



KENCRO

CHEMICALS

PROPYLENE GLYCOL USP

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT IDENTIFIER: PROPYLENE GLYCOL USP
PRODUCT USE: INDUSTRIAL APPLICATIONS: SOLVENT.
CHEMICAL FAMILY: GLYCOLS
SUPPLIER'S NAME AND ADDRESS: KENCRO CHEMICALS LIMITED
2172 WYECROFT RD., UNIT #4
OAKVILLE, ON
L6L 5V6
905-827-4133
24 HR. EMERGENCY NUMBER: 613-996-6666 (CANUTEC)

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	C.A.S. #	WT.%	LC50	LD50 (ORAL, RAT)	(ORAL, RABBIT)
PROPYLENE GLYCOL	57-55-6	60 - 100	N/AV.	21.7g/kg	19.3g/kg

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CLEAR, COLOURLESS LIQUID, ODOURLESS.
MAY BE COMBUSTIBLE AT HIGH TEMPERATURE.
MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

SIGNS AND SYMPTOMS OF SHORT-TERM EXPOSURE:

SKIN CONTACT: SLIGHTLY IRRITATING TO THE SKIN. PROLONGED CONTACT MAY CAUSE DERMATITIS.

SKIN ABSORPTION: N/AP.

EYE CONTACT: MAY CAUSE SLIGHT TRANSIENT (TEMPORARY) IRRITATION. CORNEAL INJURY IS UNLIKELY.

INHALATION: MAY CAUSE MILD IRRITATION TO THE NOSE AND THROAT. IT IS NOT FREQUENT DUE TO ITS LOW VOLATILITY, THOUGH PROLONGED EXPOSURES TO SATURATED ATMOSPHERES MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM.

INGESTION: TOXIC. ASPIRATION HAZARD IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. MAY CAUSE CONVULSIONS. EFFECTS APPEAR MORE SEVERE IN INDIVIDUALS WITH KIDNEY PROBLEMS. MAY CAUSE ADVERSE EFFECTS ON CENTRAL NERVOUS SYSTEM. OTHER EFFECTS MAY INCLUDE EUPHORIA, HEADACHE, DIZZINESS, DROWSINESS, BLURRED VISION, FATIGUE, TREMORS, CONVULSIONS, LOSS OF CONSCIOUSNESS, COMA AND EVEN DEATH BY RESPIRATORY ARREST. IT REDUCES INTRAOCULAR PRESSURE BY RAISING OSMOTIC PRESSURE OF BLOOD.

POTENTIAL CHRONIC HEALTH EFFECTS: NO KNOWN SIGNIFICANT EFFECTS OR CRITICAL HAZARDS. PROLONGED CONTACT MAY CAUSE IRRITATION OF THE EYES AND SKIN.

OTHER IMPORTANT HAZARDS: LACTIC ACIDOSIS, STUPOR AND SEIZURES HAVE BEEN REPORTED FOLLOWING CHRONIC INGESTION.

SECTION 4: FIRST AID MEASURES

INHALATION: REMOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING. WASH CLOTHING BEFORE REUSE. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN.

EYE CONTACT: CHECK FOR AND REMOVE ANY CONTACT LENSES. IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER LIDS. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.

INGESTION: DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. LOOSEN TIGHT CLOTHING SUCH AS COLLAR, TIE, BELT OR WAISTBAND. GET MEDICAL ATTENTION IF SYMPTOMS APPEAR. HAVE CONSCIOUS PERSON DRINK 2 TO 4 GLASSES OF LUKEWARM WATER.

NOTES TO PHYSICIAN:
IN CASE OF INGESTION, MONITOR FOR ACIDOSIS AND CENTRAL NERVOUS SYSTEM CHANGES. EXPOSED PERSONS WITH PREVIOUS KIDNEY DYSFUNCTION MAY REQUIRE SPECIAL TREATMENT. CONTACT POISON TREATMENT SPECIALIST IMMEDIATELY IF LARGE QUANTITIES HAVE BEEN INGESTED OR INHALED.

SECTION 5: FIRE FIGHTING MEASURES

FIRE HAZARDS/CONDITION OF FLAMMABILITY:
NOT FLAMMABLE. MAY BECOME FLAMMABLE AT TEMPERATURES AT OR ABOVE FLASH POINT.

FLASH POINT: 99°C

FLASH POINT METHOD: CLOSED CUP

LOWER FLAMMABLE LIMIT: 2.6

FLASH POINT: 99°C

AUTO IGNITION TEMPERATURE: 371°C

UPPER FLAMMABLE LIMIT: 12.5

(% BY VOL.)

OXIDIZING PROPERTIES: N/AV.

FLAME PROJECTION LENGTH: N/AV.

EXPLOSION DATA: SENSITIVITY TO MECHANICAL IMPACT/STATIC DISCHARGE:
NOT EXPECTED TO BE SENSITIVE TO MECHANICAL DISCHARGE OR STATIC DISCHARGE.

SUITABLE EXTINGUISHING MEDIA:
DRY CHEMICAL POWDER, FOAM, WATER FOG OR CARBON DIOXIDE. DO NOT USE WATER JET.

SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:
IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER PRESSURE MODE. MOVE EXPOSED CONTAINERS FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

HAZARDOUS COMBUSTION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES.

SECTION 6: ACCIDENTAL RELEASE MEASURES

LEAK AND SPILL PROCEDURES:
ABSORB SPILL WITH INERT ABSORBENT MATERIAL. CONTAIN THE SPILL AND DIKE AREA TO PREVENT SPREADING. PREVENT ENTRY INTO DRAINS, SEWERS AND OTHER WATERWAYS. VENTILATE AREA AND WEAR APPROPRIATE PROTECTIVE EQUIPMENT. SOAK UP OR PUMP TO AN APPROPRIATE CONTAINER FOR DISPOSAL. DISPOSE OF ACCORDING TO LOCAL AND REGIONAL AUTHORITY REQUIREMENTS.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES:
KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. AVOID BREATHING VAPOURS OR SPRAY MISTS. USE ADEQUATE VENTILATION. EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. DO NOT CUT, GRIND, WELD OR DRILL EMPTY CONTAINER. USE PROPER GROUNDING PROCEDURES. WEAR SUITABLE PROTECTIVE CLOTHING. AFTER HANDLING, ALWAYS WASH HANDS THOROUGHLY. DO NOT INGEST. DECONTAMINATE FOOTWEAR BEFORE REUSE. LAUNDRY CONTAMINATED CLOTHING PRIOR TO REUSE.

STORAGE REQUIREMENTS:
STORE AWAY FROM ALL SOURCES OF IGNITION. STORE IN A COOL AND WELL-VENTILATED AREA. KEEP CONTAINER TIGHTLY CLOSED. STORE AWAY FROM INCOMPATIBLES – SEE REACTIVITY AND STABILITY DATA – SECTION 10.

INCOMPATIBLE MATERIALS:
STRONG OXIDIZING AGENTS.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2.

ENGINEERING CONTROLS:

PROVIDE EXHAULT VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP AIRBORNE CONCENTRATIONS OF VAPOURS BELOW THEIR RESPECTIVE THRESHOLD LIMIT VALUE. VAPOUR AND AEROSOL=50PPM; AEROSOL, ONLY=10MG/M³.

GLOVES/TYPE:

CHEMICA RESISTANT, IMPERVIOUS GLOVES RECOMMENDED.

RESPIRATORY/TYPE:

USE NIOSH/MSHA APPROVED EQUIPMENT WHEN AIRBORNE EXPOSURE IS EXCESSIVE.

EYE/TYPE:

SAFETY GLASSES WITH SIDE SHIELDS OR FACE SHIELD TO AVOID SPLASHES.

FOOTWEAR/TYPE:

RUBBER SAFETY BOOTS.

CLOTHING/TYPE:

WEAR IMPERVIOUS PROTECTIVE CLOTHING.

OTHER/TYPE:

EYE WASH FACILTIY AND EMERGENCY SHOWER SHOULD BE IN CLOSE PROXIMITY. WASH HANDS, FOREARMS AND FACE THOROUGHLY AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND USING THE LAVATORY AND AT THE END OF THE WORKING PERIOD.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	LIQUID	APPEARANCE:	CLEAR, COLOURLESS LIQUID
ODOUR:	ODOURLESS	ODOUR THRESHOLD:	N/AV.
PH:	N/AV.	BOILING POINT:	188°C(370.4°F)
SPECIFIC GRAVITY:	1.038 @ 20°C	MELTING/FREEZING POINT:	-59°C(-74.2°F)
COEFFICIENT OF WATER/OIL		SOLUBILITY IN WATER:	COMPLETE
DISTRIBUTION:	N/AV.	VAPOUR DENSITY (AIR=1):	2.62
EVAPOURATION RATE:	0.005	VAPOUR PRESSURE (mmHg) at 20°C/68°F:	<0.1mmHg
VOLATILITY:	100%		

MOLECULAR WEIGHT: 76.09g/mole

MOLECULAR FORMULA: C₃H₈O₂

SECTION 10: REACTIVITY AND STABILITY DATA

STABILITY AND REACTIVITY:

STABLE UNDER NORMAL CONDITIONS.

CONDITIONS TO AVOID:

HEAT, FLAMES, IGNITION SOURCES AND CONTACT WITH INCOMPATIBLE SUBSTANCES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE AND CARBON MONOXIDE MAY FORM WHEN HEATED TO DECOMPOSITION. ALDEHYDES OR LACTIC, PYRUVIC OR ACETIC ACIDS MAY ALSO BE FORMED.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA: NO DATA IS AVAILABLE ON THIS PRODUCT. REFER TO SECTION 2 FOR INDIVIDUAL INGREDIENT LD50'S.

CARCINOGENIC STATUS: NOT LISTED AS A CARCINOGEN.

REPRODUCTIVE EFFECTS: NO REPRODUCTIVE EFFECTS IN ANIMALS.

TERATOGENICITY: NO INFORMATION AVAILABLE.

MUTAGENICITY: NO INFORMATION AVAILABLE.

SENSITIZATION TO MATERIAL:

NOT EXPECTED TO BE A SENSITIZER.

SYNERGISTIC MATERIALS:NO INFORMATION AVAILABLE.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:

PROLONGED CONTACT MAY CAUSE IRRITATION OF THE EYES AND SKIN.

ADDITIONAL HEALTH HAZARDS:

NONE KNOWN.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:

THE PRODUCT SHOULD NOT BE ALLOWED TO ENTER DRAINS OR WATER COURSES, OR BE DEPOSITED WHERE IT CAN AFFECT GROUND OR SURFACE WATERS.

IMPORTANT ENVIRONMENTAL CHARACTERISTICS:

NO INFORMATION AVAILABLE.

ECOTOXICOLOGICAL: NO DATA IS AVAILABLE ON THE PRODUCT ITSELF.

SECTION 13: DISPOSAL CONSIDERATIONS

HANDLING FOR DISPOSAL: SEE SECTION 7 – HANDLING AND STORAGE FOR FURTHER DETAILS.

METHOD OF DISPOSAL: DISPOSE OF IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND LOCAL HAZARDOUS WASTE LAWS.

SECTION 14: TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: PROPYLENE GLYCOL USP

TDG CLASSIFICATION: NOT REGULATED

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION: NOT CONTROLLED

SECTION 16: OTHER INFORMATION

LEGEND:	CAS #	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
	LD	LETHAL DOSE
	MSHA	MINE SAFETY AND HEALTH ADMINISTRATION
	N/AP.	NOT APPLICABLE
	N/AV.	NOT AVAILABLE
	NIOSH	NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
	TDG	TRANSPORTATION OF DANGEROUS GOODS ACT/REGULATIONS
	WHMIS	WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

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MSDS PREPARATION DATE: (DD/MM/YYYY)
01/06/2011

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