

## MICA

**SECTION 1. IDENTIFICATION**

<b>Product Identifier</b>	MICA
<b>Other Means of Identification</b>	Potassium Aluminum Silicate (Muscovite)
<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**

Carcinogenicity - Category 1A; Specific target organ toxicity (repeated exposure) - Category 2

**GHS Label Elements**

Signal Word:

Danger

This product has a 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.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	%	Other Identifiers
Mica	12001-26-2	98-100	
Silica, quartz	14808-60-7	1-2	

**SECTION 4. FIRST-AID MEASURES****First-aid Measures****Inhalation**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial resuscitation. If irritation develops or persists, seek medical attention.

**Skin Contact**

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

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the

Product Identifier: MICA

Date of Preparation: February 11, 2016

Page 1 of 05

eyelid(s) open. If eye irritation develops or persists, seek medical attention.

#### **Ingestion**

Give large quantities of water to induce vomiting. Never give anything by mouth to an unconscious or convulsing victim. Get medical attention, if adverse symptoms develop.

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

#### **Suitable Extinguishing Media**

Dry chemical, carbon dioxide, foam, water.

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

Non-flammable.

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

A solid stream of water or foam directed into hot, burning liquid can cause frothing. Firefighters must wear appropriate breathing apparatus and clothing.

## **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 allow into any sewer, on the ground or into any waterway.

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

Use appropriate safety equipment. Small spill: sweep up and put into approved DOT containers for disposal or re-use. Large spill: DO NOT allow to enter waterways; sweep or shovel into approved DOT containers for disposal or re-use.

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

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

Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid contact with skin and eyes. 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 and away from incompatible materials.

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

(mica)

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. 3 mg/m<sup>3</sup> (respirable)

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. 20 mppcf (silica, quartz)

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

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. TWA = Time-Weighted Average. 0.1 mg/m<sup>3</sup>

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.

---

Product Identifier: MICA

Date of Preparation: February 11, 2016

Page 2 of 05

### **Skin Protection**

Chemical-resistant clothing is recommended including glove, apron and goggles.

### **Respiratory Protection**

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Basic Physical and Chemical Properties**

<b>Appearance</b>	Grey - black shiny flakes. Particle Size: Not available
<b>Odour</b>	Odourless
<b>pH</b>	7 - 8
<b>Flash Point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Relative Density (water = 1)</b>	2.7 - 2.9
<b>Solubility</b>	Insoluble in water; Not available (in other liquids)
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Bulk Density</b>	Not available

## **SECTION 10. STABILITY AND REACTIVITY**

### **Chemical Stability**

Normally stable.

### **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

### **Incompatible Materials**

Strong acids (e.g. hydrochloric acid). Alkalis.

### **Hazardous Decomposition Products**

Above 1100° minor quantities of fluorides may evolve.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Likely Routes of Exposure**

Skin contact; eye contact; inhalation.

### **Skin Corrosion/Irritation**

No irritation expected.

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

Contact may cause mechanical irritation and possible injury. Individuals subject to eye irritation should not be exposed to crystalline silica dust.

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

#### **Inhalation**

Irritation of respiratory tract, nose and throat due to dust.

Individuals with respiratory disease, including but not limited to asthma and bronchitis should not be exposed to crystalline silica dust.

#### **Ingestion**

No adverse effects expected for normal, incidental ingestion.

---

Product Identifier: MICA

Date of Preparation: February 11, 2016

Page 3 of 05

## 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.

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.

Cancer Status: The International Agency for Research on Cancer has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1 - carcinogenic to humans).

### 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 ecotoxicity or environmental fate data available. It is good practice to prevent releases into the environment.

## 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.

## SECTION 16. OTHER INFORMATION

<b>SDS Prepared By</b>	Bri-Chem Supply Ltd
<b>Phone No.</b>	(403) 252-5904
<b>Date of Preparation</b>	February 11, 2016

---

Product Identifier:	MICA
Date of Preparation:	February 11, 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.