

BEBBINGTON INDUSTRIES SAFETY DATA SHEET

ETHYLENE GLYCOL STANDARD

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER	BEBBINGTON INDUSTRIES 44 WRIGHT AVENUE DARTMOUTH, NOVA SCOTIA, CANADA B3B 1G6
PRODUCT NAME	ETHYLENE GLYCOL STANDARD
CHEMICAL FORMULA	C2H6O2
CHEMICAL FAMILY	ORGANIC COMPOUND
MATERIAL USE	INDUSTRIAL USE
EMERGENCY NUMBER	CANUTEC 1 613 996 6666

SECTION 02: HAZARDS IDENTIFICATION



SIGNAL WORD.....	WARNING.
HAZARD CLASSIFICATION.....	ACUTE TOXICITY (ORAL) — CATEGORY 4. SPECIFIC TARGET ORGAN TOXICITY — REPEATED EXPOSURE — CATEGORY 2.
HAZARD STATEMENT.....	H302 HARMFUL IF SWALLOWED. H373 MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.
PRECAUTIONARY STATEMENT.....	P260 DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P264 WASH... THOROUGHLY AFTER HANDLING. P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. P301+P312 IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL. P330 RINSE MOUTH. P314 GET MEDICAL ADVICE/ATTENTION IF YOU FEEL UNWELL. P501 DISPOSE OF CONTENTS/CONTAINER ACCORDING TO ALL APPLICABLE REGULATIONS.
OTHER HAZARDS.....	NO DATA AVAILABLE.

SECTION 03: COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	CAS #	WT. %
ETHYLENE GLYCOL	107-21-1	<= 100

SECTION 04: FIRST AID MEASURES

GENERAL ADVICE:.....	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. MOVE OUT OF DANGEROUS AREA.
IF INHALED:.....	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
IN CASE OF SKIN CONTACT:.....	WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT:.....	WASH EYES WITH COPIOUS AMOUNT OF WATER.
IF SWALLOWED:.....	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABILITY.....	NOT FLAMMABLE OR COMBUSTIBLE.
SUITABLE EXTINGUISHING MEDIA.....	USE WATER SPRAY, ALCOHOL RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.
HAZARDOUS COMBUSTION PRODUCTS	CARBON OXIDES.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	MATERIAL WILL NOT BURN UNLESS PREHEATED. CARBON MONOXIDE MAY BE EVOLVED IF INCOMPLETE COMBUSTION OCCURS.
SPECIAL PROCEDURES.....	EVACUATE HAZARD AREA. WEAR FULL PROTECTIVE EQUIPMENT INCLUDING A SELF-CONTAINED BREATHING APPARATUS.

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SECTION 06: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:..... USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION.
 ENVIRONMENTAL PRECAUTIONS:..... PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:..... SOAK UP WITH INERT ABSORBENT MATERIAL AND DISPOSE OF AS HAZARDOUS WASTE. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING..... HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING MIST OR VAPOUR. USE ADEQUATE VENTILATION.
 CONDITIONS FOR SAFE STORAGE..... PROTECT CONTAINER FROM PHYSICAL DAMAGE. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. STORE IN A COOL AND WELL-VENTILATED AREA.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
ETHYLENE GLYCOL	100 ppm					
ENGINEERING CONTROLS.....	GOOD VENTILATION SHOULD BE PROVIDED TO KEEP VAPOUR AND MIST CONCENTRATIONS BELOW THE EXPOSURE LIMITS.					
SKIN AND BODY PROTECTION.....	COMPLETE SUIT PROTECTING AGAINST CHEMICALS. THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.					
RESPIRATORY PROTECTION.....	USE NIOSH APPROVED SUPPLIED-AIR RESPIRATOR.					
EYE/FACE PROTECTION.....	FACE SHIELD WITH SAFETY GLASSES.					
HYGIENIC MEASURES.....	USE GOOD PERSONAL HYGIENE PRACTICES. WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. PROMPTLY REMOVE SOILED CLOTHING AND WASH THOROUGHLY BEFORE REUSE. SHOWER AFTER WORK USING PLENTY OF SOAP AND WATER.					
OTHER/TYPE.....	EYE WASH STATION AND SAFETY SHOWER SHOULD BE LOCATED NEAR THE WORK STATION.					

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... SLIGHTLY VISCOUS LIQUID.
 ODOUR..... MILD.
 ODOUR THRESHOLD..... 25 ppm.
 PH..... NO DATA AVAILABLE.
 MELTING POINT/FREEZING POINT (C).... approx. -13 C.
 BOILING POINT..... 196-200 C.
 FLASH POINT (C), METHOD..... 116 C.
 EVAPORATION RATE..... 1.
 FLAMMABILITY (SOLIDS AND GASES)..... NOT APPLICABLE.
 UPPER FLAMMABLE LIMIT (% BY VOL.)... 28% (V).
 LOWER FLAMMABLE LIMIT (% BY VOL.)... 3.2 % (V).
 VAPOUR PRESSURE..... <10.0 Pa.
 VAPOUR DENSITY (AIR=1)..... 2.14.
 SPECIFIC GRAVITY (WATER=1)..... 1.11.
 SOLUBILITY IN WATER (% W/W)..... COMPLETELY MISCIBLE.
 AUTO IGNITION TEMPERATURE..... 398 (C).
 PARTITION COEFFICIENT:..... log Pow: -1.93.
 N-OCTANOL/WATER
 DECOMPOSITION TEMPERATURE..... NO DATA AVAILABLE.
 VISCOSITY..... 16.1 mPa.s.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:..... NO DATA AVAILABLE.
 CHEMICAL STABILITY:..... STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
 POSSIBILITY OF HAZARDOUS REACTIONS..... NO DATA AVAILABLE.
 CONDITIONS TO AVOID:..... EXTREMES OF TEMPERATURE AND DIRECT SUNLIGHT.
 INCOMPATIBLE MATERIALS :..... STRONG OXIDIZING AGENTS. STRONG BASES. STRONG ACIDS.

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SECTION 10: STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS CARBON OXIDES.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS

LC50

LD50

ETHYLENE GLYCOL

4700 mg/kg

ACUTE TOXICITY:
 ORAL LD50..... SEE ABOVE.
 INHALATION LC50..... SEE ABOVE.
 DERMAL LD50..... RABBIT- 10626 mg/kg (Ethylene Glycol).
 SKIN CORROSION / IRRITATION..... RABBIT- NO SKIN IRRITATION - 4H.
 SERIOUS EYE DAMAGE / EYE IRRITATION..... MILD EYE IRRITATION.
 RESPIRATORY OR SKIN SENSITIZATION..... NO DATA AVAILABLE.
 GERM CELL MUTAGENICITY..... NO EVIDENCE FOUND OF MUTAGENICITY.
 CARCINOGENICITY..... ACGIH: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH. IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY IARC.

REPRODUCTIVE TOXICITY..... DOES NOT IMPAIR FERTILITY. NOT A DEVELOPMENTAL TOXICANT. OVER EXPOSURE MAY CAUSE REPRODUCTIVE DISORDERS BASED ON TESTS WITH LABORATORY ANIMALS.
 STOT- SINGLE EXPOSURE..... NO DATA AVAILABLE.
 STOT - REPEAT EXPOSURE..... MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

ASPIRATION HAZARD..... NO DATA AVAILABLE.
 POTENTIAL HEALTH EFFECTS..... INHALATION - MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. INGESTION - HARMFUL IF SWALLOWED. EYES - MAY CAUSE EYE IRRITATION. SKIN - MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. MAY CAUSE SKIN IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE..... WHEN INGESTED, EARLY SYMPTOMS MIMIC ALCOHOL INEBRIATION AND ARE FOLLOWED BY NAUSEA, VOMITING, ABDOMINAL PAIN, WEAKNESS, MUSCLE TENDERNESS, RESPIRATORY FAILURE, CONVULSIONS, CARDIOVASCULAR COLLAPSE, PULMONARY EDEMA, HYPOCALCEMIC TETANY AND SEVERE METABOLIC ACIDOSIS. WITHOUT TREATMENT, DEATH MAY OCCUR IN 8 TO 24 HOURS. VICTIMS WHO SURVIVE THE INITIAL TOXICITY PERIOD USUALLY DEVELOP RENAL FAILURE ALONG WITH BRAIN AND LIVER DAMAGE. EXPOSURE TO AND/OR CONSUMPTION OF ALCOHOL MAY INCREASE TOXIC EFFECTS.

SECTION 12: ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY..... READILY BIODEGRADABLE.
 BIOACCUMULATIVE POTENTIAL..... DOES NOT BIOACCUMULATE.
 TOXICITY..... TOXICITY TO FISH- LC50- ONCORTHYNCHUS MYKISS (RAINBOW TROUT) - 18,500 mg/L - 96H. EC50 - DAPHNIA MAGNA (WATER FLEA) - 74,000 mg/L - 24H.
 MOBILITY IN SOIL..... DISSOLVES IN WATER.
 OTHER ADVERSE EFFECTS..... NO DATA AVAILABLE.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS..... OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
 PACKAGING..... DISPOSE OF AS UNUSED PRODUCT.

SECTION 14: TRANSPORT INFORMATION

UN NUMBER..... NOT APPLICABLE.
 TDG CLASSIFICATION..... NOT REGULATED.
 PACKING GROUP..... N.A.P.
 SPECIAL SHIPPING INSTRUCTIONS..... N.A.P.

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SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION..... D2A, D2B.
HPR COMPLIANCE..... THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD
CRITERIA OF THE HPR AND THE SDS CONTAINS ALL THE INFORMATION
REQUIRED BY THE HPR.

SECTION 16: OTHER INFORMATION

PREPARED BY BEBBINGTON INDUSTRIES

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DISCLAIMER:

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