

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.07.2012

Revision: 06.07.2012

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
 - **Trade name: MR® 220 Magnetic powder concentrate, black**
1:100, water suspendable
 - **Type of packaging** bulk
 - **Relevant identified uses of the substance or mixture and uses advised against**
 - **Application of the substance / the preparation**
Testing material for nondestructive surface crack detection
 - **Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Hersteller:
MR-Chemie GmbH
Nordstr. 61-63
D-59427 Unna
Tel. +49 (0)2303/95151-0
Fax +49 (0)2303/95151-10
 - **Further information obtainable from:**
MR® Chemie GmbH, Development, Tel.: 0049-(0)2303/95151-18, QS@mr-chemie.de
 - **Emergency telephone number:**
24h- Emergency Contact Phone Number
For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident
- Call Day or Night within USA and Canada: 1 800 424 9300
Outside USA and Canada: 001 703 527 3887
In-Country Emergency Number for:
- | | | |
|---------------|------------------|-------------|
| China: | 4001 204937 | (Mandarin) |
| Hong Kong: | 800 968 793 | (Cantonese) |
| India: | 000 800 100 7141 | (Hindi) |
| South Africa: | 0 800 983 611 | (English) |
- (WISAG FMO Cargo Service GmbH & CO.KG)

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
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 according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
- **Special labelling of certain preparations:**
Safety data sheet available for professional user on request.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | |
|------------------------------------|--|--------|
| CAS: 102-71-6 EINECS: 203-049-8 | 2,2',2''-nitilotriethanol substance with a Community workplace exposure limit | 10-25% |
| CAS: 141-43-5 EINECS: 205-483-3 | 2-aminoethanol C R34; Xn R20/21/22 Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 | < 1.0% |

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
Grease with skin-cream to restore fat film in order to prevent skin inflammation.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Condition of the tanks and stockrooms is to be co-ordinated with the responsible authorities.
Keep receptacles tightly sealed.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

102-71-6 2,2',2''-nitrioltriethanol

| | |
|---------------|---------------------------------------|
| MAK (Germany) | Long-term value: 5E mg/m ³ |
|---------------|---------------------------------------|

141-43-5 2-aminoethanol

| | |
|---------------------|---|
| IOELV (EU) | Short-term value: 7.6 mg/m ³ , 3 ppm Long-term value: 2.5 mg/m ³ , 1 ppm Skin |
| WEL (Great Britain) | Short-term value: 7.6 mg/m ³ , 3 ppm Long-term value: 2.5 mg/m ³ , 1 ppm Sk |
| AGW (Germany) | Long-term value: 5.1 mg/m ³ , 2 ppm 2(l);DFG, EU, H, Y, Sh |

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:**
For good ventilation provide, this can be achieved by local or space exhaust. If the concentration lies over the job limit values, then, a certified respirator suitable for this purpose must be used.
- **Protection of hands:**
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 several substances, the resistance of the glove material can not be calculated in advance and has therefore

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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:** With danger of the eye contact closing eye protector.

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

| | |
|---------------------------|-----------------|
| · Form: | Fluid |
| · Colour: | Black |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

| | |
|---------------------------------------|---------------|
| · Melting point/Melting range: | Undetermined. |
| · Boiling point/Boiling range: | 100°C |

· **Flash point:** 93°C
Basis: active substance

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 305°C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

| | |
|-----------------|-----------------|
| · Lower: | Not determined. |
| · Upper: | Not determined. |

· **Vapour pressure at 20°C:** 23 hPa

| | |
|---------------------------|------------------------|
| · Density at 20°C: | 1.36 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Segregation coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

| | |
|----------------------------|-----------------|
| · Dynamic: | Not determined. |
| · Kinematic: | Not determined. |
| · Organic solvents: | 22.0 % |
| · Water: | 15.0 % |

· **Solids content:** 30.0 %

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· **Other information**

No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product is not subject to classification according to the calculation method of the General EU 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 to our experience and the information provided to us.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1: weakly water-endangering
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.

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After arrangement with the local water authority the product In the application concentration (2-4 %) can to be discharged into drains, as far as it was not continued to contaminate by the user.

· **Waste disposal key:**

For this product no waste key number can be specified, because only the intended purpose permits an allocation. The waste key number is to be specified in arrangement with the regional waste disposal.

· **European waste catalogue**

| | |
|-----------|--|
| 15 01 10* | packaging containing residues of or contaminated by dangerous substances |
|-----------|--|

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **ADR, ADN, IMDG, IATA** Void

· **UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

· **Transport hazard class(es)**

· **ADR, ADN, IMDG, IATA**

· **Class** Void

· **Packing group**

· **ADR, IMDG, IATA** Void

· **Environmental hazards:**

· **Marine pollutant:** No

· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of**

MARPOL73/78 and the IBC Code Not applicable.

· **UN "Model Regulation":**

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **National regulations:**

· **Waterhazard class:**

Water hazard class 1: slightly hazardous for water.(In accordance with classification VwVwS,appendix 4)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

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H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

· **Recommended restriction of use**

Existing national and local laws concerning chemicals are to be considered.

· **Department issuing MSDS:** MR® Chemie GmbH, Development

· **Contact:** MR® Chemie GmbH, Tel.: 0049(0)2303/95151-0

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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