SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier
Product name: UNITCLEAN
Cat. No. 49900040
Container size: 1 l

Relevant identified uses of the substance or mixture and uses advised against
Identified use(s): Cleaning agent. Disinfectant.
Uses advised against: No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier: Struers ApS
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

Responsible for material safety data sheet authoring: Responsible for material safety data sheet authoring: DHI
Any questions to the contents of this material safety data sheet should be sent to:
struers@struers.dk

Emergency telephone number
National Capital Poison Center: 1-800-222-1222

Infotrac:
1-800-535-5053
Struers US:
1-440-871-0071
SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA 2012:
Acute Oral Toxicity Category 4
Skin Corrosive Category 1B
Serious Eye Damage Category 1
Aquatic Acute Toxicity Category 1
Aquatic Chronic Toxicity Category 1

Label elements

Danger

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective clothing, gloves, eye and face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P501 Dispose of contents/container in accordance with local regulations.
P260 Do not breathe gas, fume, vapours or spray.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P405 Store locked up.

Other hazards

Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation: Move injured person into fresh air immediately. Call an ambulance. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure. Bring these instructions. Place unconscious person on the side in the recovery position and ensure breathing.

Skin contact: Flush immediately with plenty of water and remove contaminated clothing. Call an ambulance, continue to rinse during transportation to hospital and bring these instructions.

Eye contact: Immediately flush with plenty of water. Remove any contact lenses and open eyes wide apart. Call an ambulance and continue flushing during transportation to hospital taking along these instructions.

Ingestion: Immediately call a Poison Center/doctor. Rinse mouth. Do not induce vomiting. Do not drink anything without first consulting a doctor. Have these instructions at hand.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.
SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Unsuitable extinguishing media: No specific precautions.

Special hazards arising from the substance or mixture

Specific hazards: During fire, health hazardous gases may be formed.

Advice for firefighters

Protective equipment for firefighters: Use air-supplied respirator during fire fighting.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No occupational exposure limit assigned.

Exposure controls

Engineering measures: An eye wash bottle must be available at the work site. Provide adequate ventilation.

Personal protection: Personal protection equipment should be chosen according to the ANSI standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. It is recommended to use respiratory equipment with combination filter, type ABEK.

Hand protection: Wear protective gloves. Nitrile gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Breakthrough time: 480 min

Thickness: 0,5 mm (*)

Eye protection: Wear goggles/face shield.

Skin protection: Wear special protective clothing.

Hygiene measures: Wash hands after handling. When using do not eat, drink or smoke. Change contaminated clothing.

Environmental Exposure Controls: Not available.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form: Liquid.
Color: Colorless.
Odor: Aromatic.
Odor threshold: Not available.
P: 5 - 7 (100 g/l; 68°F)
Melting point: -5 °C
Boiling point: 212°F
Flash point: 320 - 338°F
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Explosion limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: 0.98
Solubility: Miscible with water.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature (°F): Not available.
Decomposition temperature (°F): Not available.
Viscosity: Dynamic viscosity: 300 mPa.s
Explosive properties: Not available.
Oxidizing properties: Not available.

Other information

Other data: Volatile Organic Compound (VOC): 0 g/l (calculated)
SECTION 10: STABILITY AND REACTIVITY

Reactivity
Reactivity: No data available.

Chemical stability
Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions
Hazardous Reactions: Reaction with:
Oxidizing materials. Acids. Bases. (*)

Conditions to avoid
Conditions/materials to avoid: No information available.

Incompatible materials

Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute Toxicity (Oral): Harmful if swallowed.
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:
LD50=344 mg/kg (oral rat)
LD50=3340 mg/kg (Dermal Rabbit) (*)

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Causes severe burns.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.
National Toxicology Program (NTP): No.
I.A.R.C. Monographs: No.
OSHA: No.

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.

Inhalation: Vapors are corrosive. After 24-36 hours, injured persons may develop serious shortness of breath and lung edema.

Ingestion: Corrosive. Even small amounts may cause serious damage.
SECTION 12: ECOLOGICAL INFORMATION

**Toxicity**

Ecotoxicity: Very toxic to aquatic life with long lasting effects. Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:
- LC50 96 hours, fish, mg/l (Lepomis machrochirus): 0.28: 0.515
- EC50 48 hours, Daphnia, mg/l: 0.016: 0.0058

**Persistence and degradability**

Degradability: >80%. The product is expected to be easily biodegradable.

**Bioaccumulative potential**

Bioaccumulative potential: No data available on bioaccumulation.

**Mobility in soil**

Mobility: No data available.

**Results of PBT and vPvB assessment**

PBT/vPvB: This product does not contain any PBT or vPvB substances.

**Other adverse effects**

Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods**

Waste from residues: Dispose of waste and residues in accordance with local authority requirements.

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements.
## SECTION 14: TRANSPORT INFORMATION

### UN number

**UN-No:** 1760

### UN proper shipping name

**Proper Shipping Name:** CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds)

**Additional IMDG information:**
- EmS: F-A, S-B
- MFAG: 1
- Segregation Group: Alkali

### Transport hazard class(es)

**Class:** 8

### Packing group

**PG:** II

### Environmental hazards

**Marine pollutant:** Yes.

**Environmentally Hazardous substance:** Yes.

### Special precautions for user

**Special precautions:** None known.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**Transport in bulk:** Not relevant.
SECTION 15: REGULATORY INFORMATION

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

Special provisions: State and local regulation may apply.

TSCA: Listed.

NFPA Rating: Health: 3  Fire: 1  Reactivity: 0  Other:-

SARA Section 302: No.
SARA Section 304: No.
SARA Section 313: No.
SARA (311/312) Hazard categories: Yes.

National regulation: The following lists have been checked:
Threshold Limit Values (2019), ACGIH, by the American Conference on Governmental Industrial Hygienists.
NIOSH Pocket Guide to Chemical Hazards.
The Code of Federal Regulation, Title 40, part 261.33. Identification and listing of hazardous waste.
SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 8, 10, 11.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Abbreviations and acronyms used in the safety data sheet:
*PBT* = Persistent, Bioaccumulative and Toxic.
*vPvB* = very Persistent and very Bioaccumulative.
*LD50* = Lethal Dose 50%.

Additional information: Classification according to HCS 2012:
Calculation method.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.