

# SAFETY DATA SHEET

According to REACH etc. (Amendment etc.) (EU Exit) Regulations  
2019

**schülke** 

**thermodent® alka clean**

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Version  
03.07

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

### 1.1 Product identifier

Trade name : thermodent® alka clean  
Unique Formula Identifier (UFI) : 3V90-D067-X00R-WTUH

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

Use of the Sub-stance/Mixture : Cleaning agent  
Recommended restrictions on use : Restricted to professional users.

### 1.3 Details of the supplier of the safety data sheet

Producer : Schülke & Mayr GmbH  
Robert-Koch-Str. 2  
22851 Norderstedt  
Germany  
Telephone: +49 (0)40/ 52100-0  
Telefax: +49 (0)40/ 52100318  
mail@schuelke.com  
www.schuelke.com

Supplier : Schülke & Mayr UK Ltd.  
Cygnet House  
1, Jenkin Road, Meadowhall  
Sheffield S9 1AT  
United Kingdom  
Telephone: +44 114 254 35 00  
Telefax: +44 114 254 35 01  
mail.uk@schulke.com

E-mail address of person responsible for the SDS/Contact person : Application Specialists  
+49 (0)40/ 521 00 666  
AD@schuelke.com  
(Schülke & Mayr UK Ltd.: +44-1142543500)

### 1.4 Emergency telephone number

Emergency telephone number : Carechem 24 International:+44 1235 239670

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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)**

Skin irritation, Category 2

H315: Causes skin irritation.

Eye irritation, Category 2

H319: Causes serious eye irritation.

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)**

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P280 Wear protective gloves/ eye protection.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

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**Components**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
trisodium nitrilotriacetate	5064-31-3 225-768-6 607-620-00-6 01-2119519239-36-XXXX	Acute Tox. 4; H302 Eye Irrit. 2; H319 Carc. 2; H351  specific concentration limit Carc. 2; H351 ≥ 5 %	≥ 1 - < 5
sodium p-cumenesulphonate	15763-76-5 239-854-6 - - - 01-2119489411-37-XXXX	Eye Irrit. 2; H319	≥ 1 - < 10
potassium hydroxide	1310-58-3 215-181-3 019-002-00-8 01-2119487136-33-XXXX	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318  specific concentration limit Skin Corr. 1A; H314 ≥ 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0.5 - < 2 % Eye Irrit. 2; H319 0.5 - < 2 %	≥ 1 - < 2
sodium etasulfate	126-92-1 204-812-8 - - - 01-2119971586-23-XXXX	Skin Irrit. 2; H315 Eye Dam. 1; H318  specific concentration limit Eye Irrit. 2; H319 > 10 - < 20 % Eye Dam. 1; H318 > 20 %	≥ 1 - < 3
<b>Substances with a workplace exposure limit :</b>			
glycerol	56-81-5 200-289-5 - - - - - -		≥ 1 - < 10

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For explanation of abbreviations see section 16.

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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.
- If inhaled : If symptoms persist, call a physician.
- In case of skin contact : Wash off immediately with soap and plenty of water.  
If symptoms persist, call a physician.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty  
of water and seek medical advice.
- If swallowed : Rinse mouth with water.  
Give small amounts of water to drink.  
Consult a physician if necessary.

### 4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Treat symptomatically.
- Risks : Causes skin irritation.  
Causes serious eye irritation.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons  
Information Service.
- 

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Dry powder  
Carbon dioxide (CO<sub>2</sub>)  
Water spray jet  
Foam
- Unsuitable extinguishing media : Do NOT use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : No information available.
- Hazardous combustion products : No hazardous combustion products are known

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## 5.3 Advice for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus for firefighters

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

### 6.2 Environmental precautions

Environmental precautions : Avoid subsoil penetration.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### 6.4 Reference to other sections

see Section 8 + 13

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Never mix concentrates directly.

Advice on protection against fire and explosion : No special protective measures against fire required.

Hygiene measures : Keep away from food and drink.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.

Further information on storage conditions : Keep away from heat. Keep away from direct sunlight. Keep container tightly closed. Recommended storage temperature: -5 - 25°C

Advice on common storage : Do not store together with explosive, infectious and radioactive products.

### 7.3 Specific end use(s)

Specific use(s) : none

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
glycerol	56-81-5	TWA (Mist)	10 mg/m <sup>3</sup>	GB EH40
potassium hydroxide	1310-58-3	STEL	2 mg/m <sup>3</sup>	GB EH40

#### Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
trisodium nitrilotriacetate	Workers	Inhalation	Short-term exposure, Systemic effects, Local effects	5.25 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term exposure, Systemic effects, Local effects	3.5 mg/m <sup>3</sup>
sodium p-cumenesulphonate	Workers	Skin contact	Long-term systemic effects	136.25 mg/kg
	Workers	Skin contact	Long-term local effects	0.096 mg/cm <sup>2</sup>
potassium hydroxide	Workers	Inhalation	Long-term systemic effects	26.9 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local effects	1 mg/m <sup>3</sup>
sodium etasulfate	Workers	Skin contact	Long-term systemic effects	4060 mg/kg
	Workers	Inhalation	Long-term systemic effects	285 mg/m <sup>3</sup>

#### Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
trisodium nitrilotriacetate	Fresh water	0.93 mg/l
	Marine water	0.093 mg/l
	Fresh water sediment	3.64 mg/kg
	Marine sediment	0.364 mg/kg
	Sewage treatment plant	540 mg/l
	Intermittent use/release	0.915 mg/l
sodium p-cumenesulphonate	Soil	0.182 mg/kg
	Fresh water	0.23 mg/l
	Marine water	0.023 mg/l
	Intermittent use/release	2.3 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	0.862 mg/kg
sodium etasulfate	Marine sediment	0.0862 mg/kg
	Soil	0.037 mg/kg
	Fresh water	0.136 mg/l
	Marine water	0.0136 mg/l
	Fresh water sediment	1.5 mg/kg

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	Marine sediment	0.15 mg/kg
	Soil	0.22 mg/kg
	Effects on waste water treatment plants	1.35 mg/l

### 8.2 Exposure controls

#### Personal protective equipment

- Eye/face protection : Safety glasses with side-shields conforming to EN166
- Hand protection  
Directive : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
- Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protection.
- Skin and body protection : Work uniform or laboratory coat.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Protective measures : Avoid contact with skin and eyes.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : nearly colourless
- Odour : characteristic
- Odour Threshold : not determined
- pH : 12 - 12.8 (20 °C)  
Concentration: 100 %
- Melting point/freezing point : < -5 °C
- Decomposition temperature : Not applicable
- Boiling point/boiling range : ca. 100 °C
- Flash point : > 70 °C  
Method: DIN 51755 Part 1

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Evaporation rate	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	ca. 1.08 g/cm <sup>3</sup> (20 °C, 1,013 hPa)
Solubility(ies) Water solubility	:	completely soluble (20 °C)
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No data available
Viscosity Viscosity, dynamic	:	ca. 3 mPa*s Method: ISO 3219
Explosive properties	:	Not applicable
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

### **9.2 Other information**

Flammability (liquids)	:	Does not sustain combustion.
Metal corrosion rate	:	None reasonably foreseeable.

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## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

### **10.2 Chemical stability**

The product is chemically stable.

### **10.3 Possibility of hazardous reactions**

Hazardous reactions : Incompatible with acids.

### **10.4 Conditions to avoid**

Conditions to avoid : Protect from frost, heat and sunlight.

### **10.5 Incompatible materials**

Materials to avoid : Possible incompatibility with alkali sensitive materials.



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## 10.6 Hazardous decomposition products

None reasonably foreseeable.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

#### Components:

##### **trisodium nitrilotriacetate:**

Acute oral toxicity : LD50 (Rat, female): 1,300 mg/kg  
Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Acute dermal toxicity : LD50 (Rabbit, male and female): > 10,000 mg/kg

##### **sodium p-cumenesulphonate:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401  
Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

##### **potassium hydroxide:**

Acute oral toxicity : LD50 (Rat): 365 mg/kg  
Method: OECD Test Guideline 425  
Assessment: Harmful if swallowed.  
Acute inhalation toxicity : Remarks: No data available  
Acute dermal toxicity : Remarks: No data available

##### **sodium etasulfate:**

Acute oral toxicity : LD50 (Rat): 2,840 mg/kg  
Acute inhalation toxicity : Remarks: No data available  
Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

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### **glycerol:**

|| Acute oral toxicity : LD50 (Rat, female): 27,200 mg/kg  
Method: OECD Test Guideline 401

|| Acute dermal toxicity : LD50 (Guinea pig, male and female): 56,750 mg/kg

### **Skin corrosion/irritation**

Causes skin irritation.

### **Components:**

#### **trisodium nitrilotriacetate:**

|| Species : Rabbit  
|| Method : Draize Test  
|| Result : No skin irritation

#### **sodium p-cumenesulphonate:**

|| Species : Rabbit  
|| Method : OECD Test Guideline 404  
|| Result : slight irritation  
|| Remarks : Based on available data, the classification criteria are not met.

#### **potassium hydroxide:**

|| Species : reconstructed human epidermis (RhE)  
|| Method : OECD Test Guideline 431  
|| Result : Corrosive after 3 minutes or less of exposure

#### **sodium etasulfate:**

|| Species : Rabbit  
|| Method : OECD Test Guideline 404  
|| Result : Skin irritation

### **Serious eye damage/eye irritation**

Causes serious eye irritation.

### **Components:**

#### **trisodium nitrilotriacetate:**

|| Species : Rabbit  
|| Method : OECD Test Guideline 405  
|| Result : Eye irritation

#### **sodium p-cumenesulphonate:**

|| Species : Rabbit  
|| Method : OECD Test Guideline 405  
|| Result : Eye irritation

#### **potassium hydroxide:**

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Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye

### **sodium etasulfate:**

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

Not classified based on available information.

#### **Respiratory sensitisation**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

Test Type	:	Buehler Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

#### **sodium p-cumenesulphonate:**

Test Type	:	Buehler Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

#### **potassium hydroxide:**

Species	:	Guinea pig
Result	:	Did not cause sensitisation on laboratory animals.

#### **sodium etasulfate:**

Method	:	OECD Test Guideline 429
Result	:	Did not cause sensitisation on laboratory animals.

### **Germ cell mutagenicity**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

Genotoxicity in vitro	:	Remarks: In vitro tests did not show mutagenic effects
Germ cell mutagenicity- Assessment	:	Animal testing did not show any mutagenic effects.

#### **sodium p-cumenesulphonate:**

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Genotoxicity in vitro	: Test Type: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: Not mutagenic in Ames Test
Genotoxicity in vivo	: Test Type: In vivo micronucleus test Species: Mouse Application Route: Oral Result: Non mutagenic
Germ cell mutagenicity- Assessment	: Not mutagenic in Ames Test

### **potassium hydroxide:**

Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative
Germ cell mutagenicity- Assessment	: Animal testing did not show any mutagenic effects.

### **sodium etasulfate:**

Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Test system: Bacteria Method: OECD Test Guideline 471 Result: negative
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### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

Species	: Rat, male and female
Application Route	: Oral
Exposure time	: 2 Years
NOAEL	: 9.2 mg/kg body weight
Result	: Limited evidence of carcinogenicity in animal studies (oral)

Carcinogenicity - Assessment	: Suspected of causing cancer.
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#### **sodium p-cumenesulphonate:**

Species	: Rat
Exposure time	: 2 Years
Method	: OECD Test Guideline 453
Result	: no increase in tumors observed

Carcinogenicity - Assessment	: Animal testing did not show any carcinogenic effects.
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### **potassium hydroxide:**

|| Carcinogenicity - Assessment : No data available

### **sodium etasulfate:**

|| Species : Rat  
|| Application Route : Oral  
|| Exposure time : 2 Years  
|| Dose : > 1125 mg/kg body weight

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

|| Effects on fertility : Species: Rat, male and female  
|| Application Route: Oral  
|| General Toxicity - Parent: LOAEL: 450 mg/kg body weight  
|| Result: No effects on fertility and early embryonic development were detected.

|| Effects on foetal development : Species: Rabbit, female  
|| Application Route: Oral  
|| Duration of Single Treatment: 9 d  
|| Teratogenicity: NOAEL: 250 mg/kg body weight  
|| Result: No effects on fertility and early embryonic development were detected.

#### **sodium p-cumenesulphonate:**

|| Effects on fertility : Species: Rat  
|| Application Route: Oral  
|| General Toxicity - Parent: NOAEL: 300 mg/kg bw/day  
|| General Toxicity F1: NOAEL: 1,000 mg/kg bw/day  
|| Method: OECD Test Guideline 421

|| Effects on foetal development : Species: Rat  
|| Application Route: Oral  
|| General Toxicity Maternal: NOAEL: 936 mg/kg body weight  
|| Teratogenicity: NOAEL: 936 mg/kg bw/day

|| Reproductive toxicity - Assessment : study scientifically unjustified

### **potassium hydroxide:**

|| Reproductive toxicity - Assessment : No data available

### **sodium etasulfate:**

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Effects on foetal development : Species: Rat  
Application Route: Oral  
Dose: 250 milligram per kilogram  
Result: negative  
Remarks: Did not show teratogenic effects in animal experiments.

Reproductive toxicity - Assessment : No data available

## **STOT - single exposure**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

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

#### **sodium p-cumenesulphonate:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### **potassium hydroxide:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### **sodium etasulfate:**

Remarks : No data available

## **STOT - repeated exposure**

Not classified based on available information.

### **Components:**

#### **trisodium nitrilotriacetate:**

Exposure routes : Ingestion  
Target Organs : Kidney  
Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **sodium p-cumenesulphonate:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **potassium hydroxide:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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### **sodium etasulfate:**

||Remarks : No data available

### **Repeated dose toxicity**

#### **Components:**

#### **trisodium nitrilotriacetate:**

||Species : Rat, male and female  
||NOAEL : 0.21 mg/l  
||Application Route : inhalation (dust/mist/fume)  
||Test atmosphere : dust/mist  
||Exposure time : 28-day 6 h  
||Number of exposures : 5 Tage/ Woche

||Species : Rabbit, male and female  
||NOAEL : 50 mg/kg  
||Application Route : Skin contact  
||Exposure time : 90-day

||Species : Rat, male and female  
||NOAEL : 92 mg/kg  
||Application Route : Oral

#### **sodium p-cumenesulphonate:**

||Species : Rat  
||NOAEL : 763 mg/kg  
||Application Route : Oral  
||Target Organs : Cardio-vascular system  
||Remarks : Subchronic toxicity

||Species : Rat  
||NOAEL : 60 mg/kg  
||Application Route : Dermal  
||Exposure time : 2 yr  
||Method : OECD Test Guideline 453  
||Target Organs : Skin

#### **sodium etasulfate:**

||Species : Rabbit  
||NOAEL : 488 mg/kg  
||Application Route : Oral  
||Exposure time : 90-day

||Species : Mouse  
||NOAEL : 400 mg/kg  
||Application Route : Skin contact  
||Exposure time : 90-day

### **Aspiration toxicity**

Not classified based on available information.

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### Further information

#### Product:

Remarks : No data is available on the product itself.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **trisodium nitrilotriacetate:**

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Gammarus salinus (seawater shrimp)): 98 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 91.5 mg/l Exposure time: 72 h Test Type: static test  NOEC (Desmodesmus subspicatus (green algae)): 1.43 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	LC50: 90.5 mg/l Exposure time: 27 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 9.3 mg/l Exposure time: 21 Weeks Species: Gammarus fasciatus (freshwater shrimp)

##### **sodium p-cumenesulphonate:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h

##### **potassium hydroxide:**

Toxicity to fish	:	LC50 (Gambusia affinis (Mosquito fish)): 80 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available



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Toxicity to algae/aquatic plants : Remarks: No data available

### **Ecotoxicology Assessment**

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

#### **sodium etasulfate:**

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 100 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 483 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 511 mg/l  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC:  $\geq$  1,357 mg/l  
Exposure time: 42 d  
Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 1.4 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

#### **glycerol:**

Toxicity to fish : LC50 (Oncorhynchus mykiss): 54,000 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 24 h

## **12.2 Persistence and degradability**

### **Product:**

Biodegradability : Result: Readily biodegradable.  
Method: OECD 301D / EEC 84/449 C6

### **Components:**

#### **trisodium nitrilotriacetate:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 100 %  
Exposure time: 28 d

#### **sodium p-cumenesulphonate:**

Biodegradability : Test Type: aerobic  
Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

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### **potassium hydroxide:**

|| Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

### **sodium etasulfate:**

|| Biodegradability : Result: Readily biodegradable.  
Biodegradation: 89 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

## 12.3 Bioaccumulative potential

### Components:

#### **trisodium nitrilotriacetate:**

|| Bioaccumulation : Species: Brachidanio rerio  
Exposure time: 96 d  
Bioconcentration factor (BCF): < 3  
Remarks: No bioaccumulation is to be expected (log Pow <= 4).  
Does not significantly accumulate in organisms.

|| Partition coefficient: n-octanol/water : log Pow: -13.2

#### **sodium p-cumenesulphonate:**

|| Bioaccumulation : Remarks: Bioaccumulation is unlikely.

#### **potassium hydroxide:**

|| Bioaccumulation : Remarks: Does not bioaccumulate.

#### **sodium etasulfate:**

|| Bioaccumulation : Remarks: No data available

|| Partition coefficient: n-octanol/water : log Pow: -0.248

#### **glycerol:**

|| Partition coefficient: n-octanol/water : log Pow: -1.75 (25 °C)  
Method: OECD Test Guideline 107

## 12.4 Mobility in soil

### Components:

#### **trisodium nitrilotriacetate:**

|| Mobility : Remarks: Substance does not evaporate from water surface into the atmosphere., Not expected to adsorb on soil.

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**sodium p-cumenesulphonate:**

|| Mobility : Remarks: Not expected to adsorb on soil.

**potassium hydroxide:**

|| Mobility : Remarks: Mobile in soils

**sodium etasulfate:**

|| Mobility : Remarks: No data available

## 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

**Product:**

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : No data is available on the product itself.

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: Transport information

### 14.1 UN number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

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## 14.2 UN proper shipping name

**ADR** : Not regulated as a dangerous good  
**IMDG** : Not regulated as a dangerous good  
**IATA** : Not regulated as a dangerous good

## 14.3 Transport hazard class(es)

**ADR** : Not regulated as a dangerous good  
**IMDG** : Not regulated as a dangerous good  
**IATA** : Not regulated as a dangerous good

## 14.4 Packing group

**ADR** : Not regulated as a dangerous good  
**IMDG** : Not regulated as a dangerous good  
**IATA (Cargo)** : Not regulated as a dangerous good  
**IATA (Passenger)** : Not regulated as a dangerous good

## 14.5 Environmental hazards

Not regulated as a dangerous good

## 14.6 Special precautions for user

Not applicable

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

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the following entries should be considered: Number on list 3

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation : Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

UK REACH List of substances subject to authorisation (Annex XIV) : Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 0.5 %

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according to Detergents Regulation EC 648/2004 : less than 5 %: Anionic surfactants, Non-ionic surfactants, NTA (nitrilotriacetic acid) and salts thereof, Polycarboxylates  
Other constituents: Enzymes

**The components of this product are reported in the following inventories:**

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.  
sodium p-cumenesulphonate  
Sodium polyacrylate

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI : Not in compliance with the inventory

## 15.2 Chemical safety assessment

Exempt

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## SECTION 16: Other information

### Full text of H-Statements

H290 : May be corrosive to metals.  
H302 : Harmful if swallowed.  
H314 : Causes severe skin burns and eye damage.  
H315 : Causes skin irritation.  
H318 : Causes serious eye damage.  
H319 : Causes serious eye irritation.  
H351 : Suspected of causing cancer.

### Full text of other abbreviations

Acute Tox. : Acute toxicity  
Carc. : Carcinogenicity  
Eye Dam. : Serious eye damage  
Eye Irrit. : Eye irritation  
Met. Corr. : Corrosive to metals  
Skin Corr. : Skin corrosion

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Skin Irrit. : Skin irritation  
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits  
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)  
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

## Further information

### Classification of the mixture:

Skin Irrit. 2 H315  
Eye Irrit. 2 H319

### Classification procedure:

Calculation method  
Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific

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material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.