

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

Swirl RFM__PN20354

Print date : 24.09.2009

Revision date : 13.05.2009

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Suitable extinguishing media

Water fog. Water. Foam.

Extinguishing media which must not be used for safety reasons

none / none

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

none / none

Special protective equipment for fire-fighters

none / none

6. Accidental release measures

Personal precautions

Wear personal protection equipment. See protective measures under point 7 and 8.

Environmental precautions

Do not empty into drains or the aquatic environment.

Methods for cleaning up/taking up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

7. Handling and storage

Handling

Advice on safe handling

All working processes must always be organised so that the following can be ruled out: skin contact.
Eye contact.

Storage

Requirements for storage rooms and vessels

No special technical protective measures are necessary.

Storageclass (VCI) :

8B

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

| CAS-No. | Chemical name | ml/m ³ | mg/m ³ | F/ml | Category | Origin |
|-----------|---------------------|-------------------|-------------------|------|---------------|--------|
| 1310-58-3 | Potassium hydroxide | - | - | | TWA (8 h) | WEL |
| | | - | 2 | | STEL (15 min) | WEL |

Exposure controls

Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace.

Respiratory protection

If product is splashed or sprayed in high concentrations or in case of insufficient ventilation adequate masks and filters suitable for dusts / aerosols (P2) are recommended.

Hand protection

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Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications. When handling chemical substances, chemical protective gloves must be worn with CE label including a four digit code. In case of reutilization, clean gloves before taking off and store in well-aired place.

Duration of wearing with occasional contact (splashes): Duration of wearing with permanent contact: Suitable material:

Butyl rubber.FKM (Fluoroelastomer (Viton)). NBR (Nitrile rubber). CR (polychloroprenes, Chloroprene rubber). NR (Natural rubber (Caoutchouc), Natural latex). PVC (Polyvinyl chloride).

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Eye protection

Suitable eye protection: Framed glasses. Tightly sealed safety glasses. EN 166

Skin protection

Take off immediately all contaminated clothing.

9. Physical and chemical properties

General information

Physical state : liquid
Colour : colourless
Odour : characteristic

Important health, safety and environmental information

| | Test method |
|--------------------------------------|-----------------------|
| pH-Value (at 20 °C) : | ca. > 13 |
| Changes in the physical state | |
| Flash point : | not applicable |
| Oxidizing properties | |
| none / none | |
| Density (at 20 °C) : | 1,4 g/cm ³ |
| Water solubility : (at 20 °C) | easily soluble. |

10. Stability and reactivity

Materials to avoid

Reacts with : acid, concentrated.

11. Toxicological information

Acute toxicity

Acute toxicity, oral LD50: calculated. mg/kg bw: > 8400

Corrosive and irritant effects

corrosive.

Further information

Acute toxicity, irritation of the skin and mucous membrane, and mutagenic potential of the preparation were assessed by the manufacturer on the basis of the data available on the main components. Information gaps exist on some of the main individual components. However, according to the experience of the manufacturer, no dangers above and beyond those on the product label are to be expected. The classification was undertaken in accordance with the calculation method governed by the Preparations Directive (1999/45/EC).

12. Ecological information

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Persistence and degradability

not applicable :Product is inorganic.

Other adverse effects

due to the alkaline character of the product, usually, it has to be neutralized before contaminated effluents are introduced into the waste water treatment system.

Further information

The evaluation was carried out according to the calculation method of the Preparations Directive.

13. Disposal considerations

Advice on disposal

Consult the local waste disposal expert about waste disposal. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste disposal number of waste from residues/unused products

200115 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); alkalines
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Completely emptied packings can be re-cycled.
Waste disposal according to official state regulations.

14. Transport information

Land transport (ADR/RID)

UN number : 1719
Classification code : C5
Warning plate
Hazard-no. : 80
Hazard label : 8
ADR/RID packing group : III
Limited quantity : LQ7

Description of the goods

CAUSTIC ALKALI LIQUID, N.O.S. (Alkalimetasilikate, Kaliumhydroxid)

Other applicable information (land transport)

Special provisions: 274
E1
: 3
: E

Marine transport

UN number : 1719
IMDG code : 8
Marine pollutant : •
Hazard label : 8
IMDG packing group : III
EmS : F-A, S-B
Limited quantity : 5 L

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Description of the goods

CAUSTIC ALKALI LIQUID, N.O.S. (alkaline metasilicates, potassium hydroxide)

Other applicable information (marine transport)

Special provisions: 223, 274, 944

Air transport

| | |
|---|------|
| UN/ID number : | 1719 |
| ICAO/IATA-DGR : | 8 |
| Hazard label : | 8 |
| ICAO packing group : | III |
| Limited quantity Passenger : | 1 L |
| IATA-packing instructions - Passenger : | 819 |
| IATA-max. quantity - Passenger : | 5 L |
| IATA-packing instructions - Cargo : | 821 |
| IATA-max. quantity - Cargo : | 60 L |

Description of the goods

CAUSTIC ALKALI LIQUID, N.O.S. (alkaline metasilicates, potassium hydroxide)

Other applicable information (air transport)

E1
: Y819
60 L

15. Regulatory information

Labelling

Danger symbols : C - Corrosive



C - Corrosive

Hazardous component(s) to be indicated on label

disodium and potassium metasilicate MR < 1,6, potassium hydroxide

R phrases

34 Causes burns.

S phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of Water. .
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Additional advice on labelling

Product is classified and labelled in accordance with EC regulations or the corresponding national laws.

EU regulatory information

Additional information

Labelling for contents according to regulation (EC) No 648/2004, annex 7: 15-30 % phosphates

National regulatory information

Water contaminating class (D) : 1 - slightly water contaminating

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16. Other information

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

| | |
|----|-----------------------|
| 22 | Harmful if swallowed. |
| 34 | Causes burns. |
| 35 | Causes severe burns. |

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

The receiver of our product is singularly responsible for adhering to existing laws and regulations. The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.