

Material Safety Data Sheet

Neutraliser 502

1. IDENTIFICATION OF PREPARATION AND COMPANY

Product identifier: Transparent liquid
Trade name: Avesta Classic Neutralising Agent 502
Application and use: Neutralisation of acidic water
Issue date/No: 2010-02-03, 1
Manufacturer: **Böhler Welding Group Nordic AB**
 Avesta Finishing Chemicals
 Lodgatan 14, 211 24 MALMÖ, Sweden
 Telephone: +46 (0)40 288 300
 E-mail: safety@avestafinishing.com
Emergency number: +46-8-331 231

2. HAZARDS IDENTIFICATION

Health hazard in case of accidental exposure (R-phrases):

R35 Causes severe burns. See also section 11.

Environmental effects:

Alkaline solution that at local discharge will affect pH-value. See section 12.

Physical and chemical risks:

Non-flammable. In contact with metals hydrogen gas is formed. Explosive, toxic gas can form when in contact with trichloroethylene, see also section 5 and 10.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation

Chemical nature:

Alkaline solution with corrosive properties.

Hazardous components, chemical name, formula	CAS No.	EC No.	Contents weight-%	Hazard symbol/ Risk phrase*
Sodium hydroxide , NaOH	1310-73-2	215-185-5	Appr. 25	C: R35

*The full texts of the phrases are shown in section 16.

Additional information:

Classification according to directive 67/548/EEC.

Symbols and risk phrases are for concentrated substances.

4. FIRST AID MEASURES

Measures to be taken immediately after the following ways of contact with pickling acids.

Inhalation:

Remove to fresh air. Keep victim lying down, quiet and warm. Rinse nose and mouth with water. Might require assistance with breathing. Seek medical care even if only slight inconvenience occur.



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Ingestion:

Only when conscious, rinse mouth, give plenty of milk or water to drink (approx. 500 ml). DO NOT induce vomiting. Seek medical advice.

Skin contact:

Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Always seek medical advice. Launder clothes before reuse.

Eye contact:

Rinse immediately for at least 15-30 minutes with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Always seek medical advice (eye specialist). Keep rinsing during transport.

Information for medical care:

Symptomatic treatment is advised. Inform medical personnel that injury is caused by sodium hydroxide solution.

5. FIRE FIGHTING MEASURES

Danger of fire/explosion:

In contact with certain metals (i.e. zinc, aluminium) hydrogen gas is formed in small quantities, which together with air can cause explosion. Explosive gas can form when in contact with trichloroethylene.

Extinguishing media:

Non combustible. Use agent most appropriate to extinguish surrounding fire. Use water spray to cool fire-exposed containers.

How to clean or destroy soiled fire equipment: Thoroughly wash with water.

Protective clothing for firemen:

Appropriate protective clothing and breathing apparatus should be used

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid direct contact. For handling and personal protection see section 7 and 8.

Environmental precautions (water, air, soil):

Prevent spillage from entering sewage or public waters. Dispose of this material and its container at hazardous or special waste collection point.

Methods for cleaning up:

Collect as much as possible in a clean container for (preferable) reuse or disposal. Rinse remnant with plenty of water. Disposal methods, see section 13.

7. HANDLING AND STORAGE

Handling

Technical measures:

Working place and methods should be worked out in order to avoid direct contact. Keep working area well ventilated. Emergency eye wash and safety shower should be available at working area.

To prevent fire and explosion:

Not relevant.



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Precautions:

Avoid fume generation and accumulation by using in a well-ventilated area. Use in areas having local exhaust and general ventilation. Prevent accidents caused by slipperiness by rinsing floor, tools with water.

Storage

Incompatible products:

Not applicable

Storage conditions:

Keep containers securely closed when not in use and in an upright position. Store in areas where temperature remains between 0-35°C at all times.

Packaging materials:

Store in PP, PE or PVC.

Specific use:

Contact manufacturer/supplier for more information.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure limits:

Sodium hydroxide (inhalable dust) LLV 1 mg/m³, CLV 2 mg/m³.

Engineering controls:

The usual precautionary measures for handling chemicals should be observed. Keep working area well ventilated.

Personal protective equipment

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Use gas filter type B, dust filter type P3 during dust- and mist forming conditions.

Hand protection:

Rubber-gloves, i.e. butyl-, nitrile rubber.

Eye protection:

Face shield.

Skin and body protection:

Rubber boots and acid resistant clothes, which covers all body parts exposed to splashes.

Environmental exposure controls:

See section 6 and 7.

Specific hygienic measures:

Do not inhale fumes, avoid contact with eyes, skin and clothes. It is not allowed to eat, drink and smoke at workplace. Remove contaminated clothes immediately. Wash hands and face thoroughly after working with Sodium Hydroxide Solution.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (form, colour, smell) at 20°C:

Liquid, colourless and odourless.



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Boiling point:

112°C

Flash point / Explosion properties:

Not applicable

Melting point:

-18°C

Vapor Pressure:

<0.01 kPa

pH:

>14

Density:

1.2-1.3 g/cm³ (20°C)

Viscosity :

7.8 mPas (20°C)

Solubility in water at 20°C:

Completely miscible.

Solubility in organic solvents:

Not applicable.

10. STABILITY AND REACTIVITY

Stability:

Stable under normal conditions. Polymerization do not occur.

Conditions to avoid:

Reacts strongly with acids. In contact with light metals or Zinc, hydrogen gas is formed. Strong heat development when dissolved in water or alcohol. Reacts with trichloroacetylene to form a toxic and self combustible gas (dichloroacetylene).

Materials to avoid:

Attacks copper, aluminium, zinc, magnesium and their alloys, certain plastic, wood, leather and textile.

Hazardous decomposition products:

Reacts with trichloroacetylene to form a toxic and self combustible gas (dichloroacetylene)..

11. TOXICOLOGICAL INFORMATION

LD50 (rabbit oral) >500 mg/kg

Local effects

Effects on the skin:

Severely corrosive (rabbit). Gives serious damage and deep wounds that can be difficult to heal.

Effects on the eyes:

Severely corrosive (mouse). Causes intense pain and corrosive damage. High risk for permanent damage to the eyes.



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After ingestion:

Gives corrosive damages with burning pain, possibly severe general effect and damage.

Upon inhalation:

Inhalation of fumes or mist might cause aches, cough and difficulty in breathing. Risk for pulmonary oedema.

CMR-effects:

Not known

Additional information:

Observe that symptoms will not appear immediately upon exposure, they will be delayed.

12. ECOLOGICAL INFORMATION

Environmental effects

Alkaline solution that at local discharge will affect pH-value and cause damages and death to aquatic organisms.

Acute toxicity:

LC50 Fish 48h: 99 mg/l (Lepomis macrochirus)

LC50 Fish 96h: 125 mg/l (Gambusia affinis)

Mobility:

Completely miscible in water.

Persistence and degradability:

Dissociates in water to Na⁺ and OH⁻.

Bioaccumulative potential:

The product is not regarded as bioaccumulative.

Results of PBT assessment:

See section 16.

Other adverse effects:

Not known

13. DISPOSAL CONSIDERATIONS

Methods of removal

Product:

Discarded product and related waste is hazardous waste. Allotting of EWC-code should be made on the basis of the source causing the waste.

Suggested EWC-codes are 06 02 04* Sodium Hydroxide or 11 01 11* Aqueous rinsing liquids containing dangerous substances

Contaminated packing material:

Rinse with plenty of water.

Additional information: Prevent spillage from entering sewage or public waters. For further advice contact the manufacturer.



14. TRANSPORT INFORMATION

International regulations (UN)

UN-Classification No:

1824

Classification code:

C5

Proper shipping name:

SODIUM HYDROXIDE SOLUTION, 25%

Packaging group:

II

IMDG (Sea):

Class 8 EmS F-A, S-B

ADR/RID (road, rail):

Class 8

Tunnel restriction code:

(E)

IATA/DGR (air):

Class 8

Additional information:

The product is to be transported according to dangerous goods regulations.

15. REGULATORY INFORMATION

Regulations

Hazard and safety information:

According to handling of dangerous goods.

Chemical Safety Assessment:

Has not been carried out for this product (or substances in the preparation).

Contents:

Sodium Hydroxide

Hazard symbols:



Corrosive

R-phrases:

R 35: Causes severe burns

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S-phrases:

S 26: In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

S 28: After contact with skin, wash immediately with plenty of water.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61: Avoid release to the environment. Refer to special instructions/safety data sheet

Regulations:

KIFS 2005:7, (EG) 1272/2008, AFS 2005:17

16. OTHER INFORMATION

Training advice:

The Avesta Finishing Chemicals "Handbook for the pickling and cleaning of stainless steel" and "Guidelines for Planning and Designing a Pickling Workshop".

Recommended applications and restrictions:

Only for the neutralising of Avesta pickling and cleaning products.

Basic information sources used to draw up the information cards:

Standard Practice for cleaning stainless steel (ASTM-A-380), International Standard ISO 11014-1,

The full texts of the R-phrases in section 3 are:

R 35: Causes severe burns.

Changes made since last version:

New layout and doc number

s. 14 - Tunnel restriction code, reference to regulations removed

s. 15 - Regulations updated

