

Vulsay Industries Ltd.  
MATERIAL SAFETY DATA SHEET

# FLO-PERM BRAKE FLUID

REVISION DATE: March 05, 2017

## 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

PART NUMBER	
90279	90280
90745	90744
90743	90634
90558	

**24 hours EMERGENCY Phone # - Call CANUTEC at (613) 996 6666**

## 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



**WHIMIS 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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