

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

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: TRIPLE C # 235

CHEMICAL NAME: CONDENSATE LINE 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 USE ONLY.

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENTS	CONC.%	CAS #
CYCLOHEXYLAMINE	10-20 %	108-91-8
MORPHOLINE	10-20 %	110-91-8
DIETHYLAMINOETHANOL	10-20 %	100-37-8
WATER	40-70 %	7732-18-5

SECTION III - PHYSICAL DATA

PHYSICAL STATE	: LIQUID	ODOR	: AMINE ODOR
BOILING POINT (C)	: N/A	FREEZING POINT (C)	: 0 DEG C
ODOR THRESHOLD	: N/A	VAPOR PRESSURE	: N/A
VAPOR DENSITY	: N/AP	PERCENT VOLATILE	: N/A
EVAPORATION RATE	: N/AP	pH	: N/A
SPECIFIC GRAVITY	: N/A	COEFF WATER / OIL	: N/AP
SOLUBILITY IN WATER	: SOLUBLE	BULK DENSITY	: N/AP

SECTION IV - FIRE AND EXPLOSION DATA

FLAMMABILITY : FLAMMABLE

EXTINGUISHING MEDIA : WATER SPRAY, CO2, OR DRY CHEMICAL

SPECIAL FIRE FIGHTING PROC : STOP FLOW OF CHEMICAL. KEEP FIRE EXPOSED
CONTAINERS COOL WITH WATER. WEAR NIOSH APPROVED

SELF CONTAINED BREATHING APPARATUS.

FIRE & EXPLOSION HAZARDS : PRESENCE OF OIL OR OTHER COMBUSTIBLE MATERIAL
WILL INCREASE FIRE HAZARD.

FLASHPOINT : 28 DEG C

AUTO-IGNITION TEMPERATURE (C): 293 DEG C

UPPER FLAMMABILITY LIMIT : 9.4

LOWER FLAMMABILITY LIMIT : 1.5

HAZARDOUS COMB. PROD. : OXIDES OF NITROGEN

EXPLOSION SENSITIVITY TO IMPACT: N/A

SENSITIVITY TO STATIC : N/A

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SECTION V - REACTIVITY DATA

CHEMICAL STABILITY : YES, STABLE UNDER NORMAL CONDITIONS OF USE.
INCOMPATIBILITY : STRONG OXIDIZERS. STRONG ACIDS
CONDITIONS TO AVOID : EXCESSIVE HEAT, OPEN FLAME
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
HAZARDOUS DECOMPOSITION: OXIDES OF NITROGEN, OXIDES OF CARBON

SECTION VI - TOXICOLOGICAL EFFECTS

CHRONIC AND ACUTE EFFECTS UPON ROUTES OF ENTRY

EYE CONTACT: CORROSIVE EFFECT, CAUSES BURNS

SKIN CONTACT: SEVERE IRRITATION, CORROSIVE EFFECT, MAY CAUSE PERMANENT INJURY

INGESTION: CORROSIVE. MAY CAUSE SEVERE PAIN IN MOUTH, CHEST AND ABDOMEN LEADING TO COUGH, VOMITING AND COLLAPSE. GASTRIC OR ESOPHAGEAL PERFORATION MAY OCCUR AND LUNG IRRITATION AS A DELAYED REACTION.

INHALATION: CORROSIVE. CAN CAUSE IRRITATION AND INFLAMMATION OF THE RESPIRATORY SYSTEM

EXPOSURE LIMITS : 10-20 PPM
SYNERGISTIC PRODUCTS: NONE
IRRITANCY : CORROSIVE
SENSITIZATION : MAY CAUSE SKIN SENSITIZATION
CARCINOGENICITY : MAY REACT WITH NITRITES TO FORM NITROSAMINES
TERATOGENICITY : N/AV
MUTAGENICITY :NONE
REPRODUCTIVE TOXICITY: N/AV

SECTION VII - EMERGENCY AND FIRST AID PROCEDURES

IN ALL CASES, SEEK MEDICAL ATTENTION IMMEDIATELY

EYE CONTACT: FLUSH EYES WITH WATER FOR A MINIMUM OF 30 MINUTES, 60 MINUTES IS PREFERRED, HOLDING THE EYELIDS OPEN. DO NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETE UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT.

SKIN CONTACT: FLUSH WITH RUNNING WATER AND WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. COMPLETELY DECONTAMINATE CLOTHING AND ALL PROTECTIVE EQUIPMENT.

INGESTION: DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING TO DRINK. 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 ONLY BY TRAINED PERSONNEL.

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. CONSTRUCT A BARRIER AND NEUTRALIZE WITH WATER FOR DISPOSAL. PUMP SPILLED PRODUCT INTO WASTE CONTAINER.

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

HANDLING & STORAGE : STORE IN CLOSED CONTAINERS IN DRY, COOL AREAS AWAY FROM ALL HEAT SOURCES AND SPARKS

SECTION IX - TRANSPORT AND REGULATORY INFORMATION

TDG REGULATION : CORROSIVE LIQUID, FLAMMABLE N.O.S.*
(CYCLOHEXYLAMINE)
CLASS 8 (3) UN 2920, PG II

WHMIS CLASSIFICATION : CLASS E, B-2, D-1B,
PREPARED BY: TECHNICAL SERVICES DEPARTMENT
T. DONOVAN & SON (1997) LTD.
P.O. BOX 183
SAINT JOHN, N.B.
E2L 3X8

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