

# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **September 20, 2010**  
**8750 – 53<sup>rd</sup> Ave.** PHONE: 780-468-4064  
**Edmonton, AB T6E 5G2** FAX: 780-469-1899

PRODUCT NAME: **Corinox**

PRODUCT USE: Oil well drilling fluid additive  
CHEMICAL FAMILY: Neutralized phosphate ester CAS#: Blend

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2A; D2B  
WORKPLACE HAZARD: Chronic toxic effects; skin and eye irritant; ingestion hazard.

## 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>
Ethylene glycol	10-30	107-21-1	4700 mg/kg	Not available	Ceiling = 50 ppm
Sodium sulphite	5-10	7757-83-7	Not determined	Not determined	Not established

## SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: [XX] EYE CONTACT [XX] SKIN [XX] INHALATION [XX] INGESTION  
EYE CONTACT: Liquid, vapour or mist causes irritation, experienced as stinging, excess blinking and tear production, with redness of the conjunctiva. Injury to the cornea is not expected.  
SKIN CONTACT: Prolonged contact or repeated exposure may cause skin irritation. May cause defatting, drying and cracking of the skin. Prolonged and repeated contact may lead to dermatitis.

INGESTION:	May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain oligurea, uremia and CNS effects including irregular eye movements, convulsions and coma. Cardiac failure and pulmonary oedema may develop. Severe kidney damage follows the swallowing of large amounts of ethylene glycol. May be fatal. Animal toxicity values do not meet criteria, but ethylene glycol is more toxic to humans and there are numerous human case reports of toxicity and death published in the literature.
INHALATION:	Because of low vapour pressure, significant amounts of airborne vapours are not expected at room temperatures. Mist may cause irritation of the nose and throat with headache. Heated vapours may produce nausea, vomiting, headache, dizziness and irregular eye movements.
CARCINOGENICITY:	No information available.
TERATOGENICITY:	Ethylene glycol is teratogenic, fetotoxic and embryotoxic in animal studies.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	No information available.
SYNERGISTIC PRODUCTS:	No information available.

#### **SECTION IV: FIRST AID MEASURES**

EYE CONTACT:	Immediately flush with gently flowing, warm water for at least 15 minutes. Remove contact lenses if present. Hold eyelids open to ensure thorough flushing. If irritation persists, obtain medical attention.
SKIN CONTACT:	Remove contaminated clothing and wash contaminated skin thoroughly with soap and water. If irritation persists, or develops, obtain medical attention.
INGESTION:	Do not induce vomiting. If conscious, rinse out mouth and give 240 to 300 mL of water to drink. If spontaneous vomiting occurs, keep head below hips to prevent aspiration, and give more water. Obtain immediate medical attention. If medical assistance is not immediately available and victim has swallowed a moderate amount of product, give three to four ounces of hard liquor. For children give proportionately less liquor according to weight. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	Move to area free from contaminants. Apply oxygen or artificial respiration if required. If breathing difficulties or distress continues, obtain medical attention.

**SECTION V: PHYSICAL DATA**

APPEARANCE AND ODOUR:	Amber to yellow liquid; sweet odour.	
SPECIFIC GRAVITY:	1.20	
BOILING POINT (°C):	Not determined	
MELTING POINT (°C):	<-25	
SOLUBILITY IN WATER:	Soluble	pH : 7 - 9
PERCENT VOLATILE BY VOLUME:	Not determined	
EVAPORATION RATE:	Not determined	
VAPOUR PRESSURE (mmHg):	Not determined	
VAPOUR DENSITY (air = 1):	Not determined	
BULK DENSITY:	Not available	

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

FLASH POINT:	> 100°C (TCC)
FLAMMABLE LIMITS:	Not determined
EXTINGUISHING MEDIA:	Dry chemical, foam, CO <sub>2</sub> , or water.
SPECIAL FIRE FIGHTING PROCEDURES:	Self-contained breathing apparatus required for fire fighting personnel. Move containers from fire area, or cool with water spray, if possible.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	This product may burn under fire conditions if solvent is boiled off.

**SECTION VII: REACTIVITY DATA**

STABILITY:	STABLE [XX]	UNSTABLE [ ]
INCOMPATIBILITY (CONDITIONS TO AVOID):	Strong oxidizers and strong acids.	
CONDITIONS OF REACTIVITY:	Not available	
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of carbon and smoke on combustion	
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR [XX]	MAY OCCUR [ ]

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

RESPIRATORY PROTECTION:	Use approved respirators with organic vapour cartridges if airborne concentration exceeds TLV.
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VENTILATION:	Use local exhaust ventilation, process enclosure or other engineering controls to maintain concentration of airborne vapours below TLV, if required.
PROTECTIVE GLOVES:	Suggest rubber or viton.
EYE PROTECTION:	Suggest chemical goggles and/or full face-shield be worn.
OTHER PROTECTIVE EQUIPMENT (Specify):	Ensure eye wash station and emergency shower are available.

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

Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact. Launder contaminated clothing before reuse. Store in a cool, dry area away from incompatible materials and ignition sources. Keep container tightly closed when not in use. Store unused material in original container. Follow all directions for use given on container label. Empty packages contain residual hazardous material and should be stored and handled as if full.

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

Use appropriate safety equipment. Eliminate ignition sources. Stop leak if possible to do so without risk. Small spills; soak up with absorbent material; collect used absorbent material in approved containers for disposal. Large spills; dike to prevent spread; collect diked material with vacuum truck. Collect uncontaminated material for repackaging. Collect contaminated material in approved containers for disposal. Treat remaining material as a small spill. Wash spill area thoroughly with water. Ensure spilled material does not enter storm sewers or public waterways.

### **WASTE DISPOSAL METHOD**

Dispose 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. Empty containers that have not been cleaned or purged must be disposed of, or recycled, in accordance with local regulations.

### **SECTION IX: PREPARATION**

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

DATE ISSUED:	September 20, 2010	BY:	Product safety committee
SUPERSEDES:	October 19, 2007	PHONE:	780-440-4923

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

