

MATERIAL SAFETY DATA SHEET

MAGNESIUM SULPHATE HEPTAHYDRATE

1. Identification of the substance / preparation and the company / undertaking			
Product name :	Magnesium Sulphate Heptahydrate	Supplier :	Chamotte Holdings (Pty) Ltd
Trade name :	Epsom Salts, Magnesium Sulphate Heptahydrate		
Synonyms :	Talcum, Hydrous Magnesium Silicate, Hydrated Magnesium Silicate, Steatite, Soapstone	Manufacturer :	Chamotte Holdings (Pty) Ltd
Emergency telephone number :	+613-7910000		

2. Composition / Information on Ingredients				
Chemical Name	CAS No.	w/w%	Symbol	EINECS / ELINCS
Magnesium Sulphate Heptahydrate	10034-99-8	99,5	MgSO ₄ .7H ₂ O	unlisted

3. Hazards Identification	
EMERGENCY OVERVIEW	
Appearance:	Transparent solid
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. May cause central nervous system depression. The toxicological properties of this material have not been fully investigated.	
Potential Health Effects	
Target Organs:	Central nervous system, gastrointestinal system.
Eye:	May cause mild eye irritation.
Skin:	May cause skin irritation.
Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated. Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.
Chronic:	Exposure to high concentrations may cause central nervous system depression.

4. First Aid Measures	
Inhalation:	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Ingestion:	Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Skin Contact:	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Eye Contact:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Notes to Physician:	Treat symptomatically and supportively.
Antidote:	The use of calcium gluconate to precipitate the oxalate should be determined by only qualified medical personnel.

5. Fire Fighting Measures

General Information

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA / NIOSH (approved or equivalent), and full protective gear. Material will not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:	Substance is non-combustible; use agent most appropriate to extinguish surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Flash Point:	Not available.
Auto Ignition Temperature:	Not available.
Explosion Limits Lower:	Not available.
Explosion Limits Higher:	Not available.
NFPA Rating:	(estimated) Health: 1; Flammability: 0; Instability: 0

6. Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Environmental Protection:	See Section 12 and 13.
Spills and Leaks:	Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

7. Handling and Storage

Handling:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage:	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. • NB: Product will go hard even if stored in favourable Climate/storage conditions.

• Humidity can affect product physical properties, not the Chemical properties, product can become Hard/ lumpy in warm climate, Break with a rubber mallet

8. Exposure Controls, Personal Protection

Engineering Controls:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
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Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA- Final PEL's
Magnesium sulphate Heptahydrate	None Listed	None Listed	None Listed
Magnesium sulphate Anhydrous	None Listed	None Listed	None Listed

OSHA Vacated PEL's:

Magnesium sulphate Heptahydrate	No OSHA Vacated PEL's are listed for this chemical.
Magnesium sulphate Anhydrous	No OSHA Vacated PEL's are listed for this chemical.

Personal Protective Equipment:

Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin:	Wear appropriate protective gloves to prevent skin exposure. Wear appropriate gloves to prevent skin exposure.
Clothing:	Wear appropriate clothing to prevent skin exposure.
Respirator:	Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

9. Physical and Chemical Properties

Physical State:	Solid
Appearance:	Transparent
Odour:	Odourless
pH:	Not Available
Vapour Pressure:	< 0.1 mm Hg @ 20 deg C
Vapour Density:	< 0.01
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	Decomposes
Freezing/Melting Point:	1124 deg C
Decomposition Temperature:	1124 deg C
Solubility:	Soluble in water
Specific Gravity/Density:	2.66
Molecular Formula:	MgSO ₄ .7H ₂ O
Freezing / Melting Point:	Not available.
Boiling Point:	Not available.
Decomposition temperature:	Not available.
Molecular Weight:	246.4564

10. Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures
Incompatibilities with other materials:	Strong oxidizing agents.
Conditions to avoid:	Incompatible materials, dust generation, excess heat.
Hazardous decomposition products:	Irritating and toxic fumes and gases, sulphur oxides (SO _x), including sulphur oxide and sulphur dioxide.
Hazardous Polymerisation:	Will not occur.

11. Toxicological Information

RTECS #:	
CAS # 10034-99-8:	OM4508000
CAS # 7487-88-9:	OM4500000
LD50 / LC50:	Not Available
Carcinogenicity:	
CAS# 10034-99-8:	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7487-88-9:	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology:	No information found.
Teratogenicity:	No information found.
Reproductive Effects:	No information found.
Mutagenicity:	No information found.
Neurotoxicity:	No information found.
Other Studies:	

12. Ecological Information

No information available

13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. Transport Information

Not regulated as a hazardous material

15. Regulatory Information

European Labeling in Accordance with EC Directives:

Hazard symbols:	Not available
Risk Phrases:	Not available
Safety Phrases:	WGK (Water Danger/Protection) CAS# 10034-99-8: 0 CAS# 7487-88-9: 0

Notice to Reader:

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