

MATERIAL SAFETY DATA SHEET

03/16/01

PRODUCT: PROPYLENE GLYCOL USP

EMERGENCY ASSISTANCE

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL:

GOLDEN PACIFIC: (510) 887-3862 OR **CHEMTREC:** (800) 424-9300 (24HRS)

SECTION 1: INGREDIENTS

(% W/W, UNLESS OTHERWISE NOTED)

PROPYLENE GLYCOL

CAS#: 000057-55-6

99%

THIS DOCUMENT IS PREPARED PURSUANT TO THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200). IN ADDITION, OTHER SUBSTANCES NOT 'HAZARDOUS' PER THIS OSHA STANDARD MAY BE LISTED. WHERE PROPRIETARY INGREDIENT SHOWS, THE IDENTITY MAY BE MADE AVAILABLE AS PROVIDED IN THIS STANDARD.

SECTION 2: PHYSICAL DATA

BOILING POINT: 370F, 188C**SOLUBILITY IN WATER:** COMPLETE**VAPOR PRESSURE:** 0.08 MM/HG @ 20C, 68F**VAPOR DENSITY:** 2.62**SPECIFIC GRAVITY:** 1.038 20/20C, 68F**APPEARANCE & ODOR:** COLORLESS, ODORLESS LIQUID.

SECTION 3: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 218F, 103C**FLAMMABLE LIMITS:****METHOD USED:** PMCC**LFL:** 2.6% **UFL:** 12.5%**EXTINGUISHING MEDIA:** WATER FOG, ALCOHOL FOAM, CO₂, DRY CHEMICAL.**FIRE & EXPLOSION HAZARDS:** NOT AVAILABLE**FIRE – FIGHTING EQUIPMENT:** WEAR POSITIVE – PRESSURE , SELF – CONTAINED BREATHING APPARATUS.

SECTION 4: REACTIVITY DATA

STABILITY (CONDITIONS TO AVOID): STABLE UNDER NORMAL STORAGE CONDITIONS.**INCOMPATIBILITY (SPECIFIC MATERIALS TO AVOID):** OXIDIZING MATERIAL.**HAZARDOUS DECOMPOSITION PRODUCTS:** PROPIONALDEHYDE, CARBON MONOXIDE IN THE PRESENCE OF LIMITED OXYGEN IN A FIRE SITUATION.**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR.

SECTION 5: ENVIRONMENTAL AND DISPOSAL INFORMATION

ACTION TO TAKE FOR SPILLS/LEAKS:**SMALL SPILLS:** COVER WITH ABSORBENT MATERIAL, SOAK UP AND SWEEP INTO A DRUM.**LARGE SPILLS:** DIKE AROUND SPILL AND PUMP INTO SUITABLE CONTAINERS.**DISPOSAL METHOD:**

REPROCESS OR BURN IN AN APPROVED INCINERATOR IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.

SECTION 6: HEALTH HAZARD DATA

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

SKIN CONTACT: PROLONGED CONTACT IS ESSENTIALLY NONIRRITATING TO SKIN. REPEATED EXPOSURE MAY CAUSE SLIGHT FLAKING, TENDERNESS, AND SOFTENING OF SKIN.

SKIN ABSORPTION: A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS.

THE LD50 FOR SKIN ABSORPTION IN RABBITS IS >10 G/KG.

INGESTION: SINGLE DOSE ORAL TOXICITY IS EXTREMELY LOW. THE ORAL LD50 FOR RATS IS 21-33.7 G/KG. NO HAZARDS ANTICIPATED FROM INGESTION INCIDENTAL TO INDUSTRIAL EXPOSURE.

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

SYSTEMIC (OTHER TARGET ORGANS) EFFECTS: REPEATED EXCESSIVE INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.

CANCER INFORMATION: DID NOT CAUSE CANCER IN LONG – TERM ANIMAL STUDIES.

TERATOLOGY (BIRTH DEFECTS): BIRTH DEFECTS ARE UNLIKELY. EXPOSURES HAVING NO ADVERSE EFFECTS ON THE MOTHER SHOULD HAVE NO EFFECT ON THE FETUS.

REPRODUCTIVE EFFECTS: IN ANIMAL STUDIES, HAS BEEN SHOWN NOT TO INTERFERE WITH REPRODUCTION.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): RESULTS OF IN VITRO ('TEST TUBE') MUTAGENICITY TESTS HAVE BEEN NEGATIVE. RESULTS OF MUTAGENICITY TESTS IN ANIMALS HAVE BEEN NEGATIVE.

SECTION 7: FIRST AID

EYES: IRRIGATE IMMEDIATELY WITH WATER FOR AT LEAST FIVE MINUTES.

SKIN: WASH OFF IN FLOWING WATER OR SHOWER.

INGESTION: NO ADVERSE EFFECTS ANTICIPATED BY THIS ROUTE OF EXPOSURE.

INHALATION: NO ADVERSE EFFECTS ANTICIPATED BY THIS ROUTE OF EXPOSURE INCIDENTAL TO PROPER INDUSTRIAL HANDLING.

NOTE TO PHYSICIAN:

NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

SECTION 8: HANDLING PRECAUTIONS

EXPOSURE GUIDELINE(S): AIHA WEEL IS 50ppm TOTAL; 10 MG/M3 AEROSOL ONLY. THERE IS NO OSHA PEL OR ACGIH TLV FOR PROPYLENE GLYCOL.

VENTILATION: GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT.

RESPIRATORY PROTECTION: WHEN AIRBORNE EXPOSURE GUIDELINES AND/OR COMFORT LEVELS MAY BE EXCEEDED, USE AN APPROVED AIR – PURIFYING RESPIRATOR.

SKIN PROTECTION: USE IMPERVIOUS GLOVES WHEN PROLONGED OR FREQUENTLY REPEATED CONTACT COULD OCCUR.

EYE PROTECTION: USE SAFETY GLASSES. WHERE CONTACT WITH LIQUIDS IS LIKELY, CHEMICAL GOGGLES ARE RECOMMENDED BECAUSE EYE CONTACT WITH THIS MATERIAL MAY CAUSE PAIN, EVEN THOUGH IT IS UNLIKELY TO CAUSE INJURY.

SECTION 9: ADDITIONAL INFORMATION

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: EXERCISE REASONABLE CARE AND CAUTION.

REGULATORY INFORMATION (NOT MEANT TO BE ALL – INCLUSIVE – SELECTED REGULATIONS REPRESENTED):

US REGULATIONS:

SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA :HAZARDOUS CATEGORIES” PROMULGATED UNDER SECTION 311 AND 312 OF THE

SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

NOT TO HAVE MET ANY HAZARD CATEGORY

CANADIAN REGULATIONS:

THE WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (W.H.M.I.S.) CLASSIFICATION FOR THIS PRODUCT IS:

THIS PRODUCT IS NOT A "CONTROLLED PRODUCT" UNDER WHMIS.

THE TRANSPORTATION OF DANGEROUS GOODS ACT (T.D.G.A.) CLASSIFICATION FOR THIS PRODUCT IS:

NOT REGULATED

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