

MATERIAL SAFETY DATA SHEET

SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **August 7, 2008**
8750 – 53rd Ave. PHONE: 780-468-4064
Edmonton, AB T6E 5G2 FAX: 780-469-1899

PRODUCT NAME: **Caustic Potash – Anhydrous**
(Potassium Hydroxide, 90% KOH Flake)

PRODUCT USE: Oil well cement & drilling fluid additive
CHEMICAL FAMILY: Inorganic alkali salt CAS#: 1310-58-3

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: E; D1B
WORKPLACE HAZARD: Corrosive solid; toxic, generates heat when mixed with water.

TRANSPORTATION OF DANGEROUS GOODS (TDG)

PROPER SHIPPING NAME: Potassium hydroxide, solid
TDG CLASSIFICATION: 8
UN NUMBER (PIN): UN1813
PACKING GROUP: II

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>
Potassium hydroxide	84.5 – 90.5	1310-58-3	365 mg/k	No information	2mg/m ³ ceiling

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: [XX]EYE CONTACT [XX]SKIN [XX]INHALATION [XX]INGESTION
EYE CONTACT: Corrosive! May cause severe damage including burns and blindness. Severity of effects depends on concentration and how soon after exposure the eyes are washed.
SKIN CONTACT: Corrosive! May cause severe burns and tissue destruction. There may be a delay between the time of exposure and the onset of irritation depending on the concentration of the product. Prolonged or repeated contact, even to dilute solutions, can cause a high degree of tissue destruction.

INGESTION:	Corrosive! Severe burns and complete tissue perforation of mucous membranes of mouth throat and stomach.
INHALATION:	Exposure to powder, vapour, mist or liquid can produce burns of the respiratory tract. Severe exposures could result in chemical pneumonia.
CARCINOGENICITY:	No information available.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	No information available.
SYNERGISTIC PRODUCTS:	No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT:	Flush thoroughly with water while removing contaminated clothing and footwear. Get medical attention immediately.
EYE CONTACT:	Quickly and gently blot or brush away excess chemical. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 60 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting. Take care not to rinse contaminated water into the unaffected eye or onto the face. Quickly transport victim to an emergency care facility.
INGESTION:	Do not induce vomiting. If conscious, rinse out mouth and give 1 to 2 glasses of water to drink. If vomiting occurs keep head below hips to prevent aspiration and then give water. Repeat drinks of water every 10 minutes. Obtain immediate medical attention. Never give anything by mouth unless victim is fully conscious.
INHALATION:	Move to area free from contaminant. Apply oxygen or artificial respiration if required. Obtain medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	White flake; odourless
SPECIFIC GRAVITY:	2.044 @ 20°C
BOILING POINT (°C):	1320 @ 760mm Hg
MELTING POINT (°C):	400
SOLUBILITY IN WATER:	Completely soluble pH: 12.0 (0.01M)
PERCENT VOLATILE BY VOLUME:	Not applicable.
EVAPORATION RATE:	Not applicable.
VAPOUR PRESSURE (mmHg):	60 @ 1013°C
VAPOUR DENSITY (air = 1):	Not available.

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 packaging and surrounding materials.
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus required for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Contact with water can cause violent exothermic reaction.

SECTION VII: REACTIVITY DATA

STABILITY: STABLE [XX] UNSTABLE []
INCOMPATIBILITY (CONDITIONS TO AVOID): Corrosive to tin, aluminum, zinc and alloys containing these metals. Avoid contact with leather, wool acids, organic halogen compounds or organic nitro compounds.
CONDITIONS OF REACTIVITY: Not available.
HAZARDOUS DECOMPOSITION PRODUCTS: None.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR [XX] MAY OCCUR []

SECTION VIII: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Approved dust masks required for dust levels below TLV. Use approved respirators with dust cartridges if concentration of airborne dust exceeds TLV.
VENTILATION: Use local exhaust ventilation, process enclosure or other engineering controls to maintain concentration of airborne dust below TLV.
PROTECTIVE GLOVES: Rubber, neoprene or vinyl suggested.
EYE PROTECTION: Chemical goggles plus full-face shield recommended. Do not wear contact lenses.
OTHER PROTECTIVE EQUIPMENT (Specify): Impervious work clothing covering arms and legs, rubber boots & apron. Ensure emergency shower and eyewash available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Wear personal protective equipment. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid ingestion. Discard non-rubber shoes. Discard contaminated leather articles (belts, watch bands, etc.). Wash clothing before reuse. When mixing in water add product slowly, with constant stirring, to warm (30°C) water. Ensure temperature of water does not exceed 95°C to prevent boiling. Store in a cool, well-ventilated area away from incompatibles. Keep container tightly closed and properly labeled. Empty packages contain residual hazardous material and must be handled with the same care and attention as if full.

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

Use appropriate safety equipment. Evacuate unnecessary personnel. Collect dry material by shoveling; liquid material can be removed with a vacuum truck. Flush spill area with water followed by liberal covering of sodium carbonate. Collect uncontaminated material for repackaging. Collect contaminated material, and clean up materials, in an approved container for disposal. Flush spill area thoroughly with water.

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 packaging contains residual hazardous material and must be disposed of according to local regulations.

SECTION IX: PREPARATION

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

DATE ISSUED: August 7, 2008

BY: Product safety committee

SUPERSEDES: August 12, 2005

PHONE: 780-440-4923

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