

## ENVIRO-PLUG MEDIUM

### SECTION 1. IDENTIFICATION

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

### SECTION 2. HAZARD IDENTIFICATION

**Classification**

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

**Label Elements**



Signal Word:

Warning

Hazard Statement(s):

May cause respiratory irritation.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

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

Use only outdoors or in a well-ventilated area.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Get medical advice/attention if you feel unwell.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

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

**Other Hazards**

Product is slippery when wetted.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
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Silica, quartz	14808-60-7	1-6	
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**Notes**

Non-hazardous components >94%.

**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**

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 or attention.

**Ingestion**

No adverse effects expected.

**SECTION 5. FIRE-FIGHTING MEASURES****Extinguishing Media****Suitable Extinguishing Media**

Use extinguishing agent suitable for surrounding fire.

**Specific Hazards Arising from the Product**

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>

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(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**

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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**

#### **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** Not applicable

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

Not applicable

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## 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.

## SECTION 16. OTHER INFORMATION

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

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

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

**Date of Preparation**          December 21, 2015

**Date of Last Revision**        July 21, 2016

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