

SAFETY DATA SHEET

# Magnesium Oxide

	Section 1: IDENTIFICATION	
Product Name:	Magnesium Oxide Baymag 30	
Chemical Family:	Not Available	
Chemical Formula:	O4SZN	
Molecular Weight:	Not Applicable	
Material Use:	Drilling Fluid Additive	
Manufacturer/Supplier:	Bri-Chem Supply Ltd. 27075 Acheson Road Acheson, AB T7X 6B1	
Phone Number:	780-962-9490	
Emergency Phone:	CHEMTREC 1-800-424-9300	
	Section 2: HAZARD(S) IDENTIFICATION	
Route of Entry		
Eyes:	May cause irritation of eyes.	
Skin:	May cause irritation of skin.	
Inhalation:	May cause irritation of the upper respiratory passages. Inhalation of magnesium oxide fume may cause metal fume fever, however no evidence of metal fume fever resulting from industrial exposure to magnesium oxide fume has been found.	
	Symptoms of metal fume fever include; cough, tightness of chest, sweating, headache, fever, muscle aches, nausea, vomiting and tiredness.	

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS					
Hazardous Ingredients	Conc Approx %	CAS #	LD/50 (RTE/SPEC)	LC/50 (RTE/SPEC)	TLV
Magnesium Oxide	94 – 98	1309-48-4	Ň.Av.	Ň.Av.	N.Av.
Calcium Oxide	1.5 – 4	305-78-8	N.Av.	N.Av.	N.Av.
	Section 4:	FIRST-AID MEA	ASURES		
Skin Contact:	Not expected to cause a problem. However, if irritation occurs, flush affected area with water. If irritation persists, obtain medical attention.				
Eye Contact:		occurs, immed s. Obtain medio	liately flush eyes cal attention.	s with water for	at least



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Inhalation, Acute:	If symptoms of exposure are experienced (see Hazards Identification), remove victim to fresh air. Obtain medical attention.
Ingestion:	Rinse mouth with and/or drink water if conscious. Obtain medical attention.
Notes to Physician:	N. Av

Section 5: FIRE-FIGHTING MEASURES		
Flammable?	No	
If yes, Under Which Conditions?		
Flash Point (TCC) (C):	Not available	
Flammable Limits:	LEL(% BY VOL.): Not available UEL(% BY VOL): Not available	
Auto Ignition Temperature (C):	Not available	
Extinguishing Media:	Not available	
Special Procedures:	Not available	
Hazardous Combustion Products:	Not available	
Unusual Fire and Explosion Hazards:	Not available	
Sensitivity to Static Discharge:	Not available	
Sensitivity to Mechanical Impact:	Not available	

## Section 6: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Pick up spills without creating dust. Place material into a dry container and cover. Hold in sealed container for disposal. Use personal protective equipment as required (see Section 8 – Exposure Controls and Personal Protection).

### Section 7: HANDLING AND STORAGE

Handling Procedures and Storage Requirements:	Avoid inhalation of dust. Clean area frequently to avoid dust build-up. Wear applicable personal protective equipment as indicated in Section 8 – Exposure Controls and Personal Protection. Store in a dry area in sealed containers. Keep away from incompatible materials such as interhalogens and strong acids.
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Avoid contact with water – product reacts exothermically with water to form magnesium hydroxide and heat/steam. Water contact in closed or restricted storage vessels may cause heat, swelling and possible rupture of storage vessel.

Section 8	: EXPOSURE CONTROLS / PERSONAL PROTECTION
Gloves/Type:	Impervious chemical resistant gloves.
Respirator/Type:	If adequate engineering controls are not available, wear respirator approved by NIOSH/MSHA for dusts/mists, as applicable. If magnesium oxide fume is likely to be produced then ensure that a NIOSH/MSHA respirator approved for fumes is used. In conditions of oxygen deficiency, or where airborne concentrations exceed 100mg/m <sup>3</sup> , wear positive pressure or pressure demand supplied air respiratory protection or SCBA.
Eye/Type:	Wear safety goggles in high dust concentrations, unless full face-piece respiratory protection is worn. Wear coveralls.
Other/Type:	Not available
Engineering Control:	Engineering controls may include process enclosure and/or local exhaust ventilation with or without process enclosure is important where large quantities are handled, as in bagging operations.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES		
Physical State/Appearance:	White to light brown powder	
Odour:	Odourless	
Odour Threshold:	N. Av.	
Vapour Pressure (mm Hg @ 20C):	N. Av.	
Vapour Density (Air=1):	N. Av.	
Evaporation Rate (Ether=1):	N. Av.	
Specific Gravity:	N. Av.	
Boiling Point (C):	> 500°C	
Freezing Point (C):	100°C	
pH (% Solution):	3600°C	
% Volatile (WT):	N. Av.	
Solubility in Water (% W/W):	0.0006 g/100mL	



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Section 10: STABILITY AND REACTIVITY		
Chemically Stable?	Yes	
If No, Under Which Conditions?		
Incompatibility with Other Substances:	Yes	
If Yes, Which Ones:	Strong acids, Interhalogens (Eg. Bromine pentafluoride, chlorine tri-fluoride), phosphorous pentachloride.	
Special Reactivity and Under What Conditions:		
Hazardous Decomposition Products:	Magnesium fume may be generated if heated to volatization. Heat and steam may be generated upon contact with water.	
Sect	tion 11: TOXICOLOGICAL INFORMATION	
Exposure Limit of Material:	N Av	
LC50 of Material, Species and Route:	N Av	
LD50 of Material, Species and Route:	N Av	
Carcinogenicity of Material:	N Av	
Reproductive Effects:	N Av	
Irritancy of Material:	N Av	
Sensitizing Capability of Material:	N Av	
Synergistic Materials:	N Av	
Se	ction 12: ECOLOGICAL INFORMATION	
Aquatic Toxicity:	N Av	
Se	ction 13: DISPOSAL CONSIDERATIONS	
Waste Disposal:	Waste Disposal Recycle: If possible. Consult your local or regional authorities.	
Se	ection 14: TRANSPORT INFORMATION	
TDG Classification:	Class, Magnesium Oxide Baymag 30	
UN Number:		
Packing Group:		
Special Provisions for Transport:	Non regulated	



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	Section 15: REGULATORY INFORMATION
WHMIS Classification:	Non regulated
	Section 16: OTHER INFORMATION
Abbreviations Used:	N. Av. = Not available N. App / N. Ap. = Not applicable

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Prepared by:	Bri-Chem Supply Ltd.
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