

# MATERIAL SAFETY DATA SHEET

## MAGNESIUM CHLORIDE (FLAKE)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY	
Trade Name:	Magnesium Chloride
Usage:	Various
Supplier:	Medicina UK Ltd
Address:	PO Box 54797, The Hyde, NW9 1GA
Phone Number:	02082052369
Fax Number:	02082052346

2. COMPOSITION/INFORMATION ON INGREDIENTS			
<b>Magnesium Chloride Flake</b>			
CAS No	7791-18-6		
<b>TYPICAL ANALYSIS:</b>			
Magnesium Chloride	46.5-47.5%		
Calcium Chloride	2.0-2.2%		
Sodium Chloride	0.5-0.8%		
Potassium Chloride	0.2-0.5%		
Water	Balance to 100%		

3. HAZARD IDENTIFICATION	
<b>Inhalation:</b> Inhalation of dust may cause mild irritation to the mucous membranes.	
<b>Eye Contact:</b> May cause irritation.	
<b>Skin Contact:</b> May cause minor irritation.	
<b>Ingestion:</b> Since magnesium salts are absorbed slowly, abdominal pain, vomiting and diarrhoea may be the only symptoms. However, if elimination is blocked, CNS depression, lack of reflexes and hypocalcaemia (low blood calcium levels) may occur.	
<b>Medical Conditions Aggravated by Exposure:</b> None known.	

4. FIRST-AID MEASURES	
<b>Eyes:</b>	May cause irritation which can result in redness and lachrymation. If contact with the eye occurs, wash with copious amounts of water for approximately 15 minutes.
<b>Skin:</b>	May cause mild irritation in contact with the skin. Wash thoroughly with water. Wash clothes before re-use.
<b>Ingestion:</b>	Have patient drink several glasses of water to dilute. Seek medical attention if symptoms develop, or if large quantities have been consumed.
<b>Inhalation:</b>	May cause irritation of mucous membranes and upper airways. Symptoms may include sneezing, coughing and breathing difficulties. Move victim to fresh air and have the victim blow nose to remove excess dust. Ensure airways are clear. If breathing is difficult, a qualified person should give oxygen via a face mask. If irritation develops and persists, seek medical attention.

5. FIRE-FIGHTING MEASURES	
<b>Extinguishing Media:</b>	Use appropriate media to surrounding fire. Magnesium chloride is compatible with all extinguishing media.
<b>Special Exposure</b>	None.

<b>Hazards:</b>	
<b>Protective Equipment for Fire Fighting:</b>	Wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing.
<b>Hazardous Combustion Products:</b>	None known.

#### 6. ACCIDENTIAL RELEASE MEASURES

<b>Personal Precautions:</b>	Use personal protection appropriate to the situation and quantity handled. The use of a dust mask, nitrile gloves and either goggles or safety glasses is recommended. If large amounts of dust are likely to be generated, use a respirator.
<b>Environmental Precautions:</b>	No known adverse environmental effects.
<b>Spillages:</b>	Scoop up spillages and place in a container. Avoid creating dusts. Wear appropriate respiratory protection, safety glasses and overalls as a precaution.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Any irritation to the skin or eyes is likely to be mild. Where dust is generated, the use of a mechanical exhaust ventilation system is recommended.
<b>Storage:</b>	Store in original packs/containers in a cool, dry, ventilated area.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Occupational Exposure Standards:</b>	Total dust: 15 mg/m <sup>3</sup> . Respirable fraction for nuisance dusts: 5 mg/m <sup>3</sup> .
<b>Respiratory Protection:</b>	The use of a dust mask is recommended. If large amounts of dust are likely to be generated, use a respirator.
<b>Hand Protection:</b>	Protective gloves should be worn.
<b>Eye Protection:</b>	Goggles or safety glasses should be worn.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Colourless flakes or crystals
<b>Odour:</b>	Odourless
<b>PH:</b>	A 5% solution in water is approx pH 7.
<b>Boiling Point (°C):</b>	N/A
<b>Melting Point/Freezing Point (°C):</b>	118°C
<b>Explosion Limits (%):</b>	N/A
<b>Solubility in Water:</b>	167g/100ml water at 20°C
<b>Vapour Pressure:</b>	N/A
<b>Vapour Density (Air=1):</b>	N/A
<b>Density:</b>	Bulk density = 0.95 tonnes/m <sup>3</sup>
<b>Flammability:</b>	Not flammable

#### 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under ordinary conditions
<b>Materials to Avoid:</b>	Addition to furan-2-peroxycarboxylic acid will cause the acid to explode.

<b>11. TOXICOLOGICAL INFORMATION</b>	
<b>Inhalation:</b>	Inhalation of dust may cause mild irritation of the mucous membranes.
<b>Skin and Eye Contact:</b>	Irritation to the skin or eyes is likely to be mild.
<b>Ingestion:</b>	Oral, rat, LD50 = 8100 mg/kg.

<b>12. ECOLOGICAL INFORMATION</b>	
No known adverse environmental effects	

<b>13. DISPOSAL CONSIDERATIONS</b>	
<b>Product Disposal:</b>	Whatever cannot be saved for recovery or recycling may be disposed of to landfill at an approved site. It should be noted that contamination may occur during use and it is the responsibility of the user to assess an appropriate disposal method in this situation.

<b>14. TRANSPORT INFORMATION</b>	
Magnesium chloride is not regulated as a hazardous material for purposes of transportation.	

<b>15. REGULATORY INFORMATION</b>	
<b>Risk symbol</b>	<b>None</b>
<b>Hazard Classification</b>	<b>Non-Hazardous</b>
<b>R phrases (risk)</b>	
<b>S phrases (safety)</b>	<b>S22, S38</b>
<b>Precautions</b>	<b>Avoid inhaling dust</b>

<b>16. OTHER INFORMATION</b>	
<p>Medicina UK Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by a properly trained person. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.</p> <p><b>MEDICINA UK LTD MAKES NO GUARANTEES OR WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE INFORMATION SET FORTH HEREIN. ACCORDINGLY, MEDICINA UK LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.</b></p>	