

1. IDENTIFIKATION OF THE SUBSTANCE/PREPARATION AND COMPANY

COMMERCIAL PRODUCT NAME: LUISO W34

Product use: Isolation of metal for the heat treatment

Manufacturer/Supplier:

DAM Härtetechnik GmbH
Am Bubenpfad 2
67065 Ludwigshafen
Germany

Telefon:+49-(0)621-454-9-666
Telefax:+49-(0)621-454-9-667

Informing department: Laboratory

Emergency information: :+49-(0)621-454-9-666

2. HAZARDS IDENTIFICATION

Hazard designation: void

Information pertaining to particular dangers for man and environment:

The product is alkaline. The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization:

Description: Mixture of silicates in water with inorganic fillers

Dangerous components:

CAS: 1344-09-8 Silicic acid, sodium salt, mol ratio > 3,2 EINECS: 215-687-4 < 20 %

4. FIRST AID MEASURES

General information: No special measures required. Take affected persons out of danger area and instruct to lie down.

After inhalation: Supply fresh air; consult doctor in case of symptoms.

After skin contact: Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing: Do not induce vomiting; instantly call for medical help. Rinse out mouth and then drink plenty of water. Seek medical treatment.

5. FIRE-FIGHTING MEASURE

Suitable extinguishing agents: Product is non-inflammable.

Protective equipment: No special measures required.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:

Particular danger of slipping on leaked/spilled product. Wear protective clothing.

Measures for environmental protection:

Prevent material from reaching sewage system, holes and cellars. Do not allow to enter the ground/soil. Inform respective authorities in case product reaches water or sewage system.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Additional information: No dangerous materials are released.

7. HANDLING AND STORAGE

Handling

Information for safe handling:

Keep containers tightly sealed. Prevent formation of aerosols.

Information about protection against explosions and fires: The product is not flammable

Storage

Requirements to be met by storerooms and containers:

Store in cool location. Provide alkali-resistant floor. Do not use light alloy containers. Use only containers specifically permitted for this substance/product.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Components with critical values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the compilation were used as basis.

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Instantly remove any soiled and impregnated garments. Do not eat, drink or smoke while working.

Breathing equipment: Not required.

Protection of hands:

Alkaline resistant gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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 several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Fluorocarbon rubber (Viton), Nitrile rubber, Butyl rubber

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: Safety glasses recommended during refilling.

Body protection: Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Shape:

Form: paste

Color: green

Smell: little

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.

Density at 20°C 1.9 g/cm³ (DIN 53217)

Solubility in / Miscibility with

Water: Fully miscible

pH-value at 20°C: 11

Viscosity:

dynamic at 20°C: 4000-12000 mPas (Brookfield)

Solvent content: none.

Water: 30-40 %

Solids content: 60-70 %
10. STABILITY AND REAKTIVITY <u>Thermal decomposition / conditions to be avoided:</u> No decomposition if used according to specifications. <u>Dangerous reactions</u> Strong exothermic reaction with acids. <u>Dangerous products of composition:</u> No dangerous decomposition products known
11. TOXICOLOGICAL INFORMATION <u>Acute toxicity:</u> <u>Primary irritant effect:</u> <u>on the skin:</u> Irritant for skin and mucous membranes. <u>on the eye:</u> Irritant effect. <u>Sensitization:</u> No sensitizing effect known. <u>Additional toxicological information:</u> The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.
12. ECOLOGICAL INFORMATION Water hazard class 1 (Self-assessment) The product should not be allowed to enter drains or water courses.
13. DISPOSAL CONSIDERATIONS <u>Recommendation:</u> Disposal in accordance with the official regulations. <u>Recommended cleaning agent:</u> Water, if necessary with cleaning agent.
14. TRANSPORT INFORMATION <u>Landtransport:</u> ADR/RID and GGVS/GGVE - None <u>Airtransport:</u> DGR - None <u>Seatransport:</u> IMDG - None <u>Transport informations:</u> sensitive to frost
15. REGULATORY INFORMATION <u>Designation according to EC guidelines:</u> Observe the normal safety regulations when handling chemicals. The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV). <u>National regulations</u> <u>Water hazard class:</u> Water hazard class 1 (Self-assessment)
16. OTHER INFORMATION The information of this MSDS is based on the present state of our knowledge and or current EEC and national laws, as the users working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product: is not to be considered as a guarantee of the product properties.