

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

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

- **Product identifier**
- **Trade name:** **MR® 210 Magnetic powder, black, 1:100**  
**oil and water suspendable**
- **EC number:**  
215-277-5
- **Type of packaging** bulk
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation**  
Magnetic powder 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, Developement, 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  
(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 substance 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:** Not applicable.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Substances Magnetic powder
- **CAS No. Description**  
C.I.Pigment black 11
- **Identification number(s)**
- **EC number:** 215-277-5

GB

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

**Trade name: MR® 210 Magnetic powder, black, 1:100  
oil and water suspendable**

(Contd. of page 1)

### 4 First aid measures

- **Description of first aid measures**
- **General information:** 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:**  
CO<sub>2</sub>, 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 product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Avoid formation of dust.  
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.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Keep receptacles tightly sealed.
- **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 dry.  
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.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

**Trade name: MR® 210 Magnetic powder, black, 1:100**  
oil and water suspendable

(Contd. of page 2)

- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **Storage class:** 13
- **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:** Not required.
- **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:** Use a dust mask if dust release occurs.
- **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.
- **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:	Powder
Colour:	Black
Odour:	Odourless
Odour threshold:	Not determined.
- **pH-value at 20°C:** > 4
- **Change in condition**

Melting point/Melting range:	1594°C
Boiling point/Boiling range:	Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

**Trade name: MR® 210 Magnetic powder, black, 1:100**  
oil and water suspendable

(Contd. of page 3)

· <b>Self-igniting:</b>	Not determined.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density at 20°C:</b>	4.6 g/cm <sup>3</sup>
· <b>Bulk density at 20°C:</b>	600-800 kg/m <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Insoluble.
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
Organic solvents:	0.0 %
Solids content:	100.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Exothermic thermal decomposition.
- **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:**

- **LD/LC50 values relevant for classification:**

**C.I. Pigment black 11**

Oral	LD50	>5000 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

**Trade name: MR® 210 Magnetic powder, black, 1:100**  
oil and water suspendable

(Contd. of page 4)

The substance is not subject to classification according to the latest version of the EU lists.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** Fish: LC/EC/IC 50 > 1000 mg/l
- **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:** Generally not hazardous for water
- **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**  
On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.  
Eliminate in accordance with local regulations.
- **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 02	plastic packaging
----------	-------------------

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |                                     |      |
|-------------------------------------|------|
| · <b>UN-Number</b>                  |      |
| · <b>ADR, ADN, IMDG, IATA</b>       | Void |
| · <b>UN proper shipping name</b>    |      |
| · <b>ADR, ADN, IMDG, IATA</b>       | Void |
| · <b>Transport hazard class(es)</b> |      |
| · <b>ADR, ADN, IMDG, IATA</b>       |      |
| · <b>Class</b>                      | Void |
| · <b>Packing group</b>              |      |
| · <b>ADR, IMDG, IATA</b>            | Void |
| · <b>Environmental hazards:</b>     |      |
| · <b>Marine pollutant:</b>          | No   |

(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 27.01.2012

Revision: 27.01.2012

**Trade name: MR® 210 Magnetic powder, black, 1:100  
oil and water suspendable**

(Contd. of page 5)

- |  |                 |
|--|-----------------|
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | -               |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Generally not hazardous for water.
- **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.

- **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)  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organization  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LD50: Lethal dose, 50 percent
- **\* Data compared to the previous version altered.**

—GB—