

# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **February 13, 2007**  
**8750 – 53<sup>rd</sup> Ave.** PHONE: 780-468-4064  
**Edmonton, AB T6E 5G2** FAX: 780-469-1899

PRODUCT NAME: **Kelzan XCD & Kelzan XCD HI-VIS**

PRODUCT USE: Oil-well drilling fluid additive.  
CHEMICAL FAMILY: Polysaccharide gum CAS #: 11138-66-2

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: Not a controlled product under WHMIS  
WORKPLACE HAZARD: Treat as a nuisance dust

## 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>
			Contains no WHMIS controlled ingredients		

## SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY:  EYE CONTACT  SKIN  INHALATION  INGESTION  
EYE CONTACT: Mechanical irritation due to dust.  
SKIN CONTACT: May cause irritation. Prolonged contact with skin may cause drying or chapping. No skin allergy observed in guinea pig following repeated skin exposure. Product contains an ingredient, glyoxal, at less than 1% which may cause sensitization of susceptible persons.  
INGESTION: No adverse health effects expected. LD<sub>50</sub> (oral, rat) > 5000 mg/kg. No adverse effects observed in long-term feeding studies with rats (up to 1000 mg/kg/day).

INHALATION:	Excessive inhalation of dust may cause mild irritation, coughing and/or sneezing. Hygroscopic properties of the gum can form a paste or gel in the airway.
CARCINOGENICITY:	No information available.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No adverse effects were observed in a 3 generation reproduction study with rats (up to 500 mg/kg/day).
MUTAGENICITY:	No information available.
SYNERGISTIC PRODUCTS:	No information available.

#### SECTION IV: FIRST AID MEASURES

SKIN CONTACT:	Wash with soap and water. If irritation develops, obtain medical attention.
EYE CONTACT:	Flush with gently flowing warm water until particles are removed. If irritation persists, obtain medical attention.
INGESTION:	Rinse out mouth and give one to two glasses of water to dilute material. Obtain medical attention. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	If symptoms develop move patient to fresh air. Give oxygen or apply artificial respiration if required. If symptoms persist or develop, obtain medical attention.

#### SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	White to tan powder; odourless	
SPECIFIC GRAVITY:	Not available	
BOILING POINT (°C):	Not available	
MELTING POINT (°C):	Not available	
SOLUBILITY IN WATER:	Soluble	pH: ~ 7 (1% solution)
PERCENT VOLATILE BY VOLUME:	Not available	
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 applicable.
FLAMMABLE LIMITS:	Not applicable.
EXTINGUISHING MEDIA:	Use media suitable for surrounding fire and packaging.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Self contained breathing apparatus required for fire fighting personnel. Move containers from fire area if possible.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Dust clouds in air can create explosive mixtures in the presence of an ignition sources.

**SECTION VII: REACTIVITY DATA****STABILITY:**

STABLE [XX]

UNSTABLE [ ]

**INCOMPATIBILITY**

Strong oxidizers. Avoid creating dust clouds.

**(CONDITIONS TO AVOID):****CONDITIONS OF REACTIVITY:**

Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION**

Oxides of carbon.

**PRODUCTS:****HAZARDOUS POLYMERIZATION:**

WILL NOT OCCUR [XX]

MAY OCCUR [ ]

**SECTION VIII: PREVENTATIVE MEASURES****SPECIAL PROTECTION INFORMATION****RESPIRATORY PROTECTION:**

Dust masks recommended. Use an approved respirator with dust cartridges if level of airborne dust exceeds TLV.

**VENTILATION:**

General mechanical sufficient for normal conditions. Use local exhaust ventilation, process enclosure or other engineering controls to maintain level of airborne dust below TLV.

**PROTECTIVE GLOVES:**

Suggest impervious gloves.

**EYE PROTECTION:**

Safety glasses with side-shields or goggles for dusty environments.

**OTHER PROTECTIVE EQUIPMENT (Specify):**

Ensure eyewash station and emergency shower are available.

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

Avoid skin and eye contact. Wash thoroughly after handling. Keep container closed. **Launder contaminated clothing before reuse.** Use in ventilated area. To maintain best product performances, store in a cool, dry place. Product is slippery when wet. Keep away from heat, sparks and open flames.

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

Use appropriate safety equipment. Avoid creating dust. Sweep up or vacuum to collect spilled material. Use non-sparking tools and/or equipment designed for combustible dust. Collect uncontaminated material for repackaging. Collect contaminated material in approved container(s) for disposal. Wet material will be extremely slippery.

**WASTE DISPOSAL METHOD**

Dispose/landfill in accordance with all federal, provincial and local regulations. Uncontaminated material can be landfilled in most locations; **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: **February 13, 2007**

BY: **Product safety committee**

SUPERSEDES: **March 25, 2004**

PHONE: **780-440-4923**

**Diversity Technologies Corp. is the parent company of  
Canamara-United Supply, Hollimex Products, The Drilling Depot and  
Westcoast Drilling Supplies.**