



## **Safety Datasheet**

**COMMISSION REGULATION (EU) No 2015/830 of 1 June 2015 amending  
Annex II of Regulation (EU) No 453/2010**

Printing date 15.12.2018

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

**Trade name: Magnesium Sulphate Heptahydrate**

**CAS Number** : 7487-88-9/10034-99-8  
**EC Number** : 231-298-2  
**Registration Number:** 01-2119486789-11-0015

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

SU 0: Other: C15-Manufacture of leather and related products  
SU 0: Other: Uses of substances as such or in preparations in industrial sites

#### **Product category**

- PC1 Adhesives, sealants
- PC12 Fertilizers
- PC18 Ink and toners
- PC21 Laboratory chemicals
- PC23 Leather tanning, dye, finishing, impregnation and care products
- PC26 Paper and board dye, finishing and impregnation products: including bleaches and other processing aids
- PC29 Pharmaceuticals
- PC34 Textile dyes, finishing and impregnating products; including bleaches and other processing aids
- PC39 Cosmetics, personal care products

#### **Process category**

- PROC2 Use in closed, continuous process with occasional controlled exposure
- PROC3 Use in closed batch process (synthesis or formulation)
- PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises
- PROC8a Transfer of substance or preparation (charging/discharging) from/ to vessels/ Large containers at non-dedicated facilities
- PROC8b Transfer of substance or preparation (charging/discharging) from/ to vessels/ Large Containers at non-dedicated facilities
- PROC9 Transfer of substance or preparation in to small containers (dedicated filling line, including weighing)
- PROC14 Production of preparations or articles by tableting, compression, extrusion, palletisation
- PROC15 Use as laboratory reagent

#### **Environmental release category**

- ERC1 Manufacture of substances
- ERC2 Formulation of preparations
- ERC5 Industrial use resulting in inclusion into or on to a matrix
- ERC8a Wide dispersive indoor use of processing aids in open systems



## Trade name: Magnesium Sulphate Heptahydrate

### Application of the substance/the mixture

- Used as basic chemical and during synthesis in chemical industry. Also used as fertilizer and as a laboratory chemical.
- In agriculture and gardening, Magnesium sulphate is used to correct Magnesium deficiency in soil.

### Uses advised against

Avoid contact with ethoxy ethyl alcohols, arsenates, phosphates, tartrates, lead, barium, strontium, and calcium

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

#### Manufacturer/Supplier:

Mani Agro Chem Pvt Ltd  
Plot No.36/55, G.R.Nagar, Seelanaickenpatty,  
Salem-636201, Tamilnadu, India.

#### Further information obtainable from:

Telephone number: +91-27-2466010, 2469599, +91-9943068899

E-mail: [maniagrochem@gmail.com](mailto:maniagrochem@gmail.com), [info@maniagrochem.com](mailto:info@maniagrochem.com)

#### OR details

Sustainability Support Services (Europe) AB, Ideon Science Park,  
Scheelevägen 17, Beta 5,  
22370 Lund, Sweden

### 1.4 Emergency telephone number: Emergency telephone number: Opening hours:

Other Comments (e.g. language(s) of the phone service): 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 CLP regulation.

### 2.2 Label elements

- **Labeling according to Regulation (EC) No 1272/2008** : Void
- **Hazard pictograms**: Void
- **Signal word** : Void
- **Hazard statements** : Void
- **Classification system**:  
A technical grade with a minor Nickel impurity will trigger a Skin Sens1 classification

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

- **PBT** : Not applicable.
- **vPvB** : Not applicable.



Trade name: Magnesium Sulphate Heptahydrate

## SECTION 3: Composition / information on ingredients

### 3.1 Chemical Characterisation: Substances

CAS No.	Description	: 7487-88-9 Magnesium Sulphate
Identification Number(s)		
EC Number		: 231-298-2

#### Additional Information:

Chemical Formula:  $H_2O_4S.Mg$

Molecular weight: 120.366

% concentration: 99% to 99.5%

**SVHC** The substance is not in the list of SVHC substances

## SECTION 4 : First aid measures

### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing oiled by the product.

#### After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**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. Wash out the eye with plenty of clean water 15 min.

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

No further relevant information available.

**Information for doctor:** Treat symptomatically and supportively.

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

No further relevant information available.

## SECTION 5 : Fire fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** Carbon dioxide

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

In case of fire, the following can be

released: Sulphur dioxide (SO<sub>2</sub>)

Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for fire fighters

**Protective equipment:** Wear self-contained respiratory protective device.

**Additional information** Cool endangered receptacles with water spray.



**Trade name: Magnesium Sulphate Heptahydrate**

## **SECTION 6: Accidental release measures**

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

Wear protective equipment. Keep unprotected persons away. Avoid formation of dust.  
Avoid contact with skin and eyes.

### **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

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

Sweep up or use a non-sparking shovel for clean up. Place in container for disposal.

### **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**

Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.

#### **Information about fire-and explosion protection:**

Keep ignition sources away-Do not smoke.

### **7.2 Conditions for safe storage, including any incompatibilities in Storage:**

#### **Requirements to be met by store rooms and receptacles:**

Store in a cool, dry, well-ventilated area away from incompatible substances.

#### **Information about storage in one common storage facility:**

Avoid contact with sodium, sodium oxide, other alkali metals and oxides.

**Further information about storage conditions:** Keep container tightly sealed.

### **7.3 Specific end use(s)**

No further relevant information available.

- Used as basic chemical and during synthesis in chemical industry. Also used as fertilizer and as a laboratory chemical.

- In agriculture and gardening, Magnesium Sulphate is used to correct Magnesium deficiency in soil.



**Trade name: Magnesium Sulphate Heptahydrate**

## SECTION 8: Exposure controls/personal protection

### **Additional information about design of technical facilities:**

Use adequate ventilation to keep air borne concentrations low.

### **8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:** Not required.

### **8.2 Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**

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

**Respiratory protection:**

Required on release of dust. Recommended filter types: filter P1 acc. to DIN EN 3181 for solid particles of inert substances

**Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/the substance/the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.

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

### **Material of gloves**

Nitrile rubber, NBR

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**

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

On full contact: glove material: nitrile rubber, glove thickness: 0.11mm, penetration time: >480 min;

On splash contact: nitrile rubber: glove thickness: 0.11 mm, penetration time :> 480 min.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing



Trade name: Magnesium Sulphate Heptahydrate

## SECTION 9: Physical and Chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

#### Appearance:

- **Form** : Solid
- **Colour** : Whitish
- **Odour** : Odour less

**pH-value** : 6-8

#### Change in condition

- **Melting point/Melting range** : 1124°C
- **Boiling point/Boiling range** : Not applicable.

**Flashpoint** : Not applicable.

**Flammability (solid, gaseous)** : Product is not flammable.

#### Ignition temperature:

**Decomposition temperature** : >700°C

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

#### Explosion limits:

**Oxidising properties** : No oxidizing properties.

**Vapour pressure** : Not determined.

#### Density:

**Relative density at 20°C** : 1.67g/cm<sup>3</sup>

#### **Solubility in/Miscibility with water at 100°C**

: 73.8g/l

#### Viscosity:

**Dynamic** : Not applicable

#### 9.2 Other information

: No further relevant information available



**Trade name: Magnesium Sulphate Heptahydrate**

## SECTION 10 :Stability and reactivity

**10.1 Reactivity** No further relevant information available.

**10.2 Chemical stability**

Stable at ambient temperature and under normal conditions of use.

**10.3 Possibility of hazardous reactions** No dangerous reactions known.

**10.4 Conditions to avoid** heat, decomposition on heating to 1124°C

**10.5 Incompatible materials:** sodium, sodium oxide, other alkali metals and oxides

**10.6 Hazardous decomposition products:**

Sulphur oxides SO<sub>2</sub> and SO<sub>3</sub>, Magnesium Oxide MgO

## SECTION 11 :Toxicological information

**11.1 Information on toxicological effects**

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

<b>LD/LC50 values relevant for classification:</b>
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LD50	>2000 mg/kg (rat(Sprague- Dawley)male/female)
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**Primary irritant effect:**

**Skin corrosion/irritation** No irritating effect

**Serious eye damage/irritation** Dust may cause mechanical eye irritation

**Respiratory or skin sensitisation**

Since there was no indication on that the test substance elicit an SI ≥ 3 when tested up to 50%, Magnesium Sulphate Anhydrous was considered to be a non-skin sensitizer

**Toxicokinetics, metabolism and distribution**

Based on low MW, high water solubility, assumed low log Pow high absorption is expected. However, the ion formation of the substance immediately when in contact with a fluid decreases the absorption. The REACH guidance has also been taken into consideration. Therefore, 50% absorption is taken for oral, dermal and inhalation exposure.

**Repeated dose toxicity**

In a Combined Repeated Dose Toxicity Study with the Reproduction /Developmental Toxicity Screening Test, no adverse effects were seen on general toxicity endpoints. No adverse effects were seen on reproduction/developmental toxicity endpoints.

NOAEL: 1,500 mg/kg/day (general toxicity)

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

**Germ cell mutagenicity**



## Trade name: Magnesium Sulphate Heptahydrate

Genetic Toxicity : Negative

Magnesium Sulphate Anhydrous is not mutagenic in the mouse lymphoma L5178Y test system in a test conducted using OECD Guideline 476 (In Vitro Mammalian Cell Gene Mutation Test)

**Carcinogenicity** Carcinogenicity : Data waiving

### Reproductive toxicity

In a Combined Repeated Dose Toxicity Study with the Reproduction /Developmental Toxicity Screening Test, no adverse effects were seen on reproduction/developmental toxicity endpoints.

NOAEL: 1,500 mg/kg/day (reproduction/developmental toxicity)

**STOT-single exposure** No data available

**STOT-repeated exposure** No data available

**Aspiration hazard** No data available

## SECTION 12 : Ecological information

### 12.1 Toxicity

#### Aquatic toxicity:

EC50 (24hr)	1700 mg/L (Daphnia magna)
EC50 (72hr)	2700 mg/L (Scenedesmus subspicatus (green algae))
LC50 (48hr)	14000 mg/L (Leuciscusidus melanotus)

**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 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course 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

Dispose of waste material according to local, state and federal regulations.

#### Un cleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.





Trade name: Magnesium Sulphate Heptahydrate

### SECTION 14 :Transport information

<b>14.1 UN-Number</b> ADR,ADN,IMDG,IATA	Not applicable
<b>14.2 UN proper shipping name</b> ADR,ADN,IMDG,IATA	Not applicable
<b>14.3 Transport hazard class (es)</b> ADR,ADN,IMDG,IATA Class	Not applicable
<b>14.4 Packing group</b> ADR,IMDG,IATA	Not applicable
<b>14.5 Environmental hazards:</b> Marine pollutant:	No
<b>14.6 Special precautions for user</b>	Not applicable.
<b>14.7 Transport in bulk according to Annex II of Marpoland the IBC Code</b>	Not applicable.
<b>UN "Model Regulation":</b>	Not applicable

### SECTION 15 : Regulatory information

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

Labeling according to Regulation (EC) No1272/2008 Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Directive2012/18/EU: None

Named dangerous substances-ANNEX I: None

**National regulations:**

**Other regulations, limitations and prohibitive regulations**

**Substances of very high concern (SVHC) according to REACH, Article 57**

The substance is not listed as SVHC.

**15.2 Chemical safety assessment:**

Exposure assessment not required as substance is not classified as dangerous.



**Mani Agro Chem Pvt Ltd**

TRULY MAGNESIUM

**Trade name: Magnesium Sulphate Heptahydrate**

### 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.

**Department issuing MSDS:** Product safety department.

**Contact:**

Telephone number: +91-427-2466010, 2469599, +91-9943068899

E-mail: [maniagrochem@gmail.com](mailto:maniagrochem@gmail.com),  
[info@maniagrochem.com](mailto:info@maniagrochem.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)  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organisation  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
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  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
SVHC: Substances of Very High Concern  
vPvB: very Persistent and very Bioaccumulative

#### Sources

- REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- Data from ECHA website  
<https://echa.europa.eu/registration-dossier/-/registered-dossier/15865>

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

Section 5: Fire-fighting measures  
Section 6: Accidental Release Measures  
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Section 9: Physical and Chemical Properties  
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