

(11214)

Vulsay Industries Ltd.  
MATERIAL SAFETY DATA SHEET

### FLO-PERM BRAKE FLUID

REVISION DATE: Mar 24, 2014

#### I PRODUCT INFORMATION

MATERIAL NAME IDENTIFIER: Flo-perm Brake Fluid Dot 3  
Flo-perm Brake Fluid Dot 4  
CHEMICAL NAME: Mixture  
SUPPLIER: & PACKAGER: Vulsay Industries Ltd.  
ADDRESS: 35 Regan road, Brampton, Ontario L7A 1132  
PHONE: (905) 846 2200 Fax# (905) 846 2249  
24 hours EMERGENCY Phone # - Call CANUTEC at (613) 996 6666

PART NUMBER	
90279	90280
90745	90744
90743	90634
90558	

#### II PREPARATION INFORMATION

SOURCES USED: Technical references and MSDS on raw materials  
PREPARED BY: Quality control department PHONE #: (905) 846 2200  
BRIEF NOTE ON REVISION: Reprint

#### III INGREDIENTS

Hazardous Components	CAS Number	%	LD50(Oral -rat)	LC50
Diethylene Glycol*	111-46-6	0 - 10	12565 mg/kg	No available
Diethylene Glycol Monobutyl Ether	112-34-5	15 - 35	5660 mg/kg	No available
Triethylene Glycol Monobutyl Ether	143-22-6	15 - 25	6700 mg/kg	No available
Tripropylene Glycol	24800-44-0	15 - 20	2000 mg/kg	No available
Polypropylene Glycol	25322-69-4	5 - 10	26800 mg/kg	No available
Diethylene Glycol Monoethyl Ether	111-90-0	5 - 10	5500 mg/kg	No available
Triethylene Glycol Monoethyl Ether	112-50-5	5 - 10	5300 mg/kg	No available
Diethylene Glycol Monopropyl Ether	6881-94-3	5 - 10	Not available	No available
Polypropylene Glycol Monopropyl Ether	29011-16-3	5 - 10	2875 mg/kg	No available

**EMERGENCY OVERVIEW:** Product is HARMFUL or FATAL if swallowed. Moderate skin irritant  
Eye Irritant

#### IV PHYSICAL DATA

PHYSICAL STATE: Liquid	BOILING POINT: Higher than 205 C
VAPOUR DENSITY: Not determined	SPECIFIC GRAVITY: 1.01 - 1.07
ODOUR: Mild odour	VAPOUR PRESSURE: Not determined
SOLUBILITY IN WATER: Complete	APPEARANCE: Light yellow liquid

#### V FIRE AND EXPLOSION HAZARDS

FLASH POINT: 203 C METHOD: PMCC  
FLAMMABLE LIMITS: Not Determined AUTO IGNITION TEMPERATURE: Not determined  
EXTINGUISHING MEDIA: Water, fog, carbon dioxide, dry chemical, foam. DO NOT USE DIRECT WATER STEAM.  
SENSITIVITY TO MECHANICAL IMPACT: Not sensitive  
SENSITIVITY TO STATIC DISCHARGE: Not sensitive

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**VI REACTIVITY DATA**

CHEMICAL STABILITY: Stable

INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizers, acids and alkalis

HAZARDOUS POLYMERIZATION: Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion may result in the formation of carbon monoxide, carbon dioxide

CONDITIONS TO AVOID: Product can decompose at elevated temperatures

**VII TOXICOLOGICAL PROPERTIES**

EYES: May cause eye irritation. Vapors may be irritating to the eye and surrounding tissue.

SKIN ABSORPTION: No acute effects known.

SKIN CONTACT: May cause moderate skin irritation.

INHALATION: Mist or vapors expected to be slightly irritating because of material's low vapor pressure.

INGESTION: This material is toxic when ingested. Probable lethal dose to humans is 0.5 –5 g/kg. Causes nerve depression, liver and kidney lesions and anuria (urination retardation). Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

CHRONIC EFFECTS: Can cause liver and kidney lesions and damage based on repeated

CARCINOGENICITY: No information available

REPRODUCTIVE EFFECTS: No information available

TERATOGENICITY: No information available

**VIII PREVENTATIVE MEASURES**

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions.

EYE/FACE PROTECTION: Use chemical goggles

SKIN PROTECTION: Use impervious gloves during prolonged or frequently repeated contact with the product. Wear apron or long sleeved body covering.

RESPIRATORY PROTECTION: If required, use an approved air-purifying respirator

**IX FIRST AID MEASURES**

INHALATION: Remove victim from further exposure and restore breathing if stopped. **Obtain medical attention immediately.**

SKIN: Wash contaminated skin with water and mild soap. Remove contaminated clothing.

EYES: Flush eyes with water for at least 15 minutes. Obtain medical attention.

INGESTION: **If swallowed, seek medical attention IMMEDIATELY.** Do not induce vomiting unless directed to do so by medical personnel.

Note to Physician: May cause significant renal, respiratory and central nervous system toxicity. May cause significant acidosis. Consider: Gastric lavage with protected airway, administration of alcohol dehydrogenase inhibitors such as fomepizole, as antidotal treatments.

**X ADDITIONAL INFORMATION**

IN CASE OF SPILL OR LEAK: Prevent entry into sewers or waterways. Contain spill with dike. Clean up with absorbent. **DO NOT FLUSH TO SEWERS, ON THE GROUND OR INTO ANY BODY WATER.** Disposal must comply with all federal, provincial and local laws and regulations.

TRANSPORTATION INFORMATION: D.O.T. Not regulated



**WHIMS CLASSIFICATION:**

Class D, Division 1, Subdivision B: Toxic Material – Acute Lethality

Class D, Division 2, Subdivision B: Other Toxic Effects – Chronic

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