

# ENVIRO-PLUG

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	ENVIRO-PLUG
<b>Other Means of Identification</b>	Sodium Montmorillonite
<b>Product Family</b>	Lost Circulation Material
<b>Recommended Use</b>	Drilling Fluid Additive.
<b>Supplier</b>	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, <a href="http://www.brichemsupply.com">www.brichemsupply.com</a>
<b>Emergency Phone No.</b>	ChemTrec, (800) 424-9300, 24/7

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 2

### GHS Label Elements



Signal Word:

Warning

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

### Other Hazards

Product is slippery when wetted.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
BENTONITE	1302-78-9	94-98	
Silica, quartz	14808-60-7	2-6	

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration and seek medical attention. Inhalation may aggravate existing respiratory illness.

#### Skin Contact

Wash with soap and water. If adverse symptoms develop, seek medical attention.

#### Eye Contact

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Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 15 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

#### **Ingestion**

No adverse effects expected.

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

#### **Suitable Extinguishing Media**

Use extinguishing agent suitable for surrounding fire.

#### **Specific Hazards Arising from the Chemical**

Does not burn or support combustion.

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

Does not burn or support combustion. Product is slippery when wetted.

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 spilled material and/or runoff from entering waterways, drains and sewers.

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

Avoid breathing dust; wear respirator approved for silica-bearing dust. Vacuum up to avoid generating airborne dust.

Avoid using water; product is slippery when wetted.

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

#### **Precautions for Safe Handling**

Avoid ingestion. Avoid skin and eye contact. Practice reasonable caution and personal cleanliness. Material is slippery when wet.

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 cool, dry, well-ventilated place. Keep container tightly closed. Storage area floors may become slippery if wetted.

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

Exposure Limits: Total dust = 15 mg/m<sup>3</sup> / Silica = 0.1 mg/m<sup>3</sup>

(silica, quartz)

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average.

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.

Respirable quartz = 10 mg/m<sup>3</sup> divided by the value of "%SiO<sub>2</sub> + 2"

Total quartz = 30 mg/m<sup>3</sup> divided by the value of "%SiO<sub>2</sub> + 2".

#### **Appropriate Engineering Controls**

Provide mechanical ventilation to prevent dust concentrations and to reduce potential exposure.

#### **Individual Protection Measures**

##### **Eye/Face Protection**

Wear chemical safety goggles.

##### **Skin Protection**

Chemical resistant clothing such as gloves and apron are recommended.

##### **Respiratory Protection**

In absence of proper ventilation, recommend NIOSH-approved dust respirator.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Light grey powder. Particle Size: Not available
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not applicable
<b>pH</b>	8 - 10 (5% solution)
<b>Melting Point/Freezing Point</b>	1450 °C (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	2.45 - 2.55
<b>Solubility</b>	Insoluble in water; Not applicable (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not applicable
<b>Bulk Density</b>	Not available
<b>Surface Tension</b>	Not available
<b>Critical Temperature</b>	Not available
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Water, moisture, humidity.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Skin contact; inhalation.

### Skin Corrosion/Irritation

Possible drying resulting in dermatitis.

### Serious Eye Damage/Irritation

Mechanical irritant.

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

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### **Inhalation**

Acute exposure to dust levels exceeding the PEL may cause irritation of respiratory tract.  
May cause irritation of respiratory tract resulting in a dry cough.

### **Ingestion**

No adverse effects expected for normal, incidental ingestion.

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

This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue.

Long-term exposure to airborne dust containing respirable size (<10 microns) quartz particles, where respirable quartz particle levels are higher than TLV's may lead to development of silicosis or other respiratory problems. Persistent dry cough and laboured breathing upon exertion may be symptomatic.

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop tuberculosis.

### **Carcinogenicity**

(silica quartz): IARC: Group 1 – Carcinogenic to humans. ACGIH®: A2 – Suspected human carcinogen. NTP: Known 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**

No ecological information or environmental fate data is available.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Dispose of in accordance with federal, provincial and local government regulations. Containers should NOT be re-used. Containers should be disposed of in accordance with government guidelines.

## **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG Regulations.

**Special Precautions for User** 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 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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## SECTION 16. OTHER INFORMATION

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

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

**Date of Preparation** January 21, 2016

**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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