



# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

**PRODUCT NAME:** Lignite  
**PRODUCT USE:** Drilling Mud additive  
**CHEMICAL FAMILY:** Leonardite

### WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

**WHMIS CLASSIFICATION:** Class D-2(A)  
**WORK PLACE HAZARD:** Potential carcinogen, Contains free silica

### TRANSPORTATION OF DANGEROUS GOODS (TDG)

**SHIPPING NAME:** N/A  
**TDG CLASSIFICATION:** Not Dangerous goods  
**UN NUMBER (PIN):** N/A  
**PACKING GROUP:** N/A

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## SECTION II: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>PERCENT</u>	<u>CAS NUMBER</u>	<u>LD<sub>(50)</sub>, Oral-Rat</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Silica, Crystalline Quartz	<5%	14808-60-7	N/D	2mg/m <sup>3</sup>	0.1mg/m <sup>3</sup>

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## SECTION III: TOXICOLOGICAL PROPERTIES

**ROUTE OF ENTRY:**  SKIN     EYE CONTACT     INHALATION     INGESTION

**EFFECTS OF OVEREXPOSURE:** Inhalation of dust may cause mild upper respiratory irritation. May cause mild eye irritation. Crystalline Silica may cause delayed respiratory disease if inhaled over a long period of time.

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## SECTION IV: FIRST AID MEASURES

**SKIN CONTACT:** Wash affected area with soap and water. Wash clothing before reuse.  
**EYE CONTACT :** Flush eyes with water for at least 15 minutes.  
**INGESTION:** Dilute by drinking two glasses of water and induce vomiting.  
**INHALATION:** Remove patient to fresh air.

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## SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	Earthy brown/black odourless powder.
SPECIFIC GRAVITY:	1.6-1.8
BOILING POINT (°C):	N/A
MELTING POINT (°C):	N/A
pH:	4.5
SOLUBILITY IN WATER:	Insoluble
PERCENT VOLATILE BY VOLUME:	N/A
EVAPORATION RATE:	N/A
VAPOUR PRESSURE (mm Hg):	N/A
VAPOUR DENSITY (Air = 1):	99.8lb/ft <sup>3</sup>

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## SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	154.4°C
FLAMMABLE LIMITS:	N/D
EXTINGUISHING MEDIA:	Foam, or Dry chemical, or CO <sub>2</sub> .
SPECIAL FIRE FIGHTING PROCEDURES:	Self contained respirators required for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Treat as flammable dust in finely divided state.

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## SECTION VII: REACTIVITY DATA

STABILITY:	Stable [XX]	Unstable [ ]
INCOMPATIBILITY (CONDITIONS TO AVOID):	Heat.	
HAZARDOUS DECOMPOSITION PRODUCTS:	None.	
HAZARDOUS POLYMERIZATION:	Will Not Occur [XX]	May Occur [ ]

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## VIII: PREVENTIVE MEASURES

### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	Suggest NIOSH/MESA approved dust mask.
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**VENTILATION:** 10 changes per hour suggested.

**PROTECTIVE GLOVES:** Suggest rubber.

**EYE PROTECTION:** Suggest goggles to avoid eye contact.

**OTHER PROTECTIVE EQUIPMENT (Specify):** Suggest rubber apron and rubber footwear. Long protective clothing.

## **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Avoid breathing dust, wear approved respirator. Practice reasonable caution and personal cleanliness. Avoid eye contact. Store in dry area. Keep dust to a minimum. Keep away from fire and heat.

## **STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED**

Contain spill; sweep, shovel or vacuum material into waste container. Keep out of waterways. Re-bag if possible.

## **WASTE DISPOSAL METHOD**

Lignite may contain low levels of leachable chrome. Test waste material before disposal to determine hazardous status. Dispose of material in accordance with local ordinances.

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## **SECTION IX: PREPARATION**

THE INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

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