

SAFETY DATA SHEET according to Regulation (EU) No. 1907/2006

TriClean 212 TFNE

Version 1.0
Revision Date 02.07.2007

Print Date 02.07.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : TRICLEAN 212 TFNE
Supplier : **TriSep Corporation**
93 South La Patera Lane
Goleta, CA 93177
USA

Emergency telephone : 1-760-602-6096
number

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

C R35 Causes severe burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Preparation of substances listed below with non hazardous additions.

Hazardous components

sodium hydroxide Concentration: $\geq 5,00\%$ - $< 30,00\%$
CAS-No.: 1310-73-2 EC-No.: 215-185-5 Index-No.: 011-002-00-6
Classification: C; R35

Benzenesulfonic acid, C10-13-alkyl derivs., Concentration: $\geq 1,00\%$ - $< 5,00\%$
sodium salts
CAS-No.: 68411-30-3 EC-No.: 270-115-0
Classification: Xn; R22 Xi; R38, R41

For the full text of the R phrases mentioned in this Section, see Section 16.
For information on Regulation(EC) No 648/2004 on detergents refer to chapter 15.

4. FIRST AID MEASURES

General advice : Remove from exposure, lie down. Take off all contaminated clothing immediately. First aider needs to protect himself.
Inhalation : Remove to fresh air. In case of shortness of breath, give

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- oxygen. If unconscious place in recovery position and seek medical advice.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Protect unharmed eye. Consult an eye specialist immediately. Go to a ophthalmic hospital if possible.
- Ingestion : Rinse the mouth and spit the fluids out. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Call a physician immediately.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Extinguishing media which must not be used for safety reasons : High volume water jet
- Specific hazards during fire fighting : Heating or fire can release toxic gas.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
- Additional advice : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment. Keep away unprotected persons. Provide adequate ventilation. Avoid contact with skin and eyes.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Local authorities should be advised if significant spillages cannot be contained.
- Methods for cleaning up : Ensure adequate ventilation. Use mechanical handling equipment. Avoid dust formation. Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Avoid contact with skin and eyes. Handle and open container with care. Never add water to this product. Avoid dust formation.

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Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers : Materials to avoid: Keep away from oxidizing agents. Keep away from strong acids.
Further information on storage conditions : Keep container tightly closed. Keep in a dry place. Product is hygroscopic.
German storage class : 8: Corrosive Substances

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : Required if dust is released, Particle filter:P2
Hand protection : Protective gloves
The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.
Protective gloves should be replaced at first signs of wear.
The following information applies to aqueous, saturated solutions.

Material	strength of material	Break through time
butyl-rubber	0,5 mm	8 h

Eye protection : Tightly fitting safety goggles
Body Protection : impervious clothing
Hygiene measures : Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area.

Engineering measures

Refer to protective measures listed in sections 7 and 8.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : powder

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Colour : white
Odour : odourless

Safety data

Melting point/range : ca. 620 °C
Density : no data available
Water solubility : 150 g/l; 20 °C
pH : ca. 11; 10 g/l; (as aqueous solution)

10. STABILITY AND REACTIVITY

Conditions to avoid : Avoid moisture. Product is hygroscopic.
Materials to avoid : Oxidizing agents, Acids
General advice : No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Ingestion : sodium hydroxide: LD50 rat. 325 mg/kg Cause serious burns with severe pains, vomiting, pains in the stomach, possibly chock and damaged kidneys. The burn may occur even if only small amounts have been swallowed.
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LD50 rat. 200 - 2.000 mg/kg
Inhalation : sodium hydroxide: Inhalation may cause pain in respiratory system, sneezing, coughing and difficulty in breathing. Risk for pulmonary edema by high concentration.
Skin contact : corrosive effects
Eye contact : corrosive effects
Sensitization : No sensitizing effect known.

12. ECOLOGICAL INFORMATION

Biodegradability : Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: > 70 % 28 d; OECD 301 A; Readily biodegradable
Toxicity to fish : sodium hydroxide: LC50 Gambusia affinis 125 mg/l 96 h
sodium hydroxide: LC50 Poecilia reticulata 145 mg/l 24 h
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LC50 Cyprinus carpio (Carp) 1 - 10 mg/l 96 h OECD Test Guideline 203
Toxicity to daphnia : sodium hydroxide:
EC50 Daphnia magna 76 mg/l 24 h
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
EC50 Daphnia magna 1 - 10 mg/l 48 h OECD Test Guideline 202;

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Toxicity to algae : Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: EC50 Scenedesmus subspicatus 10 - 100 mg/l 72 h OECD Test Guideline 201;
Toxicity to bacteria : sodium hydroxide: EC50 Photobacterium phosphoreum 22 mg/l 15 min

Further information on ecology

Additional ecological information : Harmful effects to aquatic organisms due to pH-shift. Do not flush into surface water or sanitary sewer system.

13. DISPOSAL CONSIDERATIONS

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains.
Packaging : Empty remaining contents. Dispose of as special waste in compliance with local and national regulations.

14. TRANSPORT INFORMATION

ADR : UN-No. **1823**
Class 8
Packaging group II
Classification Code C6
ADR/RID-Labels 8
Risk No. 80
Description of the goods SODIUM HYDROXIDE, SOLID, MIXTURE

RID : UN-No. **1823**
Class 8
Packaging group II
Classification Code C6
ADR/RID-Labels 8
Risk No. 80
Description of the goods SODIUM HYDROXIDE, SOLID, MIXTURE

IMDG : UN-No. **1823**
Class 8
Packaging group II
ADR/RID-Labels 8
EmS 8-06

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Description of the goods SODIUM HYDROXIDE, SOLID, MIXTURE

15. REGULATORY INFORMATION

Labelling according to EC Directives

The product is classified and labelled in accordance with EC directives or respective national laws.



C Corrosive

R-phrase(s)	R35	Causes severe burns.
S-phrase(s)	S22 S26 S36/37/39 S45	Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Hazardous components which must be listed on the label:

- sodium hydroxide

Exceptional labelling of special substances/preparations : Restricted to professional users.

Regulation (EC) No 648/2004 on detergents

Phosphates Concentration : $\geq 30\%$
anionic surfactants Concentration : $< 5\%$

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

National legislation



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WGK (DE)	:	WGK:2; water endangering; Self-classification according VwVwS of 17 May 1999, Annex 4
Major Accident Hazard Legislation Regulation	:	Does not fall under the German StörfallV. - Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R22	Harmful if swallowed.
R35	Causes severe burns.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

Further information

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

Indicates updated section.