

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Revision date : 22-10-2015  
Print date : 22/10/2015  
Version (Revision) : 1.1.0 (1.0.0)

## Magnesium sulphate - heptahydrate - FCC grade

14820001

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

#### 1.1 Product identifier

Magnesium sulphate - heptahydrate - FCC grade

MAGNESIUM SULFATE HEPTAHYDRATE ; CAS No. : 10034-99-8 ; EC No. : 231-298-2

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

Relevant identified uses

Food additive.

#### 1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Hexeal Chemicals Ltd, 21 Mackintosh Road, Norwich NR13 6LJ

Telephone : 01603 604200

Information contact : sales@hexchem.co.uk

#### 1.4 Emergency telephone number 01603 604200

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

None

#### 2.2 Label elements

None

#### 2.3 Other hazards

None under normal conditions.

This product does not contain substance of very high concern (SVHC).

### SECTION 3: Composition / information on ingredients

#### 3.1 Substances

Substance name : MAGNESIUM SULFATE HEPTAHYDRATE

EC No. : 231-298-2

CAS No. : 10034-99-8

Purity : 99 % [mass]

### SECTION 4: First aid measures

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### 4.1 Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### Following inhalation

Remove victim out of the danger area.

#### In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

#### After eye contact

Continue to rinse eye with clean water for 10 - 15 min minutes, retracting eyelids often.

Remove contact lenses, if present and easy to do. Continue rinsing.

Seek medical attention if irritation develops.

#### After ingestion

Rinse mouth thoroughly with water.

Give water to drink.

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

After ingestion:

Diarrhea.

### 4.3 Indication of any immediate medical attention and special treatment needed

Give supportive therapy.

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

This product is not flammable.

Use extinguishing media appropriate for surrounding fire.

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

Thermal decomposition generates:

Sulfur oxides.

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. (see chapter 8).

Do not breathe dust.

Avoid dust production.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

#### For cleaning up

Take up mechanically, placing in appropriate containers for disposal.

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Dispose in a safe manner in accordance with local/national regulations.

### 6.4 Reference to other sections

See protective measures under point 8 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid dust production.  
Avoid contact with skin and eyes.  
Avoid ingestion and inhalation.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated area.

#### Hints on joint storage

Storage class : 13

### 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

None

### 8.2 Exposure controls

#### Personal protection equipment

##### Eye/face protection

Safety glasses

##### Skin protection

###### Hand protection

Wear suitable gloves resistant to chemical penetration.

Long-term exposure:

Breakthrough time: 480 min

Thickness of the material: 0,7 mm

Short-term exposure:

Breakthrough time: 30 min

Thickness of the material: 0,4 mm

Material:

NR (natural rubber, natural latex)

###### Body protection

Wear suitable protective clothing and chemical resistant boots.

##### Respiratory protection

Approved dust respirator.

#### General health and safety measures

When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

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### Safety relevant basis data

Physical state :		solid
Appearance :		crystalline
Colour :		white
Odour :		Faint odour.
Melting point/melting range :		770 °C
Flash point :		not applicable
pH :	ca.	8
Flammability:		Not flammable.
Oxidising properties:		Not applicable.
Explosive properties :		Not applicable.
Density :	( 20 °C )	1700 kg/m <sup>3</sup>
Bulk density :	ca.	980 kg/m <sup>3</sup>
Solubility in water:		342 g/L

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions.

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

Thermal decomposition generates:  
Sulfur oxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

##### Acute oral toxicity

Parameter :	LD50
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 425

By analogy.

##### Acute dermal toxicity

Parameter :	LD50
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg

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Method : OECD 402

By analogy.

### Acute inhalation toxicity

Parameter : LC50  
Exposure route : Inhalation  
Test result : No information available.

### Irritant and corrosive effects

#### Primary irritation to the skin

Parameter : Skin corrosion/irritation  
Result : Not irritant.

By analogy.

#### Irritation to eyes

Parameter : Serious eye damage/irritation  
Species : Rabbit  
Result : Not irritant.  
Method : OECD 405

By analogy.

### Sensitisation

#### In case of skin contact

Parameter : Respiratory or skin sensitisation  
Species : Mouse  
Result : Not sensitizing.  
Method : OECD Test Guideline no. 429

By analogy.

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

#### Carcinogenicity

Parameter : Carcinogenicity  
Test result : No information available.

#### Germ cell mutagenicity

##### In vitro mutagenicity

Parameter : Germ cell mutagenicity  
Test result : Negative.  
Method : OECD 476

By analogy.

##### In vivo mutagenicity

No information available.

#### Reproductive toxicity

##### Adverse effects on sexual function and fertility

Parameter : Reproductive toxicity  
Exposure route : NOAEL(C)  
Species : Rat  
Effective dose : >= 1500 mg/kg  
Method : OECD 422

By analogy.

### STOT-single exposure

No information available.

### STOT-repeated exposure

#### STOT RE 1 and 2

Parameter : Single target organ toxicity - repeated exposure  
Exposure route : NOAEL

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Species : Rat  
Effective dose :  $\geq$  256 mg/kg  
Method : OECD 453  
By analogy.

**Aspiration hazard**  
No information available.

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity

###### Acute (short-term) fish toxicity

Parameter : LC50  
Species : Pimephales promelas (fathead minnow)  
Effective dose : 680 mg/l  
Exposure time : 96 h

By analogy.

###### Acute (short-term) daphnia toxicity

Parameter : EC50  
Effective dose : 720 mg/l  
Exposure time : 48 h

By analogy.

###### Acute (short-term) algae toxicity

Parameter : EC50  
Species : Chlorella vulgaris  
Effective dose : 2700 mg/l  
Exposure time : 18 d

By analogy.

###### Bacteria toxicity

Parameter : EC50  
Species : Photobacterium phosphoreum  
Effective dose : 84 mg/l  
Exposure time : 0.5 h

#### 12.2 Persistence and degradability

##### Biodegradation

Analytical method : Biodegradation  
Evaluation : Not applicable to inorganic substances.

#### 12.3 Bioaccumulative potential

not applicable

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

#### 12.6 Other adverse effects

No information available.

#### 12.7 Additional ecotoxicological information

None

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

#### 14.1 UN number

No dangerous goods in sense of this transport regulation.

#### 14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

#### 14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

#### 14.4 Packing group

No dangerous goods in sense of this transport regulation.

#### 14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

#### 14.6 Special precautions for user

None

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Ensure all national/local regulations are observed.

National regulations

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Other regulations, restrictions and prohibition regulations

#### 15.2 Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

### SECTION 16: Other information

#### 16.1 Indication of changes

02. Classification of the substance or mixture · 02. Label elements

#### 16.2 Abbreviations and acronyms

a.i. = Active ingredient

ACGIH = American Conference of Governmental Industrial Hygienists (US)

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

AFFF = Aqueous Film Forming Foam

AISE = International Association for Soaps, Detergents and Maintenance Products (joint project of AISE and CEFIC)

AOAC = AOAC International (formerly Association of Official Analytical Chemists)

aq. = Aqueous

ASTM = American Society of Testing and Materials (US)

atm = Atmosphere(s)

B.V. = Beperkt Vennootschap (Limited)

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BCF = Bioconcentration Factor  
bp = Boiling point at stated pressure  
bw = Body weight  
ca = (Circa) about  
CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)  
CEFIC = European Chemical Industry Council (established 1972)  
CIPAC = Collaborative International Pesticides Analytical Council  
CLP = REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
Conc = Concentration  
cP = CentiPoise  
cSt = Centistokes  
d = Day(s)  
DIN = Deutsches Institut für Normung e.V.  
DNEL = Derived No-Effect Level  
DT50 = Time for 50% loss; half-life  
EbC50 = Median effective concentration (biomass, e.g. of algae)  
EC = European Community; European Commission  
EC50 = Median effective concentration  
EINECS = European Inventory of Existing Commercial Chemical Substances (EU, outdated, now replaced by EC Number)  
ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)  
ErC50 = Median effective concentration (growth rate, e.g. of algae)  
EU = European Union  
EWC = European Waste Catalogue  
FAO = Food and Agriculture Organization (United Nations)  
GIFAP = Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques (now CropLife International)  
h = Hour(s)  
hPa = HectoPascal (unit of pressure)  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IC50 = Concentration that produces 50% inhibition  
IMDG Code = International Maritime Dangerous Goods Code  
IMO = International Maritime Organization  
ISO = International Organization for Standardization  
IUCLID = International Uniform Chemical Information Database  
IUPAC = International Union of Pure and Applied Chemistry  
kg = Kilogram  
Kow = Distribution coefficient between n-octanol and water  
kPa = KiloPascal (unit of pressure)  
LC50 = Concentration required to kill 50% of test organisms  
LD50 = Dose required to kill 50% of test organisms  
LEL = Lower Explosive Limit/Lower Explosion Limit  
LOAEL = Lowest observed adverse effect level  
mg = Milligram  
min = Minute(s)  
ml = Milliliter  
mmHg = Pressure equivalent to 1 mm of mercury (133.3 Pa)  
mp = Melting point  
MRL = Maximum Residue Limit  
MSDS = Material Safety Data Sheet  
n.o.s. = Not Otherwise Specified  
NIOSH = National Institute for Occupational Safety and Health (US)  
NOAEL = No Observed Adverse Effect Level  
NOEC = No observed effect concentration  
NOEL = No Observable Effect Level  
NOx = Oxides of Nitrogen



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OECD = Organization for Economic Cooperation and Development  
OEL = Occupational Exposure Limits  
Pa = Pascal (unit of pressure)  
PBT = Persistent, Bioaccumulative or Toxic  
pH = -log<sub>10</sub> hydrogen ion concentration  
pKa = -log<sub>10</sub> acid dissociation constant  
PNEC = Previsible Non Effect Concentration  
POPs = Persistent Organic Pollutants  
ppb = Parts per billion  
PPE = Personal Protection Equipment  
ppm = Parts per million  
ppt = Parts per trillion  
PVC = Polyvinyl Chloride  
QSAR = Quantitative Structure-Activity Relationship  
REACH = Registration, Evaluation and Authorization of CHemicals (EU, see NCP)  
SI = International System of Units  
STEL = Short-Term Exposure Limit  
tech. = Technical grade  
TSCA = Toxic Substances Control Act (US)  
TWA = Time-Weighted Average  
vPvB = Very Persistent and Very Bioaccumulative  
WHO = World Health Organization = OMS  
y = Year(s)

### 16.3 Key literature references and sources for data

None

### 16.4 Relevant R-, H- and EUH-phrases (Number and full text)

None

### 16.5 Training advice

None

### 16.6 Additional information

None

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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