

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.11.2023

Revision: 25.11.2023

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

- **1.1 Product identifier**
- **Trade name:** **MR® 214 Magnetic powder composition, black**
Dilution: 20 g/l in water
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category**
 PC14 Metal surface treatment products, including galvanic and electroplating products
- **Process category**
 PROC7 Industrial spraying
 PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
 PROC13 Treatment of articles by dipping and pouring
- **Environmental release category**
 ERC4 Industrial use of processing aids in processes and products, not becoming part of articles
- **Article category** AC7 Metal articles
- **Application of the substance / the mixture**
 Testing material for nondestructive surface crack detection
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 3AK Chemie Pvt. Ltd.
 5/B5/1 - TSIIIC Automotive Park, Kallakal, Telangana, Dist: Medak, INDIA. Pin: 502336
 Email: qc@3akchemie.com
- **Further information obtainable from:**
 3AK Chemie Pvt. Ltd. Safety Data Sheet, qc@3akchemie.com
- **1.4 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:
 Australia: +61 433 289 052 (English)
 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)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The substance is classified and labelled according to the CLP regulation.

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· Hazard pictograms



GHS07

· Signal word Warning

· Hazard statements

H319 Causes serious eye irritation.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· CAS No. Description

1345-25-1 Eisen-II-oxid

· Identification number(s)

· EC number: 215-721-8

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 7631-99-4 EINECS: 231-554-3	sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen Ox. Sol. 2, H272 Eye Irrit. 2, H319	40-60%
CAS: 102-71-6 EINECS: 203-049-8	2,2',2''-nitrilotriethanol substance with a Community workplace exposure limit	2.5-10%
CAS: 68911-38-1 EINECS: 221-416-0	Fettalkohol ethoxyliert, sulfatiert, Na-salz Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-10%
CAS: 57-55-6 EINECS: 200-338-0	propane-1,2-diol Acute Tox. 4, H302	< 1.0%

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information: Immediately remove any clothing soiled by the product.

· 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.

· 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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- **Information for doctor:**
Grease with skin-cream to restore fat film in order to prevent skin inflammation.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

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

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
Avoid contact with eyes and skin.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Keep receptacles tightly sealed.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 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.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 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/m³

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57-55-6 propane-1,2-diol

WEL (Great Britain)	Long-term value: 474* 10** mg/m ³ , 150* ppm *total vapour and particulates **particulates
MAK (Germany)	als Dampf und Aerosol;vgl.Abschn.IIb

· **DNELs****102-71-6 2,2',2''-nitrilotriethanol**

Dermal	Long-term - systemic effects, worker	6.3 mg/kg bw/day (worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m ³ (worker)
	Long-term - local effects, worker	5 mg/m ³ (worker)

57-55-6 propane-1,2-diol

Inhalative	Long-term - systemic effects, worker	168 mg/m ³ (worker)
	Long-term - local effects, worker	10 mg/m ³ (worker)

· **PNECs****102-71-6 2,2',2''-nitrilotriethanol**

Aquatic compartment, freshwater	0.32 mg/L (freshwater)
Aquatic compartment - marine water	0.032 mg/L (marine water)
Aquatic compartment - water intermittent releases	5.12 mg/L (intermittent release water)
Aquatic compartment- sediment in freshwater	1.7 mg/kg sed dw (sediment fresh water)
Aquatic compartment sediment in marine water	0.17 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	0.151 mg/kg dw (soil)
Sewage treatment plant	10 mg/L (sewage treatment plant)

57-55-6 propane-1,2-diol

Aquatic compartment, freshwater	260 mg/L (freshwater)
Aquatic compartment - marine water	26 mg/L (marine water)
Aquatic compartment- sediment in freshwater	572 mg/kg sed dw (sediment fresh water)
Aquatic compartment sediment in marine water	57.2 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	50 mg/kg dw (soil)
Sewage treatment plant	20000 mg/L (sewage treatment plant)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.

· **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:**

For the protection against chemicals in areas with heightened risk of injury (mechanical hazard) no recommendation for a suitable glove material can be given.
 Check the permeability prior to each renewed use of the glove.
 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**

Rubber gloves

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Recommended thickness of the material: ≥ 0.1 mm

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.

· **Penetration time of glove material**

Value for the permeation: Level ≤ 6

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

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form:	Powder
Colour:	Black
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· **Flash point:** Not applicable.

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

· **Ignition temperature:**

Decomposition temperature: Not determined.

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

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

· **Explosion limits:**

Lower:	0.0 Vol %
Upper:	0.0 Vol %

· **Vapour pressure:** Not applicable.

Density at 20 °C:	4.6 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

· **Solubility in / Miscibility with water:**

Soluble.

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

· **Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.
Organic solvents:	3.0 %
Water:	0.9 %

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Solids content: 100.0 %
9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

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

7631-99-4 sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen

Oral	LD50	3236 mg/kg (rat)
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102-71-6 2,2',2''-nitrotriethanol

Oral	LD50	8000 mg/kg (rat)
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57-55-6 propane-1,2-diol

Oral	LD50	2000 mg/kg (rat)
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Dermal	LD50	20800 mg/kg (rbt)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

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- **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
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Eliminate in accordance with local regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **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 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by dangerous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|--|-----------------|
| · 14.1 UN-Number | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | |
| | Not applicable. |

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· **UN "Model Regulation":** Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:**
Water hazard class 1: slightly hazardous for water. (In accordance with classification VwVwS, appendix 4)
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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. The data in this safety data sheet are based on our knowledge at the time of the revision. The information should give you reference points for a safe handling of the product specified in this safety data sheet. The data are not transferable to other products. If the product specified in this safety data sheet is mixed or processed with other materials, the data cannot be transferred without examination.

- **Relevant phrases**
The wording of the listed risk phrases are those of the individual raw materials.
H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- **Recommended restriction of use**
Existing national and local laws concerning chemicals are to be considered.
- **Department issuing MSDS:** 3AK Chemie Pvt. Ltd.
- **Contact:** 3AK Chemie Pvt. Ltd., Safety data sheets, Email: qc@3akchemie.com

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 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 Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Ox. Sol. 2: Oxidising Solids, Hazard Category 2
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

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. * **Data compared to the previous version altered.**

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