

T. DONOVAN & SON (1997) LTD.
MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: DOWFROST* HEAT TRANSFER FLUID
CHEMICAL NAME: INHIBITED PROPYLENE GLYCOL TREATMENT

MANUFACTURER: T. DONOVAN & SON (1997) LTD
REGULAR PHONE #: 506-642-1500 HOURS: 8:30 - 4:30
EMERGENCY PHONE #: 613-996-6666 CHEMICAL EMERGENCIES ONLY

PRODUCT USE: INDUSTRIAL APPLICATION

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENTS	CONC.%	CAS #
PROPYLENE GLYCOL	95 %	0057-55-6
DIPOTASSIUM PHOSPHATE	1-5 %	7758-11-4
WATER	1-5 %	7732-18-5

SECTION III - PHYSICAL DATA

PHYSICAL STATE	: LIQUID	ODOR	: NONE
BOILING POINT (C)	: 370F, 188C	FREEZING POINT (C)	: N/AV
ODOR THRESHOLD	: N/A	VAPOR PRESSURE	: 0.22 mmHg @ 20C, 68F
VAPOR DENSITY	: 2.62	PERCENT VOLATILE	: N/A
EVAPORATION RATE	: N/AP	pH	: N/AV
SPECIFIC GRAVITY	: 1.050	COEFF WATER / OIL	: N/AP
SOLUBILITY IN WATER	: SOLUBLE	BULK DENSITY	: N/A

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY : NON-FLAMMABLE AT RECOMMENDED TEMPERATURES AND PRESSURES
EXTINGUISHING MEDIA : FOR LARGE FIRES USE FOAM. FOR SMALL FIRES CO2 OR
DRY CHEMICAL MAY BE USED.

SPECIAL FIRE FIGHTING PROC : WEAR NIOSH APPROVED SELF CONTAINED BREATHING
APPARATUS.

FIRE & EXPLOSION HAZARDS : MAY PRODUCE A FLOATING FIRE HAZARD IN EXTREME
CASES.

FLASHPOINT : 215F, 102C
AUTO-IGNITION TEMPERATURE (C): N/A
UPPER FLAMMABILITY LIMIT : N/A
LOWER FLAMMABILITY LIMIT : N/A

HAZARDOUS COMB. PROD. : SEE SECTION V
EXPLOSION SENSITIVITY TO IMPACT: N/A
SENSITIVITY TO STATIC : N/A

DOWFROST 100%

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY : YES, STABLE UNDER NORMAL CONDITIONS OF USE.

INCOMPATIBILITY : SEE BELOW

CONDITIONS TO AVOID : STRONG OXIDIZING AGENTS

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS DECOMPOSITION: DEPENDS UPON TEMPERATURE, AIR SUPPLY & THE PRESENCE OF OTHER MATERIALS

SECTION VI - TOXICOLOGICAL EFFECTS

CHRONIC AND ACUTE EFFECTS UPON ROUTES OF ENTRY

EYE CONTACT: IRRITANT. MAY CAUSE SLIGHT TEMPORARY EYE IRRITATION. CORNEAL INJURY IS UNLIKELY.

SKIN CONTACT: BRIEF CONTACT IS ESSENTIALLY NONIRRITATING TO SKIN. PROLONGED CONTACT CAN CAUSE SLIGHT SKIN IRRITATION OR DAMAGED SKIN IF ABSORBED IN LARGE QUANTITIES.

INGESTION: SINGLE DOSE ORAL TOXICITY IS LOW. NO HAZARDS ANTICIPATED FROM SWALLOWING SMALL AMOUNTS INCIDENTAL TO NORMAL HANDLING OPERATIONS.

INHALATION: A SINGLE PROLONGED (HOURS) INHALATION EXPOSURE IS NOT LIKELY TO CAUSE ADVERSE EFFECTS. MISTS ARE NOT LIKELY TO BE HAZARDOUS.

EXPOSURE LIMITS	: NONE	SYNERGISTIC PRODUCTS	: NONE
IRRITANCY	: NONE	SENSITIZATION	: NONE
CARCINOGENICITY	: NONE	TERATOGENICITY	: NONE
MUTAGENICITY	: NONE	REPRODUCTIVE TOXICITY	: NONE

SECTION VII - EMERGENCY AND FIRST AIR PROCEDURES

IN ALL CASES, SEEK MEDICAL ATTENTION IMMEDIATELY

EYE CONTACT: FLUSH EYES WITH WATER FOR 30 MINUTES, HOLDING THE EYELIDS OPEN. A NEUTRAL SALINE SOLUTION MAY BE USED TO FLUSH CONTAMINATED EYES.

SKIN CONTACT: FLUSH WITH WATER FOR 30 MINUTES. REMOVE CONTAMINATED CLOTHING. COMPLETELY DECONTAMINATE CLOTHING AND ALL PROTECTIVE EQUIPMENT.

INGESTION: DO NOT INDUCE VOMITING. DRINK LARGE QUANTITIES OF WATER OR MILK. IF VOMITING OCCURS NATURALLY, HAVE VICTIM LEAN FORWARD. REPEAT ADMINISTERING WATER.

INHALATION: REMOVE FROM CONTAMINATED AREA. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF DIFFICULTY BREATHING, GIVE OXYGEN.

DOWFROST 100%

SECTION VIII - PREVENTIVE MEASURES

EYE PROTECTION : SAFETY OR CHEMICAL GLASSES FOR FULL FACE MASK.
SKIN PROTECTION : RUBBER OR PLASTIC GLOVES, COVERALLS OR APRON.
RESPIRATORY PROTECTION : WEAR NIOSH APPROVED RESPIRATOR.
ENGINEERING CONTROLS : GENERAL MECHANICAL VENTILATION.

SPILL & LEAK PROCEDURES : WEAR NECESSARY PROTECTIVE CLOTHING AND EQUIPMENT.
PUMP SPILLED PRODUCT INTO WASTE CONTAINER. CONTAIN LARGE SPILLS FOR LATER DISPOSAL.

WASTE DISPOSAL : DISPOSE ACCORDING TO LOCAL, PROVINCIAL AND FEDERAL LAWS.

HANDLING & STORAGE : STORE IN CLOSED CONTAINERS IN DRY, COOL AREAS. DO NOT STORE NEAR ACIDS.

SECTION IX - TRANSPORT AND REGULATORY INFORMATION

TDG REGULATION : NON REGULATED

WHMIS CLASSIFICATION : THIS IS NOT A CONTROLLED PRODUCT

PREPARED BY: TECHNICAL SERVICES DEPARTMENT
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