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

Trade name : Lithofin KF Shower Cabin Cleaner

Revision date : 16.11.2023 **Version (Revision) :** 6.0.8 (6.0.7)
Print date : 14.12.2023

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

1.1 Product identifier
Lithofin KF Shower Cabin Cleaner

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses
Mixture Washing and cleaning products, acidic

1.3 Details of the supplier of the safety data sheet

Distributor :	Casdron Enterprises Ltd.
Street :	Wood End, Prospect Road
Postal code/City :	New Alresford, Hants SO 24 9QF
Land :	GREAT BRITAIN
Telefone :	+44 1962 732126
Telefax :	+44 1962 735373
Contact :	Technical Department
E-mail :	sales@lithofin.co.uk
Emergency telephone number :	**+44 1962 732126** (Only available during office hours)
Supplier :	Lithofin AG
Street :	Heinrich-Otto-Str. 36
Postal code/City :	73240 Wendlingen
Country :	GERMANY
Telefone :	+49 7024 9403 0
Telefax :	+49 7024 9403 40
Contact :	Technical Department
E-mail :	info@lithofin.de
Emergency telephone number :	**+49 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]
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
Additional information
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
Remark
For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms

Exclamation mark (GHS07)

Signal word

Warning

Hazard statements

H319	Causes serious eye irritation.

Precautionary statements

P102	Keep out of reach of children.
P280	Wear eye/face protection.
P337+P313	If eye irritation persists: Get medical advice/attention.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with local and national regulations.

Other labelling

2.3 Other hazards

Adverse environmental effects

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

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

2.4 Additional information

see section 12.5

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

CITRIC ACID ; REACH No. : 01-2119457026-45-xxxx ; EC No. : 201-069-1; CAS No. : 77-92-9

Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Eye Irrit. 2 ; H319 STOT SE 3 ; H335

ETHANOL ; REACH No. : 01-2119457610-43-xxxx ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319
Specific Conc. Limits :	Eye Irrit. 2 ; H319: C ≥ 50 %

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; REACH No. : Polymer ; CAS No. : 69011-36-5

Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Eye Dam. 1 ; H318 Acute Tox. 4 ; H302
Specific Conc. Limits :	Eye Dam. 1 ; H318: C ≥ 10 %

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; REACH No. : Polymer ; CAS No. : 69011-36-5

Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Eye Irrit. 2 ; H319 Aquatic Chronic 3 ; H412

Contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH

None (below the concentration limit)

Contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH

None (below the concentration limit)

Additional information

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

For full text of Hazard- and EU Hazard-statements: 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 but breathing normally, 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. 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.

Following 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

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 jet 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)

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. Co-ordinate 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

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) : 10
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

CITRIC ACID ; CAS No. : 77-92-9
Limit value type (country of origin) : KZG (D)
Parameter : E: inhalable fraction

Limit value : 4 mg/m³
Remark : SSc
Version :

Limit value type (country of origin) : MAK (D)
Parameter : E: inhalable fraction
Limit value : 2 mg/m³
Remark : SSc
Version :

Limit value type (country of origin) : TRGS 900 (D)
Parameter : E: inhalable fraction
Limit value : 2 mg/m³
Peak limitation : 2(I)
Remark : Y
Version : 23.06.2022

ETHANOL ; CAS No. : 64-17-5

Limit value type (country of origin) : KZG (D)
Limit value : 1000 ppm / 1920 mg/m³
Remark : SSc
Version :

Limit value type (country of origin) : MAK (D)
Limit value : 500 ppm / 960 mg/m³
Remark : SSc
Version :

Limit value type (country of origin) : TRGS 900 (D)
Limit value : 200 ppm / 380 mg/m³
Peak limitation : 4(II)
Remark : Y
Version : 23.06.2022

DNEL-/PNEC-values

DNEL/DMEL

ETHANOL ; CAS No. : 64-17-5

Limit value type : DNEL Consumer (local)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 950 mg/m³

Limit value type : DNEL Consumer (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 206 mg/kg/d

Limit value type : DNEL Consumer (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 114 mg/m³

Limit value type : DNEL Consumer (systemic)
Exposure route : Oral
Exposure frequency : Long-term
Limit value : 87 mg/kg/d

Limit value type : DNEL worker (local)
Exposure route : Inhalation
Exposure frequency : Short-term
Limit value : 1900 mg/m³

Limit value type : DNEL worker (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 343 mg/kg/d

Limit value type : DNEL worker (systemic)
Exposure route : Inhalation

Exposure frequency : Long-term
Limit value : 950 mg/m³

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5
Limit value type : DNEL Consumer (systemic)
Exposure route : Oral
Exposure frequency : Long-term
Limit value : 25 mg/kg
Limit value type : DNEL Consumer (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 1250 mg/kg
Limit value type : DNEL Consumer (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 87 mg/m³
Limit value type : DNEL worker (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 2080 mg/kg
Limit value type : DNEL worker (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 294 mg/m³

PNEC

CITRIC ACID ; CAS No. : 77-92-9
Limit value type : PNEC (Aquatic, freshwater)
Limit value : 440 mg/l
Limit value type : PNEC (Sediment, freshwater)
Limit value : 7,52 mg/kg
Limit value type : PNEC (Sediment, marine water)
Limit value : 0,752 mg/kg

ETHANOL ; CAS No. : 64-17-5
Limit value type : PNEC (Aquatic, freshwater)
Limit value : 0,96 mg/l
Limit value type : PNEC (Aquatic, intermittent release)
Limit value : 2,75 mg/l
Limit value type : PNEC (Aquatic, marine water)
Limit value : 0,79 mg/l
Limit value type : PNEC (Sediment, freshwater)
Limit value : 3,6 mg/kg/d
Limit value type : PNEC (Sediment, marine water)
Limit value : 2,9 mg/kg/d
Limit value type : PNEC (Soil)
Limit value : 0,63 mg/kg
Limit value type : PNEC (Sewage treatment plant)
Limit value : 580 mg/l

Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5
Limit value type : PNEC (Aquatic, freshwater)
Limit value : 0,074 mg/l
Limit value type : PNEC (Aquatic, intermittent release)
Limit value : 0,015 mg/l
Limit value type : PNEC (Aquatic, marine water)
Limit value : 0,0074 mg/l
Limit value type : PNEC (Sediment, freshwater)
Limit value : 0,604 mg/kg
Limit value type : PNEC (Sediment, marine water)
Limit value : 0,0604 mg/kg
Limit value type : PNEC (Soil)

Limit value :	0,1 mg/kg
Limit value type :	PNEC (Sewage treatment plant)
Limit value :	1,4 mg/l

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation of the storage area.
Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protection equipment

Eye/face protection

Usually no personal eye/face protection necessary. Eye/face protection necessary at: Splashes, Contact with eyes, Spray application.

Suitable eye protection

Eye glasses with side protection goggles

Required properties

EN 166

Skin protection

Usually no personal skin protection necessary. Skin protection necessary at: Splashes, Contact with skin, Spray application.

Hand protection

Suitable gloves type : Gloves with long cuffs

Suitable material : NBR (Nitrile rubber), 0,4mm, >8h; Butyl caoutchouc, 0,5mm, >8h; FKM (fluoro rubber), 0,7mm, >8h;

Required properties : EN ISO 374

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. : EN 13034 EN 14605
Chemical resistant safety shoes : EN ISO 20345

Remark : Barrier creams are not substitutes for body protection.

Respiratory protection

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

Suitable respiratory protection apparatus

Full-/half-/quarter-face masks (EN 136/140) Combination filtering device (EN 14387) ABEK-P1 (EN14387)

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 information

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. When using do not eat, drink, smoke, sniff. 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 : fruity

Safety characteristics

Melting point/freezing point :	(1013 hPa)	approx.	-2	°C	
Initial boiling point and boiling range :	(1013 hPa)	approx.	97	°C	
Decomposition temperature :	(1013 hPa)		not determined		
Flash point :		approx.	98	°C	closed cup (EN ISO 3679)
Auto-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)		1,02	g/cm³	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)	approx.	12	s	ISO cup 4 mm (DIN EN ISO 2431)
Odour threshold :			not determined		
Vapourisation rate :			not determined		
VOC content-EC			2,8	Weight-%	*
VOC content-EC			28	g/l	*
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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Acute oral toxicity

Parameter :	LD50 (CITRIC ACID ; CAS No. : 77-92-9)
Exposure route :	Oral
Species :	Rat
Effective dose :	3000 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	10470 mg/kg
Method :	OECD 401
Parameter :	LD50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 300 - 2000 mg/kg
Method :	OECD 423
Parameter :	LD50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg

Acute dermal toxicity

Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 2000 mg/kg
Method :	OECD 402
Parameter :	LD50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 402
Parameter :	LD50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 402

Acute inhalation toxicity

Parameter :	LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	124,7 mg/l
Exposure time :	4 h

Specific effects (Longterm animal experiment)

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

Corrosion

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

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
Based on available data, the classification criteria are not met.
Germ cell mutagenicity
Based on available data, the classification criteria are not met.
Reproductive toxicity
Based on available data, the classification criteria are not met.

STOT-single exposure
Based on available data, the classification criteria are not met.

STOT-repeated exposure
Based on available data, the classification criteria are not met.

Aspiration hazard
Based on available data, the classification criteria are not met.

11.2 Information on other hazards
No information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity
Based on available data, the classification criteria are not met.

Chronic (long-term) toxicity to aquatic invertebrate

Parameter :	NOEC (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Species :	Chronic (long-term) toxicity to aquatic invertebrate
Effective dose :	> 1 mg/l
Exposure time :	21 day(s)
Method :	OECD 202

Acute (short-term) toxicity to algae and cyanobacteria

Parameter :	EC50 (CITRIC ACID ; CAS No. : 77-92-9)
Species :	Daphnia
Effective dose :	120 mg/l
Exposure time :	72 h
Parameter :	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species :	Daphnia
Effective dose :	> 10000 mg/l
Exposure time :	48 h
Parameter :	EC50 (ETHANOL ; CAS No. : 64-17-5)
Species :	Algae
Effective dose :	5000 mg/l
Exposure time :	7 D
Parameter :	EC50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Species :	Daphnia
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h
Parameter :	EC50 (Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched ; CAS No. : 69011-36-5)
Species :	Daphnia
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h

Sewage treatment plant
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 surfactants contained in this mixture comply 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

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

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

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

12.8 Additional ecotoxicological information

Additional information

The product has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of waste according to applicable legislation.
Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

Waste code (EWC/AVV) : 06 01 06* (other acids)

After intended use

Do not allow to enter into surface water or drains. Non-contaminated packages may be recycled. Packing which cannot be properly cleaned must be disposed of. Delivery to an approved waste disposal company.

Disposal operations

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

Waste codes/waste designations according to EWC/AVV

Waste code packaging: 15 01 10*

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 or ID number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

14.6 Special precautions for user

None

14.7 Maritime transport in bulk according to IMO instruments

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 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL 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

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Use restriction according to REACH annex XVII, no. : 3, 40, 75

Restrictions of occupation

Observe restrictions to employment for juveniles 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 (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer

Not listed/not relevant.
Contains the following substances that deplete the ozone layer: -

Regulation (EC) 2019/1021 [POP Regulation]

Not listed/not relevant.
Name of the persistent organic pollutant (POP): -

Regulation (EU) 2019/1148 (marketing and use of explosives precursors)

Not listed/not relevant.

Regulation (EU) 649/2012 (PIC)

Not listed/not relevant.
Chemicals qualifying for PIC notification: -

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

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

Other regulations, restrictions and prohibition regulations

Switzerland

VOCV-Regulation

Maximum VOC content (Switzerland) : 2,8 Weight-% according to VOCV

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

16.1 Indication of changes

15. Water hazard 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 Abstracts 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
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 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
ECHA: Registered substances (https://echa.europa.eu/information-on-chemicals/registered-substances)
REACH Article 59: Candidate List of substances of very high concern for Authorisation (https://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)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

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.