

TECH LINE COATINGS, INC.

26844 Adams Ave. ♦ MURRIETA, CA 92562 ♦ USA

Phone 951-304-0498

♦ Fax 951-461-9658

www.techlinecoatings.com

MATERIAL SAFETY DATA SHEET**SECTION I**

COMMON NAME(S): TLMB

CHEMICAL NAME(S) AND SYNONYM(S): BONDED SOLID FILM COATING

CHEMICAL FAMILY: N/A

FORMULA: Complex Mixture

EMERGENCY PHONE: (Chemtrec) 1-800-424-9300

INFORMATION PHONE: 951-304-0498

DATE PREPARED: 7/2/2003 (update)

SECTION II**HAZARDOUS INGREDIENTS**

COMPONENT	CAS#	CONCENTRATIONS
METHYL ETHYL KETONE ACGIH TLV: 200 PPM OSHA PEL: 200 PPM	78-93-3	20-40%
ETHANOL ACGIH TLV: 1000 PPM OSHA PEL: 1000 PPM	64-17-5	20=30%
METHANOL ACGIH TEL: 200 PPM OSHA PEL: 200 PPM	67-56-1	<5%
RESIDUAL PHENOL ACGIH TLV: 5 PPM (SKIN) OSHA PEL: 5 PPM (SKIN)	108-95-2	TRACE
RESIDUAL FORMALDEHYDE ACGIH TLV: 1 PPM OSHA PEL: 1 PPM	50-00-0	TRACE
MOLYBDENUM DISULFIDE ACGIH TLV: 10 mg/m ³ OSHA PEL: 10 mg/m ³	1317-33-5	10%

SECTION III**PHYSICAL CHARACTERISTICS**

BOILING POINT: NOT AVAILABLE.

VAPOR DENSITY (AIR = 1) : >1

VAPOR PRESSURE: NOT AVAILABLE

MELTING POINT: NOT AVAILABLE

APPEARANCE AND ODOR: GRAY LIQUID/SOLVENT SMELL

SOLUBILITY IN WATER: MODERATE

REACTIVITY IN WATER: NOT AVAILABLE

VOC'S: 810 GRAMS/L

SHIPPING: Flammable Liquid UN1263, PG II

SECTION IV**FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT: 16F.

FLAMMABLE LIMITS:

LEL- NOT ESTABLISHED

UEL- NOT ESTABLISHED

DOT: FLAMMABLE LIQUID

EXTINGUISHING MEDIA: FOAM, CO₂, DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES: USE FULL PROTECTIVE EQUIPMENT, INCLUDING SELF CONTAINED BREATHING APPARATUS. DO NOT EXTINGUISH WITH WATER

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V
REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITY (MATERIALS TO AVOID) : CONTACT WITH STRONG OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS: IRRITATING AND/OR TOXIC FUMES INCLUDING OXIDES OF CARBON AND SULFUR, AND HYDROGEN SULFIDE MAY BE RELEASED

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: OPEN FLAME

SECTION VI
HEALTH HAZARD DATA

ROUTES OF ENTRY:

INHALATION ? YES

SKIN ? YES

INGESTION ? YES

TOXICITY (ACUTE AND CHRONIC)

METHYL ETHYL KETONE (CAS# 78-93-3) IS AN EYE AND SKIN IRRITANT, AFFECTS THE NERVOUS SYSTEM, AND IS A TERATOGEN IN LAB ANIMALS.

CARCINOGENICITY: NPT-NO IARC-NO OSHA-NO

ETHANOL (CAS# 64-17-5) IS A MILD IRRITANT TO RABBIT SKIN AND A SEVERE EYE IRRITANT. ETHANOL IS REPORTED TO CAUSE TERATOGENICITY, CNS DEPRESSION, GASTROINTESTINAL DISTRESS FROM ORAL CONSUMPTION BY HUMANS. NO TOXICITY IS REPORTED FROM INHALATION BELOW TWA.

CARCINOGENICITY: NPT-NO IARC-NO OSHA-NO

METHANOL (CAS# 67-56-1) IS A SKIN, EYE AND INHALATION IRRITANT. IT IS TOXIC ORALLY AND POSSESSES NARCOTIC PROPERTIES. TOXIC EFFECTS MANIFESTED IN THE CENTRAL NERVOUS SYSTEM AND PARTICULARLY IN THE OPTIC NERVE. METHANOL IS A CUMULATIVE POISON. SEVERE EXPOSURE TO METHANOL CAN CAUSE DIZZINESS, UNCONSCIOUSNESS, SIGNING RESPIRATION, CARDIAC DEPRESSION AND EVENTUAL DEATH. LESS SEVERE EXPOSURE TO METHANOL CAN CAUSE BLURRING OF VISION, PHOTOPHOBIA, CONJUNCTIVITIS, EYE LESIONS, HEADACHE, GASTROINTESTINAL DISTURBANCES, DIZZINESS AND A FEELING OF INTOXICATION. DEATH FROM INGESTION OF LESS THAN 30ml HAS BEEN REPORTED. USUAL FATAL DOSE IS 100-250 ml.

CARCINOGENICITY: NTP-NO IARC-NO OSHA-NO

THE ORAL LD50 OF PHENOL (CAS# 108-95-2) IS 414 mg/kg AND IT'S INHALATION LC50 (RAT) IS 316 mg/m3. PHENOL IS CONSIDERED TOXIC ORALLY. IT IS A SEVERE SKIN AND EYE IRRITANT IN RABBITS.

(PHENOL)

CARCINOGENICITY: NTP-NO IARC-NO OSHA-NO

FORMALDEHYDE (CAS# 50-00-0) IS HIGHLY IRRITATING TO SKIN, EYES, MUCOUS MEMBRANES, AND CAN CAUSE HYPERSENSITIVITY LEADING TO CONTACT DERMATITIS. FORMALDEHYDE IS LISTED BY THE IARC AS AN INDEFINITE HUMAN CARCINOGEN AND A POSITIVE ANIMAL CARCINOGEN. IT MAY REASONABLY BE ANTICIPATED TO BE A HUMAN CARCINOGEN ACCORDING TO THE NTP ANNUAL REPORT

CARCINOGENICITY: NTP-YES IARC-YES OSHA-NO

(ANIMAL POSITIVE)- (HUMAN INDEFINITE)

MOLYBDENUM COMPOUNDS MAY BE SLIGHTLY IRRITATING.

CARCINOGENICITY: NPT-NO IARC-NO OSHA-NO

HEALTH HAZARDS:

EYES: IRRITATION, REDNESS, TEARING AND BLURRED VISION

SKIN: PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, DERMATITIS

INHALATION: EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL

AND RESPIRATORY IRRITATION, DIZZINESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, DEATH

INGESTION: CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA.

EMERGENCY AND FIRST AID:

EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER, CALL A PHYSICIAN

(FLUSH FOR AT LEAST 15 MIN., INCLUDING UNDER EYELIDS)

SKIN: WASH WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING IF IRRITATION OCCURS GET MEDICAL ATTENTION

INHALATION: REMOVE INDIVIDUAL TO FRESH AIR. ADMINISTER OXYGEN IF BREATHING IS DIFFICULT. CALL A PHYSICIAN

INGESTION: CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING , KEEP WARM

* INTENTIONAL MISUSE BY DELIBERATE CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: CLEAN SPILL WITH ABSORBENT MATERIAL, ELIMINATE IGNITION SOURCES, WEAR PROTECTIVE GLOVES, GOGGLES AND MASK IF TWA'S ARE EXCEEDED

WASTE DISPOSAL METHOD: DISPOSAL SHOULD BE MADE IN ACCORD WITH FEDERAL, STATE AND LOCAL REGULATIONS.

OTHER PRECAUTIONS: CONTACT LENSES POSE A SPECIAL HAZARD; SOFT LENSES MAY ABSORB ALL LENSES CONCENTRATE IRRITANTS.

SECTION VIII
SPECIAL PROTECTION / CONTROL MEASURES:

RESPIRATORY PROTECTION: USE NIOSH APPROVED RESPIRATOR IF TWA/TLV LIMITS ARE EXCEEDED

VENTILATION:

- LOCAL EXHAUST: USE TO MAINTAIN BELOW TWA LIMITS
- MECHANICAL: USE NON-SPARKING EQUIPMENT

PROTECTIVE GLOVES: CHEMICAL RESISTANT

EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES

OTHER PROTECTIVE EQUIPMENT: WEAR PROTECTIVE CLOTHING, CHEMICAL RESISTANT OR OTHER PROTECTIVE OUTERWEAR, AVOID CONTACT WITH SKIN OR EYES

WORK / HYGIENIC PRACTICES: WASH THOROUGHLY AFTER HANDLING PRODUCT AND BEFORE EATING, DRINKING OR SMOKING

SECTION IX
SPECIAL PRECAUTIONS

HANDLING AND STORAGE: STORE IN A COOL DRY PLACE, SUITABLE FOR OSHA CLASS 1 FLAMMABLE LIQUIDS

SARA Title III
Section 313
Supplier Notification

This product is known to contain the following chemicals, which are listed in 40 CFR 372.65 as toxic chemicals requiring notification. This information must be included in all MSDS's that are copied and distributed for this product.

COMPONENT	CAS#	% BY WEIGHT
Phenol	108-95-2	7.5 max.
Methanol	67-56-1	4.0 max.
Formaldehyde	50-00-0	0.5 max.

California safe Drinking Water and Toxic Enforcement Act (Proposition 65) :
This Product contains the following substance(s) known to the State of California to cause cancer:
Formaldehyde

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