

# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: Diversity Technologies Corp.      DATE: March 13, 2016  
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PRODUCT NAME: Coremix

PRODUCT USE: Tar sands coring fluid additive  
CHEMICAL FAMILY: Blend      CAS #: Mixture

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2A  
WORKPLACE HAZARD: Potential carcinogen; may contain crystalline silica

## 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>LD<sub>50</sub>Oral-Rat</u>	<u>LC<sub>50</sub>Inhal-Rat</u>	<u>ACGIH-TLV</u>
Crystalline silica, quartz	0.1-1.0 & 0.0-0.1*	14808-60-7	Not available	Not available	0.025 mg/m <sup>3</sup> respirable

\* Concentration of crystalline silica in a series of naturally occurring products will vary from source to source. It was not detected on some samples (<0.1% w/w); therefore two ranges are being disclosed.

## SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: [ ] EYE CONTACT [ ] SKIN [XX] INHALATION [ ] INGESTION  
EYE CONTACT: Mechanical irritation may occur.  
SKIN CONTACT: Prolonged or repeated contact may irritate skin in some individuals.  
INGESTION: No toxic effects expected.

INHALATION:	Dust may cause respiratory tract irritation. This product may contain respirable crystalline quartz: Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Long-term inhalation 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:	This product is not listed by IARC, NTP, OSHA or ACGIH. However, this product could contain crystalline silica which when inhaled in the form of quartz from occupational sources is carcinogenic to humans: IARC has concluded that this chemical is carcinogenic to humans (Group 1); ACGIH has designated this chemical as a suspected human carcinogen (A2), and; NTP has listed this chemical as a known human carcinogen.
TERATOGENICITY:	Not available
REPRODUCTIVE TOXICITY:	Not available
MUTAGENICITY:	Crystalline silica has been shown to cause mutagenic effects in human cells in-vitro.
SYNERGISTIC PRODUCTS:	Not available

#### SECTION IV: FIRST AID MEASURES

SKIN CONTACT:	Wash with soap and water. Seek medical attention if irritation persists. Launder contaminated clothing before reuse.
EYE CONTACT:	Remove contact lenses; flush eyes with water until particles are removed. Consult a physician if necessary.
INGESTION:	Do not induce vomiting. Rinse mouth. Immediately dilute by drinking large quantities of water. Seek immediate medical attention. Never give anything by mouth to an unconscious or convulsing victim.
INHALATION:	Move to fresh air. Apply oxygen or apply artificial respiration if required. If breathing difficulties, or distress, continue obtain medical attention.

#### SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	Light tan powder; little odour
SPECIFIC GRAVITY:	0.9
BOILING POINT (°C):	Not determined
MELTING POINT (°C):	Not determined
SOLUBILITY IN WATER:	Forms suspension      pH: 7 – 9
PERCENT VOLATILE BY VOLUME:	Not determined
EVAPORATION RATE:	Not applicable
VAPOUR PRESSURE (mmHg):	Not applicable
VAPOUR DENSITY (air = 1):	Not applicable

BULK DENSITY: Not available

#### SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not flammable  
 FLAMMABLE LIMITS: Not applicable  
 EXTINGUISHING MEDIA: Use media suitable for surrounding materials.  
 SPECIAL FIRE FIGHTING PROCEDURES: Self contained breathing apparatus required for fire fighting personnel.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Dust explosions may occur when finely divided particles are mixed with air in the presence of an ignition sources. Material becomes very slippery when contacted with water.

#### SECTION VII: REACTIVITY DATA

STABILITY: STABLE [XX] UNSTABLE [ ]  
 INCOMPATIBILITY (CONDITIONS TO AVOID): Strong oxidizing agents and strong acids. Avoid creating dust clouds.  
 CONDITIONS OF REACTIVITY: Contact with strong acids and oxidizing agents.  
 HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and oxides of sulphur.  
 HAZARDOUS POLYMERIZATION: WILL NOT OCCUR [XX] MAY OCCUR [ ]

#### SECTION VIII: PREVENTATIVE MEASURES

##### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH approved dust mask or respirator recommended.  
 VENTILATION: General mechanical sufficient for normal conditions. Ensure motor is explosion proof.  
 PROTECTIVE GLOVES: Rubber gloves recommended.  
 EYE PROTECTION: Safety glasses or goggles are recommended.  
 OTHER PROTECTIVE EQUIPMENT (Specify): As appropriate to prevent contact with body. Ensure eye wash station and emergency shower are available.

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

Avoid eye and skin contact. Wear protective clothing. Wash thoroughly after handling. Store in a dry area away from incompatibles. Keep sealed until ready to use to prevent caking from moisture pick-up. Avoid creating dust clouds during use. Use caution when opening unvented containers of water solutions as microbial activity may cause pressure accumulation. Empty packaging contains residual hazardous material, handle as if full.

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

Use appropriate safety equipment. Avoid creating dust clouds. Sweep up spill. Collect uncontaminated material for repackaging. Collect contaminated material for disposal in an approved container for disposal. Wash spill area with water.

WASTE DISPOSAL METHOD

Dispose/landfill in accordance with federal, provincial and local regulations. 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:	March 13, 2016	BY:	Product safety committee
SUPERSEDES:	March 01, 2013	PHONE:	780-440-4923