

## Safety Data Sheet

### SECTION 1. IDENTIFICATION

**Product Identifier** GYPSUM  
**Other Means of Identification** Calcium Sulfate  
**Product Family** Calcium Source  
**Recommended Use** Drilling Fluid Additive.  
**Supplier Identifier** Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com  
**Emergency Phone No.** 306-634-3411

### SECTION 2. HAZARD IDENTIFICATION

**Classification**

Specific target organ toxicity (repeated exposure) - Category 2

**Label Elements**



Signal Word:

Warning

Hazard Statement(s):

May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray.

Response:

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Gypsum	13397-24-5	95-100	
Calcium carbonate	471-34-1	< 5	
Crystalline Silica, Quartz	14808-60-7	< 1	

### SECTION 4. FIRST-AID MEASURES

**First-aid Measures**

**Inhalation**

Remove to fresh air as soon as possible. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen and get medical attention.

### **Skin Contact**

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

### **Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If adverse symptoms persist, seek medical attention.

### **Ingestion**

If conscious give 2 to 4 glasses of water to drink but DO NOT induce vomiting. If swallowed, give patient large quantities of water then induce vomiting. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing.

### **Most Important Symptoms and Effects, Acute and Delayed**

If in eyes:

May cause mild irritation.

### **Immediate Medical Attention and Special Treatment**

#### **Target Organs**

Lungs, eyes.

#### **Medical Conditions Aggravated by Exposure**

Bronchitis, Emphysema and Asthma.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, foam, water.

### **Specific Hazards Arising from the Product**

None known.

Decomposes to sulfur dioxide at 1450°C.

### **Special Protective Equipment and Precautions for Fire-fighters**

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

### **Environmental Precautions**

It is good practice to prevent releases into the environment. Do not wash down drains since it could plug drains.

### **Methods and Materials for Containment and Cleaning Up**

Remove by dry-sweeping or vacuum. Avoid creating excessive dust. Wear approved respirators if necessary.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Avoid generating dust. Wear approved respirator if necessary. Keep product dry.

Handle in accordance with good industrial hygiene and safety practice. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

### **Conditions for Safe Storage**

Store in a dry area to minimize potential for clumping due to moisture absorption. The presence of moisture will harden gypsum during storage.

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

(gypsum) and (calcium carbonate)

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ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. 10 mg/m<sup>3</sup>  
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. 15 mg/m<sup>3</sup> (total dust);  
5 mg/m<sup>3</sup> (respirable dust)

(silica, quartz)

ACGIH® = American Conference of Governmental Industrial Hygienists. TWA = Time-Weighted Average. 0.025 mg/m<sup>3</sup>  
(respirable fraction)

OSHA = US Occupational Safety and Health Administration. TWA = Time-Weighted Average. 30 mg/m<sup>3</sup> divided by the  
value of "%SiO<sub>2</sub> + 2" (total quartz) 10 mg/m<sup>3</sup> divided by the value of "%SiO<sub>2</sub> + 2" (respirable)

OSHA Z3 TWA: 250 mppcf divided by the value of "%SiO<sub>2</sub>+5" (respirable)

OSHA Z-1-A and OSHA Z3 TWA: 0.1 mg/m<sup>3</sup> (respirable fraction)

Immediately dangerous to life or health concentration value: 50 mg/m<sup>3</sup>.

### Appropriate Engineering Controls

Use adequate general or local exhaust ventilation to keep dust levels as low as possible. None required where  
adequate ventilation conditions exist.

### Individual Protection Measures

#### Eye/Face Protection

Use safety glasses or goggles.

#### Skin Protection

Gloves are not required but may be desirable under certain working conditions or to protect against drying of hands.

#### Respiratory Protection

None required where adequate ventilation conditions exist. A dust mask for nuisance dust can be used. If airborne  
concentrations of any hazardous ingredients exceed the TLV or PEL, use a NIOSH-approved respirator.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Light grey powder.
Odour	Odourless
pH	~ 7
Melting Point/Freezing Point	848.81 °C (melting)
Relative Density (water = 1)	2.32 - 2.96
Solubility	Slightly soluble in water
Decomposition Temperature	1450 °C
<b>Other Information</b>	
Physical State	Solid
Bulk Density	1272 kg/m <sup>3</sup>

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

None known.

### Incompatible Materials

Aluminum, strong acids.

### Hazardous Decomposition Products

Oxides of sulfur.

## SECTION 11. TOXICOLOGICAL INFORMATION

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Treat as a nuisance dust.

### **Likely Routes of Exposure**

Inhalation.

### **Skin Corrosion/Irritation**

May temporarily cause drying of the skin.

### **Serious Eye Damage/Irritation**

May cause mild irritation.

### **STOT (Specific Target Organ Toxicity) - Single Exposure**

#### **Inhalation**

Mild irritant at high concentrations.

Persons exposed to large amounts of dust may experience nuisance conditions, including coughing, sneezing and nasal irritation.

### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

None known for gypsum. Prolonged and repeated exposure to crystalline silica by inhalation may cause silicosis and lung cancer.

### **Carcinogenicity**

(silica quartz):

IARC: Group 1 – Carcinogenic to humans.

NTP: Reasonably anticipated human carcinogen.

No information was located for: Respiratory and/or Skin Sensitization, Development of Offspring, Sexual Function and Fertility, Germ Cell Mutagenicity, Interactive Effects

## **SECTION 12. ECOLOGICAL INFORMATION**

This product has shown no known adverse effect on ecology. Toxicity studies of gypsum performed with fish, aquatic vertebrates and aquatic plants showed no toxic effect.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Dispose of in accordance with federal, provincial and local government regulations.

## **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations.

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## **SECTION 15. REGULATORY INFORMATION**

### **Safety, Health and Environmental Regulations**

#### **Canada**

#### **WHMIS 1988 Classification**



Class D2A

D2A - Very Toxic

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

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## Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients of this product are included in the Canadian Domestic Substances List (DSL).

### SECTION 16. OTHER INFORMATION

**NFPA Rating**                      **Health - 1**    **Flammability - 0**    **Instability - 0**

**SDS Prepared By**              Bri-Chem Supply Ltd

**Phone No.**                        (403) 252-5904

**Date of Preparation**          December 21, 2015

**Disclaimer**                      This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.

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