

Material Safety Data Sheet
According to 91/155 EC

Printing date 20.11.2002

Reviewed on 20.11.2002

Trade name: ALTO pH-Regulator

5 Fire fighting measures

- Suitable extinguishing agents
CO₂, extinguishing powder or water spray jet with softener additives or with alcohol-resistant foam.
 - Protective equipment: No special measures required.
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6 Accidental release measures

- Person-related safety precautions:
Wear protective equipment. Keep unprotected persons away.
 - Measures for environmental protection: Dilute with much water.
 - Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
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7 Handling and storage

- Handling
 - Information for safe handling: No special measures required.
 - Information about protection against explosions and fires:
No special measures required.
 - Storage
 - Requirements to be met by storerooms and containers:
keep in original containers
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions:
Keep container tightly sealed.
This product is hygroscopic.
 - Storage class
 - Class according to regulation on inflammable liquids: Void
-

8 Exposure controls and personal protection

Components with limit values that require monitoring at the workplace:
1310-73-2 sodium hydroxide (15-30%)
OES: Short-term value: 2 mg/m³

- Personal protective equipment
- General protective and hygienic measures
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- Breathing equipment: Not required.
- Protection of hands:
Protective gloves.
The glove material has to be impermeable and resistant to the product/
the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be
given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration
times, rates of diffusion and the degradation
- Material of gloves
The selection of the suitable gloves does not only depend on the
material, but also on further marks of quality and varies from
manufacturer to manufacturer. As the product is a preparation of

(Contd. on page 3)

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(Contd. of page 2)

several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Tightly sealed safety glasses.

9 Physical and chemical properties:

- General Information

- Form: Fluid
- Colour: Colourless
- Odour: Characteristic

	Value/Range	Unit	Method
- Change in condition			
- Melting point/Melting range:	Not determined		
- Boiling point/Boiling range:	100	° C	
- Flash point:	Not applicable		
- Self-inflammability:	Product is not selfigniting.		
- Danger of explosion:	Product is not explosive.		
- Vapour pressure:	at 20 ° C	23.0 hPa	
- Density	at 20 ° C	1.250 g/cm ³	
- Solubility in / Miscibility with			
- Water:	Fully miscible		
- pH-value:	(10 g/l) at 20 ° C	12.8	

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions: Neutralises exothermically with acids.
- Dangerous products of decomposition:
No dangerous decomposition products known

11 Toxicological information

- Acute toxicity:
LD/LC50 values that are relevant for classification:
1310-73-2 sodium hydroxide
Oral: LD50: 2000 mg/kg (rat)
- Primary irritant effect:
- on the skin: Strong caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.
- Sensitization: No sensitizing effect known.
- Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as
(Contd. on page 4)

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(Contd. of page 3)

issued in the latest version:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 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 bodies or sewage system.

The product is free from halogen organic compounds (AOX)

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms.

In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

- Product:

- 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 cleaning agent: Water, if necessary with cleaning agent.

14 Transport information

- Land transport ADR/RID (cross-border)

- ADR/RID Class: 8 (C5) Corrosive substances.

- Kemler Number: 80

- UN-Number: 1824

- Packaging group: II

- Label 8

- Designation of goods: 1824 SODIUM HYDROXIDE SOLUTION

- Maritime transport IMDG:

- IMDG Class: 8

- UN Number: 1824

- Label 8

- Packaging group: II

- EMS Number: 8-06

- Marine pollutant: n.a.

No

- Correct technical name: SODIUM HYDROXIDE SOLUTION

- Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA Class: 8

- UN/ID Number: 1824

- Label 8

- Packaging group: II

(Contd. on page 5)

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(Contd. of page 4)

- Correct technical name: SODIUM HYDROXIDE SOLUTION

15 Regulatory information

- Designation according to EC guidelines:
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
 - Code letter and hazard designation of product: C Corrosive
 - Hazard-determining components of labelling: sodium hydroxide
 - Risk phrases: 35 Causes severe burns.
 - Safety phrases:
 - 20 When using do not eat or drink.
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 60 This material and its container must be disposed of as hazardous waste.
 - National regulations
 - Classification according to VbF: Void
 - Water hazard class:
Water hazard class 1 (Self-assessment): slightly hazardous for water.
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16 Other information

- These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
- Relevant R-phrases 35 Causes severe burns.
 - Department issuing data specification sheet:
Department cleaning and care agents
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