Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

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

- · 1.1 Product identifier
- · Trade name: MR® 400 Wetting agent
- · 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 additive for magnetic particle agents
- · 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

Outside USA and Canada: 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 mixture is classified according to Regulation (EC) No 1272/2008 according to the most recent ATP.

The product 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
- · Signal word Void
- Hazard statements Void

(Contd. on page 2)

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

(Contd. of page 1)

· 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· CAS No. Description

68439-50-9 Fettalkohol C12-C14, ethoxyliert

Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 68891-38-3 Reg.nr.: 01-2119488639-16- XXXX	Fatty alcohol-C12/14-2 EO-sulfat, Na-salt Skin Irrit. 2, H315; Eye Irrit. 2, H319	≥ 5 - < 10%

· Additional information:

Wording of the listed hazard phrases are indicated in section 16 and relate to individual raw components.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

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:

Water

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.

GB

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

(Contd. of page 2)

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- · 6.3 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.

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 Open and handle receptacle with care.
- 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:

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

	at the Workplace.					
· DNELs	DNELs					
68891-38-	68891-38-3 Fatty alcohol-C12/14-2 EO-sulfat, Na-salt					
Dermal	Long-term - systemic effects, worker 2,750 mg/kg bw/day (worker)					
Inhalative	Inhalative Long-term - systemic effects, worker 175 mg/m³ (worker)					
· DNEL (De	rived No Effect Level) for the genera	al population				
68891-38-	68891-38-3 Fatty alcohol-C12/14-2 EO-sulfat, Na-salt					
Oral	Long term - systemic effects, ger population	neral 15 mg/kg bw/day (general population)				
Dermal	Long term - systemic effects, ger population	neral 1,650 mg/kg bw/day (general population)				
Inhalative	Long term - systemic effects, ger population	neral 52 mg/m³ (general population)				
·PNECs	PNECs					
68891-38-	68891-38-3 Fatty alcohol-C12/14-2 EO-sulfat, Na-salt					
Aquatic co	Aquatic compartment - freshwater 0.24 mg/L (freshwater)					

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

	(Contd. of page 3)
Aquatic compartment - marine water	0.024 mg/L (marine water)
Aquatic compartment - water intermittent releases	0.071 mg/L (intermittent release water)
Aquatic compartment - sediment freshwater	0.9168 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment marine water	0.09168 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	7.5 mg/kg dw (soil)
Sewage treatment plant	10,000 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:

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

Avoid contact with the eyes.

Respiratory protection:

Filter A

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: $\geq 0.1 \text{ mm}$

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

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.

· 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: Fluid Colour: Colourless

(Contd. on page 5)

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

	(Contd. of page 4)
· Odour:	Mild
· Odour threshold:	Not determined.
· pH-value at 20 °C:	7
 Change in condition Melting point/freezing point: Initial boiling point and boiling range: 	Undetermined. 100 °C
· Flash point:	Basis: active substance
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapour pressure at 20 °C:	23 hPa
 Density at 20 °C: Relative density Vapour density Evaporation rate 	1 g/cm³ Not determined. Not determined. Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: Dynamic at 20 °C: Kinematic:	3.22 mPas Not determined.
· Solvent separation test: Water: VOC (EU)	>60 % <0.1 %
· 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 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.

(Contd. on page 6)

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

(Contd. of page 5)

- · 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

Leicht biologisch abbaubar: > 70 %; 28 d; OECD TG 301 A (neue Version)

Leicht biologisch abbaubar: > 60 %; 28 d; OECD TG 301 B

- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product 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 the pure, unchanged substance 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.

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

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	

(Contd. on page 7)

Printing date 11.01.2023 Version number 1 Revision: 11.01.2023

Trade name: MR® 400 Wetting agent

		(Contd. of page 6)
· 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 An of Marpol and the IBC Code 	nex II Not applicable.	
· 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 Substance is not listed.
- · National regulations:
- · Waterhazard class: Water hazard class 1: slightly 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.

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 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:

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 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

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (ÚK REACH)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

* * Data compared to the previous version altered.