

**Safety Data Sheet**

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

**Section 1: Identification**

**Product Name** MAGNESIUM SULFATE USP HEPTAHYDRATE (PARENTERAL)  
**Commercial Name** Not available.  
**Product Use** Not available.  
**Restrictions On Use** Not available.  
**Product Code** 30-4610  
**Company** PCCA  
9901 South Wilcrest  
Houston, TX 77099  
Phone: 1-800-331-2498  
Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

**Section 2: Hazard(s) Identification**

**OSHA Haz Com:** Not available.  
**CFR 1910.1200**  
**Signal Word** NON-HAZARDOUS  
**Hazard Statement(s)** Not available  
**Pictogram(s) or Symbol(s)**

**Precautionary Statement(s):**

**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture** Substance  
**Components** Magnesium Sulfate Heptahydrate  
**% By Weight** 99-100  
**CAS#** 10034-99-8  
**Molecular Weight** 246.47  
**Chemical Formula** MgSO<sub>4</sub>·7H<sub>2</sub>O  
**Synonym(s)** Magnesium sulfate (1:1) heptahydrate; Epsom salts; sulfuric acid, magnesium salt (1:1), heptahydrate; Magnesium sulfate, 7- hydrate

**Mixtures**

| <b>Name</b>                    | <b>CAS#</b> | <b>% by Weight</b> | <b>TLV/PEL</b> | <b>LC50/LD50</b> |
|--------------------------------|-------------|--------------------|----------------|------------------|
| Magnesium Sulfate Heptahydrate | 10034-99-8  | 99-100             | Not available  | Not available    |

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**Section 4: First-Aid Measures**

|                         |                                                                                                                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>       | Stop exposition, move the afflicted person to the fresh air, keep him warm and at rest. If symptoms persist seek medical attention. In case of unconsciousness start with resuscitation (artificial respiration, cardiac massage) and call for medical attention. |
| <b>Skin Contact</b>     | Remove contaminated clothes and footwear. Wash of any skin contamination with cool water and soap. Launder clothes before re-use. In case of persisting irritation contact physician .                                                                            |
| <b>Eye Contact</b>      | Remove contact lenses if present. Rinse with a small amount of water for at least 10 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention. Do not use neutralization solution!                                |
| <b>Ingestion</b>        | Wash out mouth with water and give plenty of water to drink (at least 300 ml). Do not induce vomiting. Seek medical attention. When vomiting, maintain supervision until the help arrives. Obtain medical advice if symptoms persist.                             |
| <b>Symptoms/Effects</b> |                                                                                                                                                                                                                                                                   |
| <b>Acute</b>            | Skin , airways or eye irritation. After consumption of a bigger amount vomiting and diarrhoea, alimentary tract irritation may appear. Symptoms: red skin, eyes, blurred vision.                                                                                  |
| <b>Delayed</b>          | Skin , airways or eye irritation. After consumption of a bigger amount vomiting and diarrhoea, alimentary tract irritation may appear. Symptoms: red skin, eyes, blurred vision.                                                                                  |

**Immediate Medical Attention**

Effects of acute toxicity of magnesium are compensated by the use of calcium tartrate

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Non-combustible substance . All extinguishing media are allowed, select the appropriate extinguishing media depending on the surrounding fire and environment.

**Unsuitable Extinguishing Media**

Strong water jet

**Products of Combustion**

Non-combustible substance. At temperatures over 700 °C decomposition occurs with release of gaseous sulfur dioxide.

**Firefighters Special Equipment and Precautions**

In case of fire use respirator with protective filter against the sulfur dioxide vapors and protective clothing.

**Section 6: Accidental Release Measures**

Personal precautions: Use personal safety working clothes – section 8. Prevent from skin and eye contact. Do not inhale dust. Well ventilate areas. Prevent from dust making. Other safety precautions – section 7. Environmental precautions: Prevent from escape to watercourses and soil and from their contamination. If there is no way to avoid it, immediately inform appropriate authority ( police and firemen). Methods for cleaning up: Clean up contamination/spillages as soon as they occur. Collect as much as possible in a suitable clean container, preferably for re-use, otherwise for disposal (according section 13). Avoid generation of dust. Wash the spillage area with large quantities of water. When packaging is damaged, replace the amount into a new packaging with proper marking.

**Section 7: Handling and Storage**

Handling: Use the personal safety tools (section 8). Ensure fresh water for the first aid. Maintain the cleanness and tidiness on the working area. Provide basic employee training to prevent / minimize exposures and to report any healthy problems that may develop. Do not eat, drink or smoke during work. Avoid contact with skin and eyes. Wash hands duly with soap and water, take a shower. Use a body lotion. Storage: Store at a dry and well ventilated place, not above normal room temperature. Store in tightly closed packages.

**Section 8: Exposure Controls/Personal Protection**

|                             |                                                                                                                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Limits</b>      | None established.                                                                                                                                                                                                  |
| <b>Engineering Controls</b> | Operate in a well-ventilated area, avoid inhalation of dusts or mists (for liquids). Ensure shower and area for eyes rinsing. The mentioned personal safety instruments should be in compliance with EN standards. |

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**Personal Protection**

Respiratory protection: In the case of high dust levels wear suitable respiratory protective equipment, ie. dust mask or respirator conforming to EN standards. Recommended filter = particle filter,P2. Hand protection: Wear suitable chemical resistant protective gloves for frequent or prolonged operations tested to EN374 with an acceptable permeation test. Suitable materials include neoprene (chloroprene), PVC and nitrile rubber. Break through time is > 480 min. Contaminated gloves should be carefully rinsed with water before reuse. Non suitable materials: Leather gloves. Eye / face protection: Wear suitable eye/face protection. Most materials for protective goggles and face visors will probably be suitable eg. polycarbonate. Skin and body protection: Normal working clothes is suitable. Do not eat, drink or smoke during work. Immediately remove contaminated clothing. Wash hands duly with soap and water, take a shower. Use a body lotion.

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**Section 9: Physical and Chemical Properties**

|                                                   |                              |                                          |                                     |
|---------------------------------------------------|------------------------------|------------------------------------------|-------------------------------------|
| <b>Appearance</b>                                 | White Solid - crystals       |                                          |                                     |
| <b>Odor</b>                                       | Odorless.                    |                                          |                                     |
| <b>Odor Threshold</b>                             | Not available.               |                                          |                                     |
| <b>Melting Point</b>                              | 150 °C                       | <b>pH</b>                                | 5,0 – 9,2 ( 5 % solution at 20 °C ) |
| <b>Freezing Point</b>                             | Not available.               | <b>Vapor Pressure</b>                    | No information found.               |
| <b>Boiling Point/Range</b>                        | 200 °C                       | <b>Vapor Density</b>                     | No information found.               |
| <b>Decomposition temperature</b>                  | 700 °C                       | <b>Viscosity</b>                         | Not available.                      |
| <b>Partition Coefficient:<br/>n-octanol/water</b> | Not available.               | <b>Evaporation Rate</b>                  | Not available.                      |
| <b>Flash Point</b>                                | incombustible matter         | <b>Autoignition temperature</b>          | Not available.                      |
| <b>Flammability</b>                               | The substance is non-flamm.  | <b>Flammability or Explosive Limits:</b> |                                     |
|                                                   |                              | <b>Lower</b>                             | Not available.                      |
|                                                   |                              | <b>Upper</b>                             | Not available.                      |
| <b>Solubility(ies)</b>                            | 34 g / 100 ml in water.      |                                          |                                     |
| <b>Other</b>                                      | Relative density: 1,69 g/cm3 |                                          |                                     |

**Section 10: Stability and Reactivity**

|                                         |                                                                                                              |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                       | Stable under recommended storage and handling conditions.                                                    |
| <b>Chemical Stability</b>               | Stable under recommended storage and handling conditions.                                                    |
| <b>Hazardous Polymerization</b>         | Not available.                                                                                               |
| <b>Conditions to Avoid</b>              | Humidity and moisture.                                                                                       |
| <b>Incompatible Materials</b>           | Not available.                                                                                               |
| <b>Hazardous Decomposition Products</b> | None at normal use. At temperatures over 700 °C decomposition occurs with release of gaseous sulfur dioxide. |

**Section 11: Toxicological Information****RTECS** Not available.**Acute Toxicity**

LD50 oral, rat (mg.kg-1): 2200 (as anhydrous), OECD 425, Information given is based on data obtained from similar substances  
LD50 dermal, rat (mg.kg-1): > 2.000 mg/kg, rat, OECD Test Guideline 402, Information given is based on data obtained from similar substances  
LC50 inhalation, rat, for aerosols or particles (mg.l-1): Not available

**Skin Corrosion/Irritation**

No irritation

**Serious Eye Damage/Irritation**

No irritation

**Respiratory or Skin Sensitization**

Does not cause skin sensitization

**Germ Cell Mutagenicity**

Negative

**Carcinogenicity**

Not available.

**Reproductive Toxicity**

Not available.

**Routes of Entry**

Not available.

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**Symptoms Related to Exposure**

Not available.

**Potential Health Effects**

Health injuries are not known or expected under normal use.

**Target Organ(s)**

Not available.

**Section 12: Ecological Information****Ecotoxicity**

LC50 96 hr., fish (mg.l-1): 14 000 - EC50 48 hr., daphnia (mg.l-1): 1 700 - EC50 72 hr. algae (mg.l-1): 2 700 - EC50 30 min. bacteria (mg.l-1): 84 000

**Persistence and Degradability**

The product is not readily biodegradable.

**Bioaccumulative Potential**

Not available.

**Mobility in Soil**

The product is water soluble and may spread in water systems

**Other Adverse Effects**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Section 13: Disposal Considerations****Waste Disposal**

If recycling or reuse is not practical then the product must be disposed of by authorized personnel in accordance with local, state or national regulations. Never dispose by flushing into the drainage! Waste former is responsible for its sorting and disposal. Preferably dispose in independent container.

**Disposal of Container**

If recycling or reuse is not practical then packaging must be disposed of by authorized personnel in accordance with local, state or national regulations. Clean packaging with water and dispose of washings in accordance to local regulations. Packaging can be passed to a packaging return system after the cleaning.

**Other Considerations**

Not available.

**Section 14: Transport Information****DOT Classification**

DOT: Not regulated. IMDG: Not regulated. IATA: Not regulated.

**Section 15: Regulatory Information****Regulations**

Health, safety and environmental information

label : ---

15.2 Chemical Safety Assessment: Not available. 15.3 National legislation: Regulation (EC) No. 1907 / 2006 / ES, REACH Regulation (EC) No. 1272 / 2008 / ES, CLP National laws or provisions may be in force !

**Other**

Not available.

**Section 16: Other Information**

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