# MATERIAL SAFETY DATA SHEET

# SECTION I: IDENTIFICATION OF PRODUCT

COMPANY:

Diversity Technologies Corp.

DATE:

Dec. 19, 2005

 $8750 - 53^{\text{rd}}$  Ave.

PHONE:

604-940-6050

Edmonton, AB T6E 5G2

FAX:

604-940-6080

PRODUCT NAME:

BIG BEAR ROD GREASE

PRODUCT USE:

Anti-seize compound

CHEMICAL FAMILY: N

Mixture

CAS#:

Mixture

# WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION:

Not WHMIS regulated.

WORKPLACE HAZARD:

Not hazardous under normal conditions of use.

# TRANSPORTATION OF DANGEROUS GOODS (TDG)

PROPER SHIPPING NAME:

Not TDG regulated.

TDG CLASSIFICATION:

Not applicable.

UN NUMBER (PIN):

Not applicable.

PACKING GROUP:

Not applicable.

# SECTION II: HAZARDOUS INGREDIENTS

MCREDIENT

Mineral oil Barrom soap % (w/w) 70-80 20-30 CAS NUMBER 64742-52-5 68201-19-4 I.D<sub>so</sub>Oral-Rat Not available Not available LCsolnhal-Rat
Not available
Not available

ACCIH-TLV
Not available
Not available

#### SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY:

[XX] EYE CONTACT [XX] SKIN [ ] INHALATION [XX] INGUSTION

EYE CONTACT: SKIN CONTACT:

May cause slight transient irritation. May cause slight transient irritation.

INGESTION:

No effects known.

INHALATION:

Not a likely source of contact during normal use.

CARCINOGENICITY: N

None of the ingredients in the compound are listed by NTP, IARC or

OSHA as being carcinogenic.

TERATOGENICITY:

No information available.

Big Bear Rod Grease

Page 2 of 4

REPRODUCTIVE

TOXICITY:

No information available.

MUTAGENICITY:

No ingredients listed as mutagenic.

SYNERGISTIC PRODUCTS:

No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT:

Remove by wiping, or with a waterless hand cleaner. Wash with soap and water. Remove and launder contaminated clothing before re-use.

EYE CONTACT:

Immediately flush with gently flowing warm water until all residual material is removed. Remove contact lenses if present. Hold eyelids open to ensure thorough flushing. If irritation persists, obtain medical

attention.

INGESTION:

Do not induce vomiting. Rinse mouth. Obtain immediate medical

attention. Never give anything by mouth to an unconscious or

convulsing victim.

INHALATION:

Move to fresh air. Apply oxygen or artificial respiration as required. If

breathing difficulties or distress continues, obtain medical attention.

#### SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR:

Brown paste; bland odour

SPECIFIC GRAVITY:

0.90 @ 16°C

BOILING POINT (°C):

371

MELTING POINT (°C):

204

SOLUBILITY IN WATER:

Insoluble

PERCENT VOLATILE BY VOLUME:

Not available

EVAPORATION RATE:

Not available

VAPOUR PRESSURE:

Not available

VAPOUR DENSITY (air = 1):

Not available

BUILK DENSITY:

Not applicable

## SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:

188°€

FLAMMABLE LIMITS:

Not available

EXTINGIUSHING MEDIA:

Dry chemical, CO<sub>2s</sub> foam or water spray.

SPECIAL FIRE FIGHTING

Solf-contained breathing apparatus required for fire fighting personnel. Remove containers from fire

PROCEDURES:

area, or cool with water spray, if possible.

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

pH: Not available

Big Bear Rod Grease

Page 3 of 4

UNUSUAL FIRE AND EXPLOSION HAZARDS:

This product may burn under fire conditions.

## SECTION VII: REACTIVITY DATA

STABILITY:

INCOMPATIBILITY

(CONDITIONS TO AVOID):

CONDITIONS OF REACTIVITY: HAZARDOUS DECOMPOSITION

PRODUCTS:

HAZARDOUS POLYMERIZATION:

STABLE [XX]

UNSTABLE[]

Strong oxidizers. Avoid heat, sparks and open

flames.

Contact with incompatibles or ignition sources.

May release CO,, smoke and irritating vapours when

heated to decomposition.

WILL NOT OCCUR [XX] MAY OCCUR [ ]

## SECTION VIII: PREVENTATIVE MEASURES

#### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

VENTILATION:

Not required under normal conditions of use.

Not required under normal conditions of use.

PROTECTIVE GLOVES:

EYE PROTECTION:

OTHER PROTECTIVE EQUIPMENT

(Specify):

Suggest reoprene or viton.

Safety glasses with side-shields if required.

Protective clothing as required to prevent contact. Ensure eyewash station and emergency shower are

available.

## PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid contact with skin and eyes. Avoid ingestion. Wash thoroughly before eating, drinking or smoking. Store in cool, dry area away from incompatibles and sources of ignition. Use caution when opening unvented containers. Use in well ventilated area. Store onused material in original container.

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

Use appropriate safety equipment. Eliminate ignition sources. Scoop up excess, then wipe down the affected area and pick up residual with diatomaceous earth to prevent slipping hazard. Place contaminated material and clean up materials in approved containers for disposal.

#### WASTE DISPOSAL METHOD

Dispose/incinerate 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. Dispose of, or recycle, empty containers in accordance with local regulations.

# SECTION IX: PREPARATION

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

DATE ISSUED:

December 20, 2005

BY:

Product safety committee

SUPERSEDES: March 31, 2003

PHONE:

780-440-4923

## MATERIAL SAFETY DATA SHEET

#### SECTION I: IDENTIFICATION OF PRODUCT

COMPANY:

Diversity Technologies Corp.

DATE:

Jan. 3, 2006

8750 53rd Ave.

PHONE: FAX:

604-940-6050 604-940-6080

PRODUCT NAME:

550X POLYMER

Edmonton, AB T6E 5G2

PRODUCT USE:

Drilling mud additive,

CHEMICAL FAMILY:

Anionic water soluble polymer

CAS#:

Not available

# 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 Not applicable

UN NUMBER (PIN): PACKING GROUP:

Not applicable

## SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT

PERCENT

CAS NUMBER

LD<sub>50</sub>Oral-Rat

LCsoInhal-Rat

ACGUETLY

Contains no WHMIS controlled ingredients,

#### SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY:

[ ]EYE CONTACT [ [SKIN ] [INHALATION ] [INGESTION

EYE CONTACT:

May cause slight irritation and/or redness.

SKIN CONTACT:

May cause slight irritation some cases.

INGESTION:

No effacts expected.

INHALATION:

May cause irritation of the respiratory tract, including sneezing and

coughing.

CARCINOGENICITY:

No information available.

TERATOGENICITY:

No information available.

REPRODUCTIVE

No information available

TOXICTLY:

550X Polymer Page 2 of 4

MUTAGENICITY:

No information available.

SYNERGISTIC PRODUCTS:

No information available.

### SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Wash thoroughly with soap and water. If irritation develops or persists,

obtain medical attention. Wash contaminated clothing prior to reuse.

EYE CONTACT: Flush with gently flowing warm water until irritation subsides. If

irritation persists, obtain medical attention.

INGESTION: This product is not considered toxic based on studies on lab animals.

Do not induce vomiting. Give 2-3 glasses of water. If symptoms occur,

obtain medical attention.

INHALATION: Move to fresh air. Apply oxygen or artificial respiration as required. If

breathing difficulties or distress continues obtain medical attention.

#### SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR: White granular powder; no odour

SPECIFIC GRAVITY: Not available
BOILING POINT (°C): Not available
MELTING POINT (°C): Not available

SOLUBILITY IN WATER: Soluble pII: 4-9 (@ 5 g/L)

PERCENT VOLATHLE BY VOLUME: Not available EVAPORATION RATE: Not available VAPOUR PRESSURE (mmHg): Not available 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: Carbon dioxide, dry chemical, foam, in preference to

a water spray,

SPECIAL FIRE FIGHTING Self contained breathing apparatus required for fire

PROCEDURES: fighting personnel. Move containers from fire area if

possible.

UNUSUAL FIRE AND

As with most organic powders, flammable dust

EXPLOSION HAZARDS.

As with most organic powders, flammable dust

chough may be formed in six. Avoid greating dust

clouds may be formed in air. Avoid creating dust. Avoid sources of ignition. Product is extremely

slippery when wet.

S50X Polymer Page 3 of 4

#### SECTION VII: REACTIVITY DATA

STABILITY:

STABLE [XX]

UNSTABLE | |

INCOMPATIBILITY

(CONDITIONS TO AVOID):

Avoid contact with strong exidizers. Avoid wet,

damp or humid conditions, extremes of temperature,

and ignition sources.

HAZARDOUS DECOMPOSITION

PRODUCTS.

Oxides of carbon and nitrogen, various hydrocarbons, and/or ammonia upon combustion

PRODUCTS:

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR [XX] MAY OCCUR [ ]

#### SECTION VIII: PREVENTATIVE MEASURES

#### SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

Use approved dust mask in absence of adequate

ventilation. Use approved respirators with dust

cartridges if TLV is exceeded.

VENTILATION:

Use in well-ventilated area, or use local exhaust ventilation, process enclosure or other engineering

controls to maintain dust level below TLV.

PROTECTIVE GLOVES:

Use gloves, if needed, to avoid prolonged or repeated

skin contact.

EYE PROTECTION:

Use safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT.

(Specify):

As necessary to prevent contact. Ensure eyewash

station and emergency shower are available.

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

Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder or dry-clean before reuse. Cleanse skin thoroughly after contact, before breaks and meals and at end of work period. Product is readily removed from skin by washing thoroughly with soap and water. Store in a cool, dry location away from incompatibles. Store in original container.

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

Use appropriate safety equipment. Sweep up dry material and flush spill area with water. Collect uncontaminated material for repackaging. Collect contaminated material in approved containers for disposal. Scrub spill area with dry absorbent and then flush residue with water to eliminate slip hazard. Absorb spills of dilute solutions with inert absorbent. Collect in approved containers for disposal. The product or its solutions should not be allowed to enter waterways without treatment. Spilled solutions can create a hazard because of their slippery nature.

550X Polymer Page 4 of 4

#### 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. It may be possible to dispose of spills of non-hazardous materials in a landfill; check with local operator.

#### SECTION IX: PREPARATION

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

DATE ISSUED:

January 3, 2006

BY:

Product safety committee

SUPERSEDES: Jane

January 2005

PHONE:

780-440-4923

# Material Safety Data Sheet / Fiche signalétique

WESTCOAST DRILLING SUPPLIES LTD.

8069 River Way, Delta, British Columbia,

Canada V4G 1[3]

Ph. (604) 940-6050 Fax (604) 940-6080

EMERGENCY 1-800-665-6645

SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME:

LINSEED SOAP

CHEMICAL FAMILY:

Lubricating grease

WHMIS CLASSIFICATION:

Not regulated

WORK PLACE HAZARD:

Not applicable

TRANSPORTATION OF DANCEROUS GOODS (TDGR)

CLASSIFICATION:

Not available

PACKAGE GROUP:

Not available

PRODUCT IDENTIFICATION NUMBER (PIN):

Not applicable (Petroleum Lubricating Grease)

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT

PERCENTAGE

CAS NUMBER

Linseed Soap

100%

Mixture

LD50 LC50

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY (Information not available)

[] Skin, [] Eye Contact, [XXX] Inhalation, [] Ingestion

SKIN CONTACT:

Prolonged and repeated contact with skin can cause defatting and

drying of the skin resulting in skin aritation and dermatitis.

EYE CONTACT:

Not available,

INHALATION:

Inhalation of oil mist or vapors from hot grease may cause irritation

of the upper respiratory tract. Long term intensive exposure may

cause benign lung librosis.

INGESTION:

Not available.

CHRONIC OVEREXPOSURE. IRRITATION INDEX: SKIN:

Not determined.

SYMPTOMS OF EXPOSURE:

Not available.

Not available.

EXPOSURE INFORMATION:

Oil mist (particulate): 5 mg/M3 (TLV/TWA)

ACGIH 88/89 10 mg/M2 (TLV/STEL) ACGIH 88/89

SECTION IV: FIRST AID MEASURES

SKIN CONTACT:

Remove contaminated clothing. Wash contaminated skin with mild

soap and water. Wipe excess from skin.

EYE CONTACT.

Flush eyes with water for at least fifteen (15) minutes.

INHALATION.

Remove victim from further exposure. Additional first aid treatment

is not ordinarily required

INGESTION:

Do not induce vomiting. Obtain medical attention immediately.

OTHER INSTRUCTIONS:

None

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR:

Semi-solid brown colored grease; slight hydrocarbon odor.

DENSITY (SPECIFIC GRAVITY): BOILD/G POINT

100° €

the state of the s

MELTING POINT:

Not available

WATER SOLUBILITY:

Muscible.

WESTCOAST DIBLLING SUPPLIES LTD.



#### WESTCOAST DRILLING SUPPLIES LTD.

8089 River Way, Datta, British Columbia, Canada V4G 1L3 Plane (604) 940-8050 Fex. (604) 940-8080 100 Fred. 1-800-665-6645

## LINSEED SOAP

Page 2 of 3

% VOLATILE BY VOLUME: EVAPORATION RATE:

VAPOR PRESSURE: (mm Hg) VAPOR DENSITY: (Air = 1)

VISCOSITY:

Not available

Not available

Not available Not available

9.5

Not available

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

Not available

222° C

FLASH POINT:

FLAMMABLE LIMIT: AUTO IGNITION TEMP:

EXTINGUISHING MEDIA:

SPECIAL FIRE FIGHTING PROCEDURES:

343° C

Dry chemical, carbon dioxide CO, foam water fog.

No special procedures - Avoid inhalation of smoke. Caution, spilled

material is slippery. Use water to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None currently known.

#### SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []

INCOMPATIBILITY (CONDITIONS TO AVOID): Not available.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide; carbon dioxide and dense smoke are produced on

combustion. Avoid excessive heat, formation of vapors or mists.

HAZARDOUS POLYMERIZATION:

Will not occur [ ] May occur [ ] Not Available

#### SECTION VIII: PREVENTATIVE MEASURES

RESPIRATORY PROTECTION:

Under conditions of high heat use an air purifying respirator

VENTILATION:

(mechanical filter with accompanying organic vapor cartridge). Highly recommended for all indoor situations to control fugitive emissions. Concentrations in air should be maintained below the recommended threshold limit value if unprotected personnel are

involved.

LOCAL: MAKE-UP AIR:

If oil mist is present or if exposure is exceeded. Should always be supplied to balance air exhausted

(either generally or locally).

PROTECTIVE GLOVES:

EYE PROTECTION:

Impervious gioves (viton, nitrile, PVC neoprene) should be worn at

all times when handling this product.

OTHER PROTECTIVE EQUIPMENT:

Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes. Impervious clothing (apron, coveralls) should be worn in confined workspaces or where the risk of skin exposure is much higher.

PERMISSIBLE CONCENTRATIONS:

Not available.



## LINSEED SOAP

Page 3 of 3

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a cool, dry, well ventilated area, away from heat and ignition sources. Avoid excessive heat, formation of oil mist, breathing of vapors and mist of hot oil and prolonged or repeated contact with skin. Launder contaminated clothing prior to reuse. Properly dispose of contaminated leather articles, including shoes, that cannot be decontaminated.

## STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Spilled material is slippery. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Contain a land spill by diking. For large spills remove by mechanical means and place in containers. Clean area with appropriate cleaner. Do not allow product to run off from fire control to enter storm of sanitary sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.

# WASTE DISPOSAL METHOD:

Reclaim or dispose of at a licensed waste disposal company.

#### SECTION IX: PREPARATION

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

DATE ISSUED: May 28, 1991

BY: Product Safety Committee

DATE REVISED: April 1, 2000

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