



Prairie Mud Service Ltd.

"Serving Western Canada with 24 Hour Drilling Mud Service"

MSDS (Material Safety Data Sheet)

MATERIAL SAFETY DATA SHEET

SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Prairie Mud Service** DATE: October 15, 2009
738 6th Street PHONE: 306-634-3411
Estevan, SK S4A 1A4 FAX: 306-634-7310

PRODUCT NAME: **Graphite**

PRODUCT USE: Oil well drilling fluid additive.
CHEMICAL FAMILY: Carbon; graphite CAS#: 7782-42-5

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2A
WORKPLACE HAZARD: Materials causing other toxic effects; potential carcinogen.

TRANSPORTATION OF DANGEROUS GOODS (TDG)

PROPER SHIPPING NAME: Not regulated under TDG
TDG CLASSIFICATION: Not applicable
UN NUMBER (PIN): Not applicable
PACKING GROUP: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>% (w/w)</u>	<u>CAS NUMBER</u>	<u>LD₅₀Oral-Rat</u>	<u>LC₅₀Inhal-Rat</u>	<u>ACGIH-TLV</u>
Silica, crystalline quartz	0-5	14808-60-7	No information	No information	0.025 mg/m ³

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: EYE CONTACT SKIN INHALATION INGESTION
EYE CONTACT: May cause mechanical irritation.
SKIN CONTACT: May dry skin due to absorption of skin oils on fine particulate dust.
INGESTION: Not a toxic product.



Prairie Mud Service Ltd.

"Serving Western Canada with 24 Hour Drilling Mud Service"

MSDS (Material Safety Data Sheet)

INHALATION:	Inhalation may cause irritation of the nose, throat and respiratory passages. Contains silica. Long-term inhalation of silica may cause silicosis, a progressive, disabling and, sometimes, fatal lung disease. Chronic inhalation exposure to crystalline silica quartz has been observed to cause lymph node effects, kidney effects and auto-immune disease.
CARCINOGENICITY:	Crystalline silica when inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans: IARC has concluded that this chemical is carcinogenic to humans (Group 1). The ACGIH has designated this chemical as a suspected human carcinogen (A2). The US NTP has listed this chemical as a known human carcinogen.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	Crystalline silica has been shown to cause mutagenic effects in human cells in-vitro.
SYNERGISTIC PRODUCTS:	No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT:	Wash with soap and water if irritation develops, at breaks and at end of workday. If irritation persists, obtain medical attention.
EYE CONTACT:	Flush with gently flowing warm water until particles are dislodged. If irritation persists, obtain medical attention.
INGESTION:	Do not induce vomiting. Rinse mouth and give one to two glasses of water to drink. If symptoms develop, obtain medical attention. Never give anything by mouth to an unconscious or convulsing victim.
INHALATION:	Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties or distress continues, obtain medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	Dark gray powder, odourless.	
SPECIFIC GRAVITY:	2.25	
BOILING POINT (°C):	Not applicable	
MELTING POINT (°C):	Not applicable	
SOLUBILITY IN WATER:	Insoluble	pH: Not applicable
PERCENT VOLATILE BY VOLUME:	Not applicable	
EVAPORATION RATE:	Not applicable	
VAPOUR PRESSURE (mmHg):	Not applicable	



Prairie Mud Service Ltd.

"Serving Western Canada with 24 Hour Drilling Mud Service"

MSDS (Material Safety Data Sheet)

VAPOUR DENSITY (air = 1): Not applicable
BULK DENSITY: Not available

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable
FLAMMABLE LIMITS: Not applicable
EXTINGUISHING MEDIA: Water, carbon dioxide, foam or dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus required for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

SECTION VII: REACTIVITY DATA

STABILITY: STABLE [XX] UNSTABLE []
INCOMPATIBILITY: Strong oxidizers, acids and bases.
(CONDITIONS TO AVOID):
CONDITIONS OF REACTIVITY: Contact with incompatible materials.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon on combustion.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR [XX] MAY OCCUR []

SECTION VIII: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Suggest NIOSH/MESA approved dust mask or approved respirator with filters for silica bearing dust.
VENTILATION: Use local exhaust ventilation, process enclosure or other engineering controls to maintain levels of airborne dust below TLV, if necessary.
PROTECTIVE GLOVES: Personal preference to prevent contact.
EYE PROTECTION: Suggest safety glasses or goggles.
OTHER PROTECTIVE EQUIPMENT (Specify): Suggest rubber apron or other impervious clothes. Ensure emergency eye wash station and safety shower are available.



Prairie Mud Service Ltd.

"Serving Western Canada with 24 Hour Drilling Mud Service"

MSDS (Material Safety Data Sheet)

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact. Dust collectors should be used in all work areas to trap airborne dust. Wear respiratory protection to prevent inhalation. Store in a cool, dry area away from incompatibles.

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

Use appropriate safety equipment including respiratory protection. Contain spill. Sweep up or vacuum to collect. Collect uncontaminated material for repackaging. Collect contaminated material for disposal in an approved container for disposal. Flush area with water.

WASTE DISPOSAL METHOD

Dispose in accordance with federal, provincial and local regulations. Landfill is suggested; check with local operator. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal.

SECTION IX: PREPARATION

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

DATE ISSUED: October 15, 2009 BY: Product safety committee