


1 Identification

- **Product identifier:**
- **Trade name:** Black & White descaler
- **Article number:** 141.811-146.965
- **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

- **Distributed by:**
Thermoplan AG
Thermoplan-Platz 1
CH-6353 Weggis
Tel.: +41 41 3921200
thermoplan@thermoplan.ch
- **Information department:** Product safety department
- **Emergency telephone number:**
POISON CONTROL
National Capital Poison Center
Tel.: 1-800-222-1222

2 Hazard(s) identification

- **Classification of the substance or mixture:**
Skin Irritation 2 H315 Causes skin irritation.
Eye Damage 1 H318 Causes serious eye damage.
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- **Label elements:**
 - **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
 - **Hazard pictograms:**

GHS05
 - **Signal word:** Danger
 - **Hazard-determining components of labeling:**
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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- **Classification system:**
- **NFPA ratings (scale 0 - 4):**



- **HMIS-ratings (scale 0 - 4):**



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

3 Composition/information on ingredients

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

· **Dangerous components:**

CAS: 50-21-5 EINECS: 200-018-0	Lactic acid Eye Damage 1, H318; Skin Irritation 2, H315	5-<15%
CAS: 75-75-2 EINECS: 200-898-6	methanesulphonic acid Acute Toxicity - Dermal 3, H311; Skin Corrosion 1B, H314; Acute Toxicity - Oral 4, H302	<1%

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 Fire-fighting measures

- **Extinguishing media:**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **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).

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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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

75-75-2	methanesulphonic acid	0.18 ppm
34590-94-8	Dipropylene glycol monomethyl ether	150 ppm
547-58-0	sodium 4-(4-dimethylaminophenylazo)benzenesulphonate	0.18 mg/m ³

· **PAC-2:**

75-75-2	methanesulphonic acid	2.8 ppm
34590-94-8	Dipropylene glycol monomethyl ether	1700 ppm
547-58-0	sodium 4-(4-dimethylaminophenylazo)benzenesulphonate	2.0 mg/m ³

· **PAC-3:**

75-75-2	methanesulphonic acid	17 ppm
34590-94-8	Dipropylene glycol monomethyl ether	9900 ppm
547-58-0	sodium 4-(4-dimethylaminophenylazo)benzenesulphonate	12 mg/m ³

7 Handling and storage

· **Handling:**

· **Precautions for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:** 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 receptacle 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 systems:** No further data; see section 7.

· **Control parameters:**

· **Components 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 that were valid during the creation 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.

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Avoid contact with the eyes.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **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.

· **Eye protection:**



Tightly sealed goggles!

9 Physical and chemical properties

· Information on basic physical and chemical properties:	
· General Information:	
· Appearance:	
· Form:	Fluid
· Color:	Red
· Odor:	Characteristic
· Odor threshold:	Not determined
· pH-value at 20 °C (68 °F):	3.13
· Change in condition:	
· Melting point/Melting range:	Undetermined
· Boiling point/Boiling range:	Undetermined
· Flash point:	Not applicable
· Flammability:	Not applicable
· Decomposition temperature:	Not determined
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined

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Upper:	Not determined
Vapor pressure:	Not determined
Density at 20 °C (68 °F):	1.031 g/cm ³ (8.604 lbs/gal)
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 %
VOC content:	0.03 %
Solids content:	0.2 %
Other information:	No further relevant information available.

10 Stability and reactivity

- **Reactivity:** No further relevant information available.
- **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:**
- **on the skin:** Irritating to skin
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories:**

IARC (International Agency for Research on Cancer):	None of the ingredients is listed.
NTP (National Toxicology Program):	None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients is listed.

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12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior 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 (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 of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, ADR, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, IMDG, IATA	Void
· Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable
· Special precautions for user	Not applicable
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
· UN "Model Regulation":	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
No further relevant information available.

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· **Sara:**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

7732-18-5	water	ACTIVE
50-21-5	Lactic acid	ACTIVE
75-75-2	methanesulphonic acid	ACTIVE
34590-94-8	Dipropylene glycol monomethyl ether	ACTIVE
109-46-6	1,3-dibutyl-2-thiourea	ACTIVE
547-58-0	sodium 4-(4-dimethylaminophenylazo)benzenesulphonate	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65:**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH):**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

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

· **Date of preparation / last revision** 01/13/2026 / -

· **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
- DOT: US Department of Transportation
- IATA: International Air Transport Association

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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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Acute Toxicity - Dermal 3: Acute toxicity – Category 3
Skin Corrosion 1B: Skin corrosion/irritation – Category 1B
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Damage 1: Serious eye damage/eye irritation – Category 1

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