Safety Data Sheet (SDS)

Issue date : 19. 11. 2018 (Ver.1.0)

Last revision : 31. 01. 2025(Ver.3.0)

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

1.1. Product identifier

Trade Name : S-OIL 7 SUPER COOLANT

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

Type of use : Coolant / Antifreeze

1.3. Details of the supplier of the safety data sheet

Manufacturer / Supplier : KD Finechem Co., Ltd

Address : 286, Pyeongtaekhang-ro, Poseung-eup, Pyeongtaek-si, Gyeonggi-do, Republic of Korea

Competent person responsible for the safety data sheet

E-mail : yc0103@kdfinechem.com (https://www.kdfinechem.com)

1.4. Emergency telephone number

TEL. (KR) +82-31-680-0505 (SK) +421 911 888 0509

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

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

1) Physicochemcal : Not Classified

2) Health hazards :

Acute toxicity (Oral) : Category 4 (H302)

Specific target organ toxicity following repeat exposure : Category 2 (H373)

3) Environmental hazards : Not Classified

2.2 Label elements

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

1) Pictogram : GHS07, GHS08

2) Signal Word : Warning

3) Hazard Statement(s)

H302 : Harmful if swallowed.

H373 : May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

4) Precautionary Statement(s)

Precautionary

P260 : Do not breathe vapours/spray.

P264 : Wash Hands thoroughly after handling.

P270 : Do no eat, drink or smoke when using this product.

Response

P301+P312 : IF SWALLOWED: Call a POISON CENTER/ doctor/…/ if you feel unwell.

P314 : Get medical advice/attention if you feel unwell.

P330 : Rinse mouth.

Storage

Not Classified

Disposal

P501 : Dispose of contents and container in accordance with applicable regulations.

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

Hazard determining component(s) for labelling: ETHYLENE GLYCOL (ethanediol)

2.3 Other hazards.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3 Composition/information on ingredients

3.2. Mixtures

Substance name	Product identifier	Content in % weight	Classification
1. ETHYLENE GLYCOL	CAS No. : 107-21-1 EC List no: 203-473-3 Index: 603-027-00-1 REACH Registration No. : 01-2119456816-28	90 ~ 94 %	Acute Tox. 4 / H302 STOT RE 2 / H373
2. WATER	CAS No. : 7732-18-5 EC List no: 231-791-2 REACH Registration No. : Exemption according to annex V of (EC) No. 1907/2006	3 ~ 7 %	Not Classified
3. Orthophosphoric acid	CAS No. : 7664-38-2 EC List no: 231-633-2 REACH Registration No. : 01-2119493919-15	1 ~ 2 %	Met. Corr. 1 / H290 Acute Tox. 4 / H302 Skin Corr. 1B / H314 Eye Dam. 1 / H318
4. Potassium hydroxide	CAS No. : 1310-58-3 EC List no: 215-181-3 Index: 019-002-00-8 REACH Registration No. : 01-2119487136-33	1 ~ 2 %	Skin Corr. 1A / H314 Acute Tox. 4 / H302

For full text of abbreviations: see SECTION 16

SECTION 4 First aid measures

4.1 Description of first aid measures

General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower.

In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Rinse cautiously with water for several minutes.

In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth with water (only if the person is conscious).

Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Fatigue, Vertigo, Agitation, Diarrhoea, Vomiting, Nausea, Unconsciousness

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5 Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dr extinguishing powder.

BC-powder, carbon dioxide (CO_2)

Unsuitable extinguishing media

water jet

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO_2)

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Fight fire with normal precautions from a reasonable distance.

Wear self-contained breathing apparatus.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid contact with skin, eyes and clothes.

Do not breathe vapour/spray.

6.2. Environmental precautions

Keep away from drains, surface and ground water.

6.3. Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal.

6.4. Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Provision of sufficient ventilation.

Advice on general occupational hygiene

Wash hands before breaks and after work.

Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a dry place. Hygroscopic.

Incompatible substances or mixtures

Observe hints for combined storage.

Protect against external exposure, such as

humidity

Consideration of other advice:

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 ° C

7.3 Specific end uses

Recommendations : Coolant and antifreeze.

Industrial sector specific solutions : No data available.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

Exposure limit value

1. ETHYLENE GLYCOL

Occupational exposure limit values (Workplace Exposure Limits)

Country	Substance	CAS No.	Identifier	TWA (ppm)	TWA (mg/m³)	STEL (ppm)	STEL (mg/m³)	Ceiling-C (ppm)	Ceiling-C (mg/m³)	Notation	Source
EU	ethylene glycol	107-21-1	IOELV	20	52	40	104			H	2000/39/EC
GB	ethane-1,2-diol	107-21-1	WEL		10					particle	EH40/2005
GB	ethane-1,2-diol	107-21-1	WEL	20	52	40	104			vap	EH40/2005
IE	ethane-1,2-diol	107-21-1	OELV	20	52	40	104			vap	S.I. No.619 of 2001

*H = Absorbed through the skin

*Ceiling-C = Ceiling value is a limit value above which exposure should not occur

*STEL = Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15 period (unless otherwise specified)

* TWA =TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a referenc period of
8 hours time-weighted average (unless otherwise specified)

*vap = As vapours

*particle = As airborne particles

DNELs (Derived no effect levels) :

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	35 mg/m³	Human, INHALATION	Worker (industry)	Long-term Local Effects
DNEL	106 mg/kg	Human, Dermal	Worker (industry)	Long-term Systemic Effects
DNEL	7 mg/m³	Human,INHALATION	GENERAL POPULATION	Long-term Local Effects
DNEL	53 mg/kg	Human, Dermal	GENERAL POPULATION	Long-term Systemic Effects

PNECs (Predicted no effect concentrations) :

Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	10 mg/L	aquatic organisms	Freshwater	short-term (single instance)
PNEC	1 mg/L	aquatic organisms	Marine water	short-term (single instance)
PNEC	199,5 mg/L	aquatic organisms	Sewage treatment plant (STP)	short-term (single instance)
PNEC	37 mg/kg	aquatic organisms	Freshwater sediment	short-term (single instance)
PNEC	3,7 mg/kg	aquatic organisms	Marine sediment	short-term (single instance)
PNEC	1,53 mg/kg	terrestrial organisms	Soil	short-term (single instance)

2. WATER

Occupational exposure limit values (Workplace Exposure Limits)

No Data available

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

3. Orthophosphoric acid

Occupational exposure limit values (Workplace Exposure Limits)

Country	Substance	CAS No.	Identifier	TWA (ppm)	TWA (mg/m³)	STEL (ppm)	STEL (mg/m³)	Ceiling-C (ppm)	Ceiling-C (mg/m³)	Notation	Source
EU	ethylene glycol	107-21-1	IOELV		1		2				2000/39/EC
GB	ethane-1,2-diol	107-21-1	WEL		1		2				EH40/2005
IE	ethane-1,2-diol	107-21-1	OELV		1		2				S.I. No.619 of 2001

DNELs (Derived no effect levels) :

No data available

PNECs (Predicted no effect concentrations) :

No data available

4. Potassium hydroxide

Occupational exposure limit values (Workplace Exposure Limits)

Country	Substance	CAS No.	Identifier	TWA (ppm)	TWA (mg/m³)	STEL (ppm)	STEL (mg/m³)	Ceiling-C (ppm)	Ceiling-C (mg/m³)	Notation	Source
GB	Potassium hydroxide	1310-58-3	WEL				2			particle	EH40/2005
IE	Potassium hydroxide	1310-58-3	OELV				2			particle	S.I. No. 619 of 2001

DNELs (Derived no effect levels) :

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	1 mg/m³	Human, INHALATION	Worker (industry)	Long-term Local Effects
DNEL	1 mg/m³	Human, INHALATION	GENERAL POPULATION	Long-term Local Effects

PNECs (Predicted no effect concentrations) :

No data available

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

Hands protection

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

For special purposes, it is recommended to check the resistance to chemicals of the protective glove mentioned
above together with the supplier of these gloves.

The times are approximate values from measurements at 22 ° C and permanent contact.
Increased temperatures due to heated substances, body heat etc. and a reduction of the effective laye thickness by
stretching can lead to a considerable reduction of the breakthrough time.

If in doubt, contact manufacturer.

At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved.

Type of material

NBR (Nitrile rubber)

Material thickness

>0,3 mm

Breakthrough times of the glove material

>480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration.

Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Respiratory protection necessary at: Aerosol or mist formation.

Type: A (against organic gases and vapours with a boiling point of > 65 ° C , colour code: Brown).

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid,
Color	Red
Odor	odorless
Melting Point / Freezing Point	- 13℃
Boiling point or initial boiling point and boiling range	> 100℃
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	3.2 ~ 15.3% (Ethylene Glycol)
Flash point	> 111℃
Auto-ignition temperature	398℃ (Ethylene Glycol)
Decomposition temperature	No data available
pH	7.0 ~ 9.0
Kinematic viscosity	No data available
Solubility (in water)	Soluble
Partition coefficient n-octanol/water (log value)	-1.36 (Log Kow)
Vapour pressure	7 Pa(20℃) (Ethylene Glycol)

Density and/or relative density	1.120 ~ 1.150 g/cm³ at 20 ° C
Relative vapour density	(Air=1) : 2.14 (Ethylene Glycol)
Particle characteristics	No data available

9.2. Other information

No data available

SECTION 10 Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

If heated : Vapours may form explosive mixtures with air.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature ar pressure

10.3 Possibility of hazardous reactions

Exothermic reaction with: Sulphuric acid, Alkali hydroxide (caustic alkali), Aluminium, Nitric acid,

Risk of ignition: Chlorates, Permanganates, Peroxides, strong oxidiser

10.4 Conditions to avoid

Protect from moisture. Keep away from heat.

10.5 Incompatible materials

aluminium, zinc

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

SECTION 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Classification according to GHS (1272/2008/EC, CLP)

1. ETHYLENE GLYCOL

Acute toxicity

Oral : LD50 7712 mg/kg bw / Rat male, female

Inhalation : No data available

Dermal : LD50 > 3500 mg/kg bw / Mouse male, female

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

May cause damage to organs (kidney) through prolonged or repeated exposure (if swallowed).

Hazard category	Target organ	Exposure route
2	kidney	if swallowed

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

diarrhoea, vomiting, nausea, Liver and kidney damage

If in eyes

essentially non-irritating

If inhaled

Data are not available.

If on skin

essentially non-irritating

Other information

Other adverse effects: Loss of righting reflex, and ataxia, Unconsciousness, Drowsiness, Agitation

2. WATER

Acute toxicity

Oral : LD50 90000㎎/㎏ Rat

Inhalation : No data available

Dermal : No data available

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

Data are not available.

If in eyes

Data are not available.

If inhaled

Data are not available.

If on skin

Data are not available.

Other information

Data are not available.

3. Orthophosphoric acid

Acute toxicity

Oral : LD50 Oral - Rat - male - 300 ~ 2000 mg/kg

Inhalation : No data available

Dermal : LD50 Dermal - Rat - male and female - > 2 740 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

If in eyes

causes burns, Causes serious eye damage, risk of blindness

If inhaled

cough, pain, choking, and breathing difficulties

If on skin

causes severe burns, causes poorly healing wounds

Other information

Data are not available.

4. Potassium hydroxide

Acute toxicity

Oral : LD50 333 mg/kg Rat (OECD TG 425)

Inhalation : No data available

Dermal : No data available

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

If in eyes

causes burns, Causes serious eye damage, risk of blindness

If inhaled

Inhalation of dust may cause irritation of the respiratory system, cough, pain, choking, and breathing difficul

If on skin

causes severe burns, causes poorly healing wounds

Other information

Data are not available.

11.2 Endocrine disrupting properties

Not listed.

11.3 Information on other hazards

There is no additional information.

SECTION 12 Ecological information

12.1 Toxicity

1. ETHYLENE GLYCOL

Fishes : LC50 72860mg/L 96hr Pimephales promelas

Aquatic invertebrates : LC50 MIN 100mg/L 48hr Daphnia magna(OECD Guideline 202, GLP)

Aquatic algae and cyanobacteria : EC50 6500~13000mg/L 96hr (Pseudokirchnerella subcapitata, EPA 600/9-78-018)

2. WATER

Fishes : No data available

Aquatic invertebrates : No data available

Aquatic algae and cyanobacteria : No data available

3. Orthophosphoric acid

Fishes : LC50 75.1 mg/L 96 hr Oryzias latipes

Aquatic invertebrates : EC50 100 mg/L 48 hr Daphnia magna

Aquatic algae and cyanobacteria : EC50 > 100 mg/L 72 hr Desmodesmus subspicatus

4. Potassium hydroxide

Fishes : LC50 - 165 mg/L - 24 h

Aquatic invertebrates : No data available

Aquatic algae and cyanobacteria : No data available

12.2 Persistence and Degradability

1. ETHYLENE GLYCOL

Theoretical Oxygen Demand: 1,29 g/g

Theoretical Carbon Dioxide: 1,418 mg/mg

Biochemical Oxygen Demand: 0,78 g/g

Process of degradability

biotic/abiotic : 83 - 96 %(14d)

DOC removal : 90 - 100 %(10d)

2. WATER

No data available

3. Orthophosphoric acid

No data available

4. Potassium hydroxide

No data available

12.3 Bioaccumulative potential

1. ETHYLENE GLYCOL

Does not significantly accumulate in organisms. n-octanol/water (log KOW) : -1,36 (ECHA)

2. WATER

No data available

3. Orthophosphoric acid

No data available

4. Potassium hydroxide

No data available

12.4 Mobility in Soil

1. ETHYLENE GLYCOL : Henryho konstanta 0,013 Pa m^3 /mol at 25 ° C (ECHA)

2. WATER : No data available.

3. Orthophosphoric acid : No data available.

4. Potassium hydroxide : No data available.

12.5 Result of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Not listed.

12.7 Other adverse effects

Data are not available.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

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

Product / Packaging disposal

Product

Hazardous waste: Yes

European waste catalogue (EWC)

Waste code : 16 01 14*

Waste designation : antifreeze fluids containing hazardous substances

Must be disposed of or incinerated in accordance with local regulations.

Packaging

Contaminated packaging: Uncontaminated packaging can be reused.

Packs that cannot be cleaned should be disposed of in the same manner as the contents

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to industry and process.

Waste catalogue ordinance (Germany).

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national wast management
facilities. Please consider the relevant national or regional provisions.

SECTION 14 Transport information

14.1 UN number

ADR/RID: Not assigned IMDG: Not assigned IATA: Not assigned

14.2 UN proper shipping name

ADR/RID: Not assigned IMDG: Not assigned IATA: Not assigned

14.3. Transport hazard class(es)

ADR/RID: Not assigned IMDG: Not assigned IATA: Not assigned

14.4. Packing group

ADR/RID: Not assigned IMDG: Not assigned IATA: Not assigned

14.5. Environmental hazards

ADR/RID: Not assigned IMDG: Not assigned IATA: Not assigned

14.6. Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15 Regulatory Information

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

1. Ethylene Glycol

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Entry 3 (https://echa.europa.eu/substances-restricted-under-reach)

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed

Seveso Directive 2012/18/EU (Seveso III)

Not listed

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not listed

Water Framework Directive (WFD)

Not listed

Regulation on the marketing and use of explosives precursors

Not listed

Regulation on drug precursors

Not listed

Regulation on substances that deplete the ozone layer (ODS)

Not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

Not listed

Regulation on persistent organic pollutants (POP)

Not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Not listed

Restrictions according to GB REACH, Annex 17

Entry 3 (https://www.hse.gov.uk/reach/restrictions.htm)

Other information

Directive 94/33/EC on the protection of young people at work.

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing m

2. Water

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Not listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed

Seveso Directive 2012/18/EU (Seveso III)

Not listed

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not listed

Water Framework Directive (WFD)

Not listed

Regulation on the marketing and use of explosives precursors

Not listed

Regulation on drug precursors

Not listed

Regulation on substances that deplete the ozone layer (ODS)

Not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

Not listed

Regulation on persistent organic pollutants (POP)

Not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Not listed

Restrictions according to GB REACH, Annex 17

Not listed

Other information

Directive 94/33/EC on the protection of young people at work.

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing m

3. Orthophosphoric acid

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Not listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed

Seveso Directive 2012/18/EU (Seveso III)

Not listed

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not listed

Water Framework Directive (WFD)

Not listed

Regulation on the marketing and use of explosives precursors

Not listed

Regulation on drug precursors

Not listed

Regulation on substances that deplete the ozone layer (ODS)

Not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

Not listed

Regulation on persistent organic pollutants (POP)

Not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Not listed

Restrictions according to GB REACH, Annex 17

Not listed

Other information

Directive 94/33/EC on the protection of young people at work.

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing m

4. Potassium hydroxide

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Entry 75 (https://echa.europa.eu/substances-restricted-under-reach)

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not listed

Seveso Directive 2012/18/EU (Seveso III)

Not listed

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not listed

Water Framework Directive (WFD)

Name of substance	Name acc. to inventory	CAS No.	Listed in	Remarks
Potassium hydroxide	7. Metals and their compounds		a)	

a) Directive 2000/60/EC ANNEX VIII INDICATIVE LIST OF THE MAIN POLLUTANTS

Regulation on the marketing and use of explosives precursors

Not listed

Regulation on drug precursors

Not listed

Regulation on substances that deplete the ozone layer (ODS)

Not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

Not listed

Regulation on persistent organic pollutants (POP)

Not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Not listed

Restrictions according to GB REACH, Annex 17

Entry 75 (https://www.hse.gov.uk/reach/restrictions.htm)

Other information

Directive 94/33/EC on the protection of young people at work.

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing m

National inventories

Country	Inventory	Status				Remarks
		1. Ethylene Glycol	2. Water	3. Orthophos -phoric acid	4. Potassium hydroxide	
AU	AIIC	Listed	Listed	Listed	Listed	
CA	DSL	Listed	Listed	Listed	Listed	
CN	IECSC	Listed	Listed	Listed	Listed	
EU	ECSI	Listed	Listed	Listed	Listed	
EU	REACH REG.	Listed	Listed	Listed	Listed	
JP	CSCL-ENCS	Listed	Listed	Listed	Listed	
KR	KECI	Listed	Listed	Listed	Listed	
MX	INSQ	Listed	Listed	Listed	Listed	
NZ	NZIOC	Listed	Listed	Listed	Listed	
PH	PICCS	Listed	Listed	Listed	Listed	
TR	CICR	Listed	Listed	Listed	Listed	
TW	TCSI	Listed	Listed	Listed	Listed	
US	TSCA	Listed	Listed	Listed	Listed	

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16 Other Information

Key literature references and sources for data

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

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

List of relevant phrases (code and full text as stated in section 2 and 3)

H290 : May be corrosive to metals

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

H318 : Causes serious eye damage

H373 : May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Disclaimer

This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.