

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier:**
- **Trade name:** Black & White descaler
- **Article number:** 141.811-146.965
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product category:** PC35 Washing and cleaning products (including solvent based products)
- **Application of the substance / the preparation:** Cleaning material/ Detergent
- **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
- **Emergency telephone number:**  
Toxin emergency call (24 hours):  
Phone: +44 (0) 845 4647

## 2 Hazards identification

- **Classification of the substance or mixture:**  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements:**
- **GHS label elements**  
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Lactic acid
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye damage.
- **Precautionary statements**  
Wear protective gloves / eye protection.  
IF ON SKIN: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

### 3 Composition/information on ingredients

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

· <b>Dangerous components:</b>		
50-21-5	Lactic acid ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315	5-<15%
75-75-2	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.

### 4 First aid measures

- **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.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:**  
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

### 5 Firefighting measures

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

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.

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Prevent formation of aerosols.

· **Information about fire - and explosion protection:** No special measures required.

· **Conditions for safe storage, including any incompatibilities:**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.

Storage between 5 and 40°C.

· **Information about storage in one common storage facility:** Not required

· **Further information about storage conditions:**

Keep container tightly sealed.

Protect from heat and direct sunlight.

Store in dry conditions.

Protect from humidity and water.

· **Storage class:** 12

· **Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see section 7.

· **Control parameters:**

· **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.

· **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.

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· Eye protection:



Tightly sealed goggles!

## 9 Physical and chemical properties

· 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	Not applicable
· Decomposition temperature:	Not determined
· 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 <sup>3</sup>
· 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:	0.2 %
· Other information:	No further relevant information available.

## 10 Stability and reactivity

· Reactivity: No further relevant information available.

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- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritating to skin
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

## 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **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.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable
- **vPvB:** Not applicable
- **Other adverse effects:** No further relevant information available.

## 13 Disposal considerations

- **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.

## 14 Transport information

· <b>UN-Number</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>ADR, IMDG, IATA</b>	Void

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· <b>Transport hazard class(es)</b>	
· <b>ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void
· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b>	Not applicable
· <b>Special precautions for user</b>	Not applicable
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable
· <b>UN "Model Regulation":</b>	Void

## 15 Regulatory information

- **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.
- **Chemical safety assessment::** A Chemical Safety Assessment has not been carried out.

## 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:** HSE department
- **Contact:** HSE 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  
 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