

Printing date 20.07.2016 Version number 2 Revision: 20.07.2016

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

1.1 Product identifier

Trade name: Magnesium sulfate solution

Article number: - Registration number:

Magnesium sulfate registration 10.01.2013

01-2119486789-11-0030

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

Application of the substance / the preparation: Construction materials industry

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Montanwerke Brixlegg AG Werkstraße 1

A-6230 Brixlegg Tel: +43-5337-6151-0 Fax: +43-5337-6151-102

MSDS@Montanwerke-Brixlegg.com

More information: www.montanwerke-brixlegg.com

1.4 Emergency telephone number:

Tel: + 43-5337-6151-0 during normal business hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void 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

3.2 Chemical characterisation: Mixtures

Description: Aqueous solution containing 200-300 g/l of magnesium sulfate (CAS no. 7487-88-9)

Dangerous components: Void

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of symptoms.

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: Seek immediate medical advice.

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

Suitable extinguishing agents:

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

Unsuitable extinguishing agents (for safety reasons): Water with full jet

5.2 Special hazards arising from the substance or mixture No further relevant information available.

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5.3 Advice for firefighters

Protective equipment: Wear fully protective suit.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- **6.2 Environmental precautions:** Prevent material from reaching sewage system, holes and cellars.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of the material collected according to regulations.

6.4 Reference to other sections

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 No special measures required.

Information on protection against explosions and fires: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storagerooms and containers: No special requirements.

Information on storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Storage class: 12

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

8.1 Control parameters

Components with critical 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.

DNELs:					
7487-88-9 magnesium sulfate					
Oral	DNEL	Long-term / systemic effects	12.8 mg/kg KG(bw)/d (Consumer/general population)		
Dermal	DNEL	Long-term / systemic effects	21.3 mg/kg KG(bw)/d (Worker)		
			12.8 mg/kg KG(bw)/d (Consumer/general population)		
Inhalative	DNEL	Long-term / systemic effects	37.6 mg/m³ (Worker)		
			11.1 mg/m³ (Consumer/general population)		

PNECs:

7487-88-9 magnesium sulfate

PNEC 0.068 mg/l (Seawater)

6.8 mg/l (intermittent releases)

0.68 mg/l (Fresh water)

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 for handling chemicals should be followed.

Store protective clothing separately. **Breathing equipment:** Not required. **Protection of hands:** Protective gloves

Material of gloves:

PVC, PE

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.

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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: Safety glasses

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
Odour: Odourless
pH-value: 6 - 9

Change in condition:

Melting point/Melting range: Not determined.

Flash point: Not applicable.

Danger of explosion: Product is not explosive.

Density: 1180 - 1280 g/l

Solubility in / Miscibility with:

Water: Soluble.

Viscosity:

dynamic: Not determined.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Conditions to be avoided: No decomposition if used according to specifications.

- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products: None

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values that are	relevant for	classification:
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7487-88-9 magnesium sulfate

Oral LD50 >2000 mg/kg (rat)
Dermal LD50 >2000 mg/kg (rat)

Primary irritant effect:

Skin: Based on available data, the classification criteria are not met.

Eye: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Repeated dose toxicity:

7487-88-9 magnesium sulfate

Oral NOAEL 256 mg/kg KG(bw)/d (rat)

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.

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Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

7487-88-9 magnesium sulfate

LC50 680 mg/l/96h (Pimephales promelas)

LC50 720 mg/l/48h (Daphnia magna (water flea))

EC50 2700 mg/l/72h (Scenedesmus subspicatus (green alga))

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:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

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:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal in compliance with local and/or national safety directions.

Uncleaned packagings:

Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

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:	Not applicable. 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.				
UN "Model Regulation":	Void			

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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.

15.2 Chemical safety assessment: A Chemical Safety Assessment has 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.

User: UHE

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 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

* Data compared to the previous version altered.

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