

## LIGNITE

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	LIGNITE
<b>Other Means of Identification</b>	Brown Coal
<b>Product Family</b>	Dispersant
<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 1



## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Humic acids	1415-93-6	90-100	
Silica, quartz	14808-60-7	6	

## SECTION 4. FIRST-AID MEASURES

## First-aid Measures

**Inhalation**

Move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. If breathing has stopped, trained personnel should begin rescue breathing. Call a Poison Centre or doctor if you feel unwell or are concerned.

**Skin Contact**

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Call a Poison Centre or doctor if you feel unwell or are concerned.

**Eye Contact**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

**Ingestion**

Drink water to dilute and then induce vomiting.

## SECTION 5. FIRE-FIGHTING MEASURES

Product Identifier: LIGNITE  
 Date of Preparation: March 02, 2016

### Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam, water.

### Specific Hazards Arising from the Chemical

COMBUSTIBLE DUST. May explode if dust is suspended in air and ignition source is present. Granules burn similar to coal or wood.

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

A full-body encapsulating chemical protective suit with 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

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. Avoid skin and eye contact. Practice reasonable caution and personal cleanliness. 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

(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.

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"

(nuisance dust)

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. 5 mg/m<sup>3</sup> (respirable fraction) 15 mg/m<sup>3</sup> (total dust).

### Appropriate Engineering Controls

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

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Use a NIOSH-approved dust mask.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Black - brown powder. Particle Size: Not available
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available

Product Identifier: LIGNITE

Date of Preparation: March 02, 2016

Page 2 of 05

<b>pH</b>	4.5 (1% solution)
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	> 400 °F (open cup)
<b>Evaporation Rate</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	1.6 - 1.8
<b>Solubility</b>	Insoluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</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 available
<b>Molecular Weight</b>	Not available
<b>Bulk Density</b>	Not applicable
<b>Surface Tension</b>	Not available
<b>Critical Temperature</b>	Not available
<b>Electrical Conductivity</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.

### Incompatible Materials

None known.

### Hazardous Decomposition Products

When burned, carbon dioxide, sodium oxide, hydrocarbons, carbon monoxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

Contains silica dust. Excessive or prolonged inhalation of this product may cause permanent lung damage or possibly silicosis.

### Skin Corrosion/Irritation

Prolonged exposure may cause irritation.

### Serious Eye Damage/Irritation

Exposure may cause irritation to eyes and eyelids.

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

#### Inhalation

Contains small amount of crystalline silica which may cause delayed respiratory disease if inhaled over a long

period of time.

**Ingestion**

May cause nausea.

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

Long-term exposure to products containing crystalline silica may cause silicosis. Avoid inhalation.

This product contains a small amount of crystalline silica which may cause respiratory disease over a prolonged period of time.

**Carcinogenicity**

(Naturally Occuring Crystalline Silica) IARC:

Group 1 – Carcinogenic to humans. ACGIH®:

A2 – Suspected human carcinogen. NTP:

Known human carcinogen.

No information was located for: Skin Corrosion/Irritation, Serious Eye Damage/Irritation, STOT (Specific Target Organ Toxicity) - Single Exposure, STOT (Specific Target Organ Toxicity) - Repeated Exposure, 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.

**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 regulations.

**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

**Additional Canadian Regulatory Lists**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**SECTION 16. OTHER INFORMATION**

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

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

**Date of Preparation** March 02, 2016

Product Identifier: LIGNITE

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**Disclaimer**

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