/l is exceeded organisms in the water may be affected adversely.
Toxicity to bacteria:							In high concentrations the product provokes an increase in temperature and of the pH-value. It is used to sanitise sewage sludge
Other organisms:	NOEC/NOEL		2000	mg/kg dw			soil macroorganisms
Other organisms:	NOEC/NOEL		12000	mg/kg dw			soil microorganisms
Other organisms:	NOEC/NOEL	21d	1080	mg/kg			terrestrial plants

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)
10 13 04 wastes from calcination and hydration of lime
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
For contaminated packing material
Pay attention to local and national official regulations.
Uncontaminated packaging can be recycled.

SECTION 14: Transport information

General statements
Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:	3266
14.2. UN proper shipping name:	
UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CALCIUM DIHYDROXIDE)	
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	E
Classification code:	C5
LQ:	5 L
Transport category:	3

Transport by sea (IMDG-code)

14.1. UN number or ID number:	3266
14.2. UN proper shipping name:	
UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CALCIUM DIHYDROXIDE)	
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
14.5. Environmental hazards:	Not applicable
Marine Pollutant:	Not applicable
EmS:	F-A, S-B

Transport by air (IATA)

14.1. UN number or ID number:	3266
14.2. UN proper shipping name:	
UN 3266 Corrosive liquid, basic, inorganic, n.o.s. (CALCIUM DIHYDROXIDE)	
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
14.5. Environmental hazards:	Not applicable

14.6. Special precautions for user
Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.
14.7. Maritime transport in bulk according to IMO instruments
Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with trade association/occupational health regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.
A chemical safety assessment was carried out for the following substance(s):
Calcium dihydroxide

SECTION 16: Other information

Revised sections: 1, 15

Link exposure scenarios (Annex as a separate document):
https://sichdatonline.chemical-check.de/Dokumente/714/EX/A-3_0014_04-04-2022_EN_EX.pdf

References
90/269/EWG
Booklet L64 - Safety Signs and Signals. The Health and Safety (Safety Signs and Signals) Regulation 1996 - Guidance on Regulations (HSE) - ISBN 0 7176 0870 0
IUCLID Dataset 2000
Merck Index (Ed. Merck & Co, Rahway, USA)
Employee training in handling dangerous goods is required.
These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
STOT SE 3, H335	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.

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).
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
Skin Irrit. — Skin irritation
Eye Dam. — Serious eye damage

Key literature references and sources for data:
Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate
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
BSEF The International Bromine Council
bw body weight
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
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)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
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 for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
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)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
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.
These statements were made by:
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