

FLO-PERM PLUMBING ANTI-FREEZE (ETHANOL BASE)

REVISION DATE: March 24, 2014

Note: This is a generic MSDS for Flo-perm Plumbing AF (-40 and -50 burst protection)

SECTION I: PRODUCT INFORMATION

PART NUMBERS
32531N, 90360

MANUFACTURER'S NAME: Vulsay Industries Ltd.
ADDRESS: 35 Regan Road, Brampton, Ontario L7A 1B2
TELEPHONE #: (905) 8462200
SUPPLIER'S NAME: same as above
PRODUCT IDENTIFIER: Flo-perm Plumbing Anti-freeze
PRODUCT PART NUMBERS: 90355, 90360, 90361
PRODUCT USE: In burst protecting plumbing water systems

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



WHIMS CLASSIFICATION:

B3 - Flammable and combustible material – Combustible

TDG CLASSIFICATION

4x4L package and 1x205L

Section 1.36 Class 3, Flammable Liquids: Alcohol solutions of alcohol exemption
Since the contents are in a small means of containment (less than or equal to 450 L) TDG regulations do not apply to these packages

Size greater than 450 L – TDG regulations apply.

Alcohols, N.O.S. (Ethanol/Water solution)

Class: 3, UN1987, PG: III

SECTION II: HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>CAS#</u>	<u>% by Volume</u>	<u>TLV, ppm</u>	<u>LC50, ppm/4h</u>	<u>LD50, mg/kg</u>
Ethanol	64-17-5	15-25	1000	31,623	Rat, Oral 7060 Rabbit, skin 20,000
(1,2)Propylene glycol	57-55-6	5-10	Not available	Not applicable	Rat, Oral 20000 Rabbit, skin 20800

SECTION III: PHYSICAL DATA

PHYSICAL STATE: Liquid

ODOUR AND APPEARANCE: Pink coloured liquid with faint cherry odour.

ODOUR THRESHOLD: Not Av.

VAPOUR PRESSURE : < 44 MMHG at 20 deg C

VAPOUR DENSITY: >1

BOILING POINT (deg C): 91

FREEZING POINT: >- 18 deg C

EVAPORATION RATE: (nbuac=1) : >1

SPECIFIC GRAVITY @20/20 DEG C: 0.950 - 1.000 pH: 6 - 8

COEFFICIENT OF WATER/OIL DISTRIBUTION: Insoluble in oil, completely soluble in water

SECTION IV: FIRE OR EXPLOSION HAZARD

CONDITIONS OF FLAMMABILITY: Excessive heat

MEANS OF EXTINCTION: Use water spray, alcohol, foam, dry chemical or carbon dioxide

FLASH POINT (C) AND METHOD: >39 TCC UPPER FLAMMABLE LIMIT % V/V: 3.3

LOWER FLAMMABLE LIMIT % V/V: 19.0 AUTOIGNITION TEMPERATURE (c): > 420

FIRE AND EXPLOSION HAZARDS: Keep the product away from heat, flame, spark and ignition sources.

SECTION V: REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Sources of ignition

INCOMPATIBLE MATERIALS: Oxidizing materials

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon monoxide, carbon dioxide

HAZARDOUS POLYMERIZATION: Will not occur

Vulsay Industries Ltd.

MATERIAL SAFETY DATA SHEET

Flo-perm Plumbing Anti-freeze

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SECTION VI: TOXICOLOGICAL PROPERTIES

PRODUCT LD50 (Rat, Oral): 21,830 mg/Kg

PRODUCT LC50 (Rat, Inh.): 105,410 ppm/4h

ROUTE OF ENTRY: Inhalation Ingestion Skin contact

EFFECT OF ACUTE AND CHRONIC EXPOSURE TO PRODUCT:

*Ingestion in large quantities may cause dizziness, vomiting, lack of coordination, unconsciousness.

*No evidence of adverse effects on skin contact. However, avoid prolonged contact with the product.

*Inhalation in high vapour concentrations may cause watering in the eyes and a burning sensation in the throat

*Eye irritant

EXPOSURE LIMITS: TLV 1900 mg/m³ IRRITANCY TO PRODUCT: Eye irritant.

SENSITIZATION TO PRODUCT: Not currently known CARCINOGENICITY: Not established

REPRODUCTIVE TOXICITY: May affect the central nervous system of the fetus

SECTION VII: PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Rubber apron to avoid contact with clothing

GLOVES (specify): Not normally needed but may use neoprene, butyl or natural rubber to avoid contact with skin

RESPIRATORY (specify): Not normally needed but may use Organic vapour cartridge @ low concentrations and line supply respirator @ high concentrations

EYES (specify): Anti-splash goggles when handling

FOOTWEAR (specify): Normal work shoes. Impervious for high exposure risk

ENGINEERING CONTROLS : Good room ventilation is usually adequate for most operations.

LEAK AND SPILL PROCEDURE: Stop leak if possible. Eliminate ignition sources, soak up with absorbent material and flush area with water

WASTE DISPOSAL: In accordance with local, provincial/state and federal regulations.

HANDLING PROCEDURES AND EQUIPMENT: Keep containers closed. Do not handle near heat, sparks, flame or strong oxidants. Use ventilation if necessary. Avoid breathing vapours and prolonged/repeated skin contact. Use good personal hygiene, launder contaminated clothing before reuse.

SECTION VIII: FIRST AID MEASURES

INHALATION: Remove victim to fresh air. Call for medical help.

INGESTION: If swallowed, if conscious, give large amounts of water, induce vomiting. Call for medical help. Keep victim at rest.

EYE CONTACT: Flush with water for 15-20 minutes. See doctor if irritation persists.

SKIN CONTACT: Remove contaminated clothing; wash with mild soap and water,

SECTION: IV: MSDS PREPARATION INFORMATION

PREPARED BY: Safety / Q.C. department. PHONE NO.: (905) 846-2200

Revision Notes: Reprint

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