



SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **May 4, 2016**
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PRODUCT NAME: **Potassium Carbonate**

PRODUCT USE: Oilwell drilling fluid additive
 CHEMICAL FAMILY: Inorganic potassium salt CAS #: 584-08-7

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2B
 WORKPLACE HAZARD: Severe eye irritant

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

INGREDIENT	% (w/w)	CAS NUMBER	LD ₅₀ Oral-Rat	LC ₅₀ Inhal-Rat	ACGIH-TLV
Potassium carbonate	98.5-100	584-08-7	1870 mg/L	>4.96 mg/L	Not established

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: EYE CONTACT SKIN CONTACT INHALATION INGESTION

EYE CONTACT: Dust and concentrated solutions may cause moderate to severe irritation with tearing, redness, or a stinging or burning feeling. Effects may become more serious with prolonged contact.

SKIN CONTACT: May cause mild irritation. Initial contact may result in itching with increasing irritation if not removed. Frequent or prolonged contact may cause dermatitis. Dermal LD₅₀ (skin – rabbit) >2000 mg/kg.

INGESTION: May cause irritation or burning of lips, mouth, tongue, throat and stomach. Severe scarring of the throat and esophagus may occur after swallowing. Massive overexposure may cause ulcerations, vomiting and death from shock.

INHALATION: Excessive levels of airborne dust may irritate the mucous membranes and upper respiratory tract.

CARCINOGENICITY: Not listed by NTP, IARC, OSHA or ACGIH.

TERATOGENICITY: No information available.

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REPRODUCTIVE TOXICITY: No information available.
MUTAGENICITY: No information available.
SYNERGISTIC PRODUCTS: No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Immediately, flush contaminated area with water for at least 5 minutes or until the chemical is removed. Under running water, remove contaminated clothing, shoes, and leather goods (e.g. watchbands, belts). If irritation occurs, obtain immediate medical attention.

EYE CONTACT: Immediately flush eyes with gently flowing warm water for 15 minutes or until irritation ceases, lifting the upper and lower eyelids occasionally. When flushing period is complete, obtain medical attention.

INGESTION: Do not induce vomiting. Rinse mouth with water. Give large amount of water to drink if patient is fully conscious. Obtain medical attention immediately. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.

INHALATION: Move to fresh air. Apply oxygen or artificial respiration if required. Obtain immediate medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:	White granular solid; odourless
SPECIFIC GRAVITY:	2.428 @ 19°C
BOILING POINT (°C):	Not available
MELTING POINT (°C):	891
SOLUBILITY IN WATER:	Soluble pH: Moderately basic
PERCENT VOLATILE BY VOLUME:	Not applicable
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 combustible
FLAMMABLE LIMITS:	Not applicable
EXTINGUISHING MEDIA:	Use media appropriate for packaging and surrounding materials.
SPECIAL FIRE FIGHTING PROCEDURES:	Self-contained breathing apparatus required for fire-fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None known.
HAZARDOUS COMBUSTION PRODUCTS:	Corrosive fumes of potassium oxide, carbon monoxide and carbon dioxide are formed in a fire.

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SECTION VII: REACTIVITY DATA

STABILITY:	<input checked="" type="checkbox"/> STABLE	<input type="checkbox"/> UNSTABLE
INCOMPATIBILITY (CONDITIONS TO AVOID):	Contact with acids will release carbon dioxide gas. Can react violently with red, hot aluminum metal; fluorine gas; lithium; and 2,4,6-trinitrotoluene. Avoid contact with lime to prevent formation of potassium hydroxide.	
CONDITIONS OF REACTIVITY:	Not applicable.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Decomposes into corrosive potassium oxide and carbon dioxide above 891°C.	
HAZARDOUS POLYMERIZATION:	<input checked="" type="checkbox"/> WILL NOT OCCUR	<input type="checkbox"/> MAY OCCUR

SECTION VIII: PREVENTIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	NIOSH/MESA approved dust mask recommended for low levels of dust. Use approved respirator with dust cartridges if dust concentration in air exceeds TLV. TWA (8 hr) for similar material is 1 mg/m ³ .
VENTILATION:	Local exhaust recommended if concentration of dust exceeds TLV.
PROTECTIVE GLOVES:	Suggest plastic or rubber.
EYE PROTECTION:	Safety glasses or goggles. Do not wear contact lenses when handling this material.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Protective clothing as required to prevent contact. Ensure eye wash station and emergency shower are available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid contact with eyes or skin. Avoid breathing dust. Use good personal hygiene and housekeeping. Thoroughly clean, or discard, contaminated clothing and footwear before reuse. Store in a cool, dry, well-ventilated place away from acids. Product is hygroscopic. Obey hazard warnings and handle empty containers as if they were full.

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

Wear appropriate safety gear including eye and respiratory protection. Clean spill by sweeping up and shoveling into containers. Collect uncontaminated material for repackaging. Collect contaminated material in an approved container for disposal. Cautiously spray residue with plenty of water. Collect wash water in an approved container for disposal. Releases should be reported to appropriate agencies.

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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 packages contain residual hazardous material and must be disposed of, or recycled, in accordance with local regulations.

SECTION IX: PREPARATION

The information contains herein is given in good faith, but no warranty, expressed or implied, is made.

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BY: Regulatory Affairs
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