

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

· **1.1 Product identifier:**

· **Trade name:** Descaler

· **Article number:** 141.811

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

No further relevant information available.

· **Application of the substance / the preparation:** Cleaning material/ Detergent

· **1.3 Details of the supplier of the safety data sheet:**

· **Manufacturer/Supplier:**

Schulz & Sohn GmbH
Chemie-Erzeugnisse
Hoeheweg 327
D-40231 Duesseldorf
sida@schulzchemie.com

Distributet by:

Thermoplan AG
Thermoplan-Platz 1
CH-6353 Weggis
Tel.: +41 41 3921200
thermoplan@thermoplan.ch

· **Further information obtainable from:** Product safety department

· **1.4 Emergency telephone number:**

Toxin emergency call (24 hours):
Phone: +44 (0) 845 4647

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture:**

· **Classification according to Regulation (EC) No 1272/2008:**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

· **2.2 Label elements:**

· **Labelling according to Regulation (EC) No 1272/2008:**

The product is classified and labelled according to the GB CLP regulation.

· **Hazard pictograms**



GHS05

· **Signal word** Danger

· **Hazard-determining components of labelling:**

Lactic acid

· **Hazard statements**

H315 Causes skin irritation.

H318 Causes serious eye damage.

· **Precautionary statements**

P280 Wear protective gloves / eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

(Contd. on page 2)

Trade name: Descaler

(Contd. of page 1)

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **2.3 Other hazards:**
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 50-21-5 EINECS: 200-018-0 Reg.nr.: 2119474164-39	Lactic acid ----- ☠ Eye Dam. 1, H318; ☠ Skin Irrit. 2, H315	5-<15%
CAS: 75-75-2 EINECS: 200-898-6 Reg.nr.: 2119491166-34	methanesulphonic acid ----- ☠ Acute Tox. 3, H311; ☠ Skin Corr. 1B, H314; ☠ Acute Tox. 4, H302	<1%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures:**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed:**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media:**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture:** No further relevant information available.
- **5.3 Advice for firefighters:**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **6.4 Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 3)

— GB —

Trade name: Descaler

(Contd. of page 2)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:** The usual precautions when handling chemicals should be taken.
 - **Information about fire - and explosion protection:** No special measures required.
 - **7.2 Conditions for safe storage, including any incompatibilities:**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
 - **Storage class:** 12
 - **7.3 Specific end use(s):** No further relevant information available.
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SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters:**
 - **Additional information about design of technical facilities:** No further data; see item 7.
 - **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls:**
 - **Personal protective equipment:**
 - **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
 - **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - **Protection of hands:**



Protective gloves!

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves:**
 - Recommendation:
uvex u-chem 3000 (DIN EN 374)
Material: Nitrile rubber, NBR
Thickness of the material: 0,5 mm
Value for the permeation: > 480 min (Level 6)
 - Recommendation:
uvex u-fit strong N2000 (DIN EN 374)
Material: Nitrile rubber, NBR
Thickness of the material: 0,2 mm
Value for the permeation: > 480 min (Level 6)
- **Penetration time of glove material:**
The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

(Contd. on page 4)

Trade name: Descaler

(Contd. of page 3)

· Eye protection:



Tightly sealed goggles!

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties:	
· General Information:	
· Appearance:	
· Form:	Fluid
· Colour:	Red
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value at 20 °C:	3.13
· Change in condition:	
· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density at 20 °C:	1.031 g/cm ³
· Relative density:	Not determined.
· Vapour density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with:	
· water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	0.0 %
· Water:	86.1 %
· Solids content:	0.6 %
· 9.2 Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity:** No further relevant information available.

(Contd. on page 5)

Trade name: Descaler

(Contd. of page 4)

- **10.2 Chemical stability:**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
 - **10.3 Possibility of hazardous reactions:** Reacts with alkali (lyes).
 - **10.4 Conditions to avoid:** No further relevant information available.
 - **10.5 Incompatible materials:** No further relevant information available.
 - **10.6 Hazardous decomposition products:** No dangerous decomposition products known.
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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects:**
 - **Acute toxicity** Based on available data, the classification criteria are not met.
 - **Primary irritant effect:**
 - **Skin corrosion/irritation**
Irritating to skin
Causes skin irritation.
 - **Serious eye damage/irritation**
Causes serious eye damage.
 - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
 - **Additional toxicological information:**
 - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** 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.
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SECTION 12: Ecological information

- **12.1 Toxicity:**
 - **Aquatic toxicity:** No further relevant information available.
 - **12.2 Persistence and degradability:** No further relevant information available.
 - **12.3 Bioaccumulative potential:** No further relevant information available.
 - **12.4 Mobility in soil:** No further relevant information available.
 - **Additional ecological information:**
 - **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 - **12.5 Results of PBT and vPvB assessment:**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
 - **12.6 Other adverse effects:** No further relevant information available.
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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods:**
- **Recommendation:**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

(Contd. on page 6)

— GB —

Trade name: Descaler

(Contd. of page 5)

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 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.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment::** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases:**
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
- **Department issuing SDS:** Product safety department
- **Contact:** Security Department
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1