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

· 1.1 Product identifier

· Trade name: MR® 81 Food Safe Dry developer

· CAS Number:

12125-28-9

EC number:

235-192-7

· Index number:

000-700-10-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

· Life cycle stages

F Formulation or re-packing

IS Use at industrial Sites

· Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

· Product category PC14 Metal surface treatment products

· Process category

PROC7 Industrial spraying

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC13 Treatment of articles by dipping and pouring

· Environmental release category

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

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:

MR Chemie GmbH

Nordstr. 61-63

59427 Unna (Germany)

Tel. +49 (0)2303 95151 0

Fax: +49 (0)2303 95151 10

post@mr-chemie.de

www.mr-chemie.de

· Further information obtainable from:

MR Chemie GmbH, Dep. safety data sheets, Tel.: +49/(0)2303/95151-38, QS@mr-chemie.de

1.4 Emergency telephone number:

24h- Emergency Contact Phone Number For Chemical Emergency, Spill, Leak, Fire, Exposure or

Accident (WISAG FMO Cargo Service GmbH & CO.KG)

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:

Germany: 0800-181-7059

 China:
 4001 204937
 (Mandarin)

 Hong Kong:
 800 968 793
 (Cantonese)

 India:
 000 800 100 7141
 (Hindi)

 South Africa:
 0 800 983 611
 (English)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the GB CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void

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· Signal word Void

· Hazard statements Void

· 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

12125-28-9 Magnesium carbonate hydroxide

· Identification number(s) · EC number: 235-192-7 · Index number: 000-700-10-2

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Seek medical advice if symptoms occurs or in cases of doubt.
- · **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.

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

No further relevant information available.

· 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

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam

· Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

· 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 Not required.
- 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

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling No special measures required.
- 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.
- · Recommended storage temperature: 5 45°C, 41 113 °F
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid contact with the eyes.

· Respiratory protection:

Filter P1

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:

Check the permeability prior to each anewed use of the glove.

For the protection against chemicals in areas with heightened risk of injury (mechanical hazard) no recommendation for a suitable glove material can be given.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Rubber gloves

Recommended thickness of the material: ≥ 0.5 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.

Penetration time of glove material

Supplier for suitable protection gloves:

ASD ArbeitsSicherheit Dortmund

Torstr. 101 - 37355 Niederorschel OT Rüdigershagen

Tel.: 02301 / 919543 - Fax: 02301 / 9453893

E-Mail: m.schnellhardt@t-online.de - http://www.arbeitssicherheitdortmund.de

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Safety data sheet according to 1907/2006/EC, Article 31

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· Eye protection:

Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:
Colour:
White
Odourless
Odour threshold:
Not determined.

pH-value:
Not applicable.

· Change in condition

Melting point/freezing point: Undetermined. **Initial boiling point and boiling range:** Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gas): Product is not flammable.

Decomposition temperature: Not determined.Auto-ignition temperature: Not determined.

• **Explosive properties:** Product does not present an explosion hazard.

Not determined.

· Explosion limits:

Lower:

Upper: Not determined.

Vapour pressure: Not applicable.

Density at 20 °C: 0.1 g/cm³

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not applicable.
 Not applicable.

· Solubility in / Miscibility with

water: Insoluble.

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

· Viscosity:

Dynamic:Not applicable.Kinematic:Not applicable.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.

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- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

- · 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 Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · General remarks:
- · CMR effects (carcinogenity, 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.
- Additional ecological information:
- · General notes: Not hazardous for water.
- · 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 the pure, unchanged substance in accordance with local regulations.
- · Waste disposal kev:

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.

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

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14.1 UN-Number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	. 5.0
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:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Ani	nex II
of Marpol and the IBC Code	Not applicable.

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 Substance is not listed.
- · National regulations:
- · Waterhazard class: Classification according to VwVwS: not hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

- · Relevant phrases The wording of the listed risk phrases are those of the individual raw materials.
- · Recommended restriction of use

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

Department issuing SDS:

MR Chemie GmbH, Dep. safety data sheets, Tel.: +49/(0)2303/95151-38

Contact:

MR Chemie GmbH, Dep. safety data sheets, Tel.: +49/(0)2303/95151-38, QS@mr-chemie.de

Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.