



### SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: **Diversity Technologies Corp.** DATE: **December 7, 2016**  
**8750 – 53<sup>rd</sup> Ave.** PHONE: **780-440-4923**  
**Edmonton, AB T6E 5G2** FAX: **780-469-1899**

PRODUCT NAME: **Sodium Acid Pyrophosphate (SAPP)**

PRODUCT USE: Oilwell drilling fluid additive  
 CHEMICAL FAMILY: Sodium phosphates CAS #: 7758-16-9

### WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2B  
 WORKPLACE HAZARD: Skin and 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 <sub>50</sub> Oral-Rat	LC <sub>50</sub> Inhal-Rat	ACGIH-TLV
Sodium acid pyrophosphate	100	7758-16-9	3600 mg/kg	Not available	Not established

### SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY:  EYE CONTACT  SKIN CONTACT  INHALATION  INGESTION

EYE CONTACT: Can cause severe irritation; symptoms include stinging, tearing redness and swelling.

SKIN CONTACT: Low acute dermal toxicity: LD50 dermal-rabbit >7940 mg/kg. May cause mild irritation with symptoms including redness and burning. Prolonged contact may cause drying or chapping of the skin.

INGESTION: Ingestion of large quantities may cause nausea, vomiting and/or diarrhea.

INHALATION: Dust may be irritating to the upper respiratory tract; symptoms include coughing, chest pain, runny nose and burning throat. Inhalation of high concentrations of dust may cause nasal stuffiness and nosebleeds.

CARCINOGENICITY: No information available.

TERATOGENICITY: No birth defects reported in animal tests.

REPRODUCTIVE TOXICITY: No information available.

## SODIUM ACID PYROPHOSPHATE (SAPP)

MUTAGENICITY: No adverse genetic effects were reported in standard tests using animals, bacterial and yeast cells.  
SYNERGISTIC PRODUCTS: No information available.

### SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Immediately flush with lukewarm flowing water. Remove contaminated clothing. If irritation persists, obtain medical attention.  
EYE CONTACT: Immediately flush with gently flowing warm water for at least 15 minutes, or until irritation ceases. If irritation persists, or develops, obtain medical attention.  
INGESTION: Do not induce vomiting. Rinse mouth with plenty of water and get medical attention. Obtain medical attention or contact a poison control centre. Never give anything by mouth to an unconscious victim.  
INHALATION: Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties, or distress, continue, obtain medical attention.

### SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR: White powder; odourless  
SPECIFIC GRAVITY: Not available  
BOILING POINT (°C): Not available  
MELTING POINT (°C): Decomposes between 250 – 275°C  
SOLUBILITY IN WATER: 12.5 g/100mL @ 25°C      pH: 4.0 - 5.0 (1% sol'n)  
PERCENT VOLATILE BY VOLUME: Not available  
EVAPORATION RATE: Not available  
VAPOUR PRESSURE (mmHg): Not available  
VAPOUR DENSITY (air = 1): Not available  
BULK DENSITY: 0.8 – 1.33 g/cc

### SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable  
FLAMMABLE LIMITS: Not applicable  
EXTINGUISHING MEDIA: Use media suitable for surrounding materials and packaging.  
SPECIAL FIRE FIGHTING PROCEDURES: Self-contained breathing apparatus required for fire-fighting personnel.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.  
HAZARDOUS COMBUSTION PRODUCTS: No information available.

**SECTION VII: REACTIVITY DATA**

STABILITY:	<input checked="" type="checkbox"/> STABLE	<input type="checkbox"/> UNSTABLE
INCOMPATIBILITY (CONDITIONS TO AVOID):	Avoid strong mineral acids.	
CONDITIONS OF REACTIVITY:	Not known.	
HAZARDOUS DECOMPOSITION PRODUCTS:	Not known.	
HAZARDOUS POLYMERIZATION:	<input checked="" type="checkbox"/> WILL NOT OCCUR	<input type="checkbox"/> MAY OCCUR

**SECTION VIII: PREVENTIVE MEASURES**

**SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION:	NIOSH approved dust mask suggested for normal conditions of use. Approved respirator with dust cartridges required if TLV's are exceeded.
VENTILATION:	Use in well-ventilated area. Use local exhaust ventilation, process enclosure or other engineering controls to maintain level of airborne dust below TLV.
PROTECTIVE GLOVES:	Neoprene or rubber gloves recommended.
EYE PROTECTION:	Safety glasses with side shields or goggles recommended. It is recommended that contact lenses not be worn when handling this material.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Full body covering suggested. Ensure eye wash station and emergency shower are available.

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

Avoid skin and eye contact. Wash thoroughly after handling and at end of shift. Avoid generating dust. Launder contaminated clothing before reuse. Store in a cool dry area away. Keep containers closed until used. Emptied container retains product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

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

Wear appropriate safety equipment. Sweep up or vacuum to collect spilled material. Collect uncontaminated material for repackaging. Collect contaminated material in approved container for disposal. Keep out of sewers, storm drains, surface waters and soil. Clean spill area with soap and 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.

## SODIUM ACID PYROPHOSPHATE (SAPP)

### SECTION IX: PREPARATION

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

DATE ISSUED: **December 7, 2016**  
SUPERSEDES: **January 9, 2014**  
BY: Regulatory Affairs  
PHONE: 780-440-4923