MATERIAL SAFETY DATA SHEET



Date-Issued: 08/01/2010
MSDS Ref. No: MSDS-TB10
Date-Revised: 01/31/2012
Revision No: 16 Part MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TB-10

GENERAL USE: Water-based Screen Printing Adhesive

PRODUCT CODE: TB-10

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (U.S.): (800) 424-9300

Emergency Phone: (805) 965-0704

International (collect): ++703 527-3887

Technical Marketing, Ltd. (TEKMAR) P.O. Box 4700 Santa Barbara, CA 93140

Contact: Health & Safety

Product Stewardship: (805) 965-0704 Transportation: (800) 564-1096

COMMENTS: To the best of our knowledge, this Material Safety Data Sheet conforms to the requirements of US OSHA

29 CFR 1910.1200, 91/155/EEC and Canadian Hazardous Products Act.

2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u> | <u>Wt.%</u> | OSHA/PEL | <u>ACGIH</u> | CAS# | EINECS# | Sec. 313 |
|------------------------------------|-------------|----------|--------------|----------|-----------|----------|
| Vinyl Acetate | <0.2% | 10 ppm | 10 ppm | 108-05-4 | 200-838-9 | Yes |
| Ethyl Acrylate | <0.1% | 25 ppm | 25 ppm | 140-88-5 | 204-825-9 | Yes |
| 2-Propenoic Acid, Butyl Ester | <0.1% | 10 ppm | N/A | 141-32-2 | 265-192-2 | Yes |
| Water and Non-Hazardous Components | >99% | N/A | N/A | N/A | N/A | No |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

May cause eye irritation *

POTENTIAL HEALTH EFFECTS

EYES May cause eye irritation.

CARCINOGENICITY: For hazard communication purposes, under OSHA Standard 29 CFR Part 1910.1200, this contains listed carcinogen(s) by IARC, ACGIH and NTP in concentrations of 0.1% (percent) or greater See section 11

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water also under the eyelid; Remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes.

SKIN: Wash off with plenty of soap and water

INGESTION: Do not induce vomiting. Call a physician immediately..

INHALATION: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen

should be administered by qualified personnel. Call a physician or transport to a medical facility.

MEDICAL CONDITIONS AGGRAVATED: None known.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Flammable

FLAMMABLE LIMITS: LFL: N/A. UFL: N/A

AUTOIGNITION TEMPERATURE: Not Available

FLAMMABLE CLASS: Nonflammable

EXTINGUISHING MEDIA: The product itself does not burn. The product will only burn after all the water has been driven off. Use extinguishing media appropriate for surrounding area.

HAZARDOUS COMBUSTION PRODUCTS: When dried polymer burns, Water, Carbon Dioxide, Carbon Monoxide are produced

FIRE FIGHTING PROCEDURES: The product as supplied is not combustible

FIRE FIGHTING EQUIPMENT No special procedures are required.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL (less than 100 Gallons): Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Wearing the appropriate personal protective equipment designated in Section 8, move the leaking container to a containment area or rotate the container so that the opening is above the liquid level. Disposal to municipal or industrial waste facility is normally acceptable Obtain approval from these Authorities before disposal.

LARGE SPILL: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Wearing the appropriate personal protective equipment designated in Section 8, close or cap valves and/or block or plug hole in leaking container and transfer to another container. Contain material as described above and dispose through licensed waste disposal facility is suggested. The product can be incinerated, although chemical or biological treatment is sufficient..

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Use appropriate containment to avoid runoff or release to sewer or waterways.

LAND SPILL: Use appropriate containment to avoid runoff or release to ground.

COMMENTS: Spilled emulsion is extremely slippery. Use care to avoid falls. See Section 13 for disposal information and Section 15 for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

7. HANDLING AND STORAGE

HANDLING: Use only in well ventilated areas. Avoid contact with eyes. Gloves or other protective equipment should be worn if skin contact is likely. When using do not eat, drink or smoke.

STORAGE: KEEP FROM FREEZING. Keep containers tightly closed when not in use.. Store in a cool, dry place. Prevent contamination with microorganisms. Minimize exposure to air.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS No special controls needed.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields or goggles when handling this material.

SKIN: Use of Gloves recommended. Rubber, Vinyl, Polyethylene, PVC, Nitrille, Butyl are all acceptable.

RESPIRATORY: Not required during normal use.

WORK HYGIENIC PRACTICES: Facilities storing or using this material should be equipped with an eyewash facility and a safety shower. Good personal hygiene practices should always be followed.

COMMENTS: No established Exposure Limits for product as supplied. See Section 2 for Exposure limits of component parts.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Sweet Odor

APPEARANCE: White Liquid

COLOR: White **pH:** Not Applicable

VAPOR PRESSURE: 31.0 mm/Hg VAPOR DENSITY: As water BOILING POINT: 100 ℃(212℃F) FREEZING POINT: > 5 ℃

SOLUBILITY IN WATER: Dispersible **EVAPORATION RATE:** 10 As water

SPECIFIC GRAVITY: 1.02

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Not applicable

STABILITY: Stable under recommended storage conditions. Coagulation may occur after freezing, thawing or boiling

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to Carbon Dioxide, Carbon Monoxide, Aldehydes and Acetic Acid

INCOMPATIBLE MATERIALS: Not Applicable

11. TOXICOLOGICAL INFORMATION: (See Section 3 for Potential Health Effects).

DERMAL LD50: dermal LD50 has not been determined.

SKIN ABSORPTION: No data available. .

ORAL LD₅₀: The oral LD50 for rats is between 1500-2500 mg/kg.

INHALATION LC₅₀: Not Available

EYE EFFECTS: This material may cause significant irritation to the eyes. **SKIN EFFECTS:** This material may cause significant irritation to the skin.

SENSITIZATION: Not Available **TARGET ORGANS:** Liver, Kidneys

CARCINOGENICITY:

IARC: Listed by IARC - No NTP: Listed by NTP - No OSHA: Listed by OSHA - No

MUTAGENICITY: Negative or equivocal results have been obtained in mutagenicity tests with methylene chloride using mammalian cells or animals. This is consistent with the lack of interaction with DNA in rats and hamsters. Although results of Ames bacterial tests have generally been positive, overall the data suggest the genotoxic potential does not appear to be a significant factor Not Available

REPRODUCTIVE EFFECTS: Not Available TERATOGENIC EFFECTS: Not Available

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

ECOTOXICOLOGICAL INFORMATION: No data is available on the product itself regarding toxicity to aquatic and other organisms.

DISTRIBUTION: Not Available

CHEMICAL FATE INFORMATION: Not Available

13. DISPOSAL CONSIDERATIONS: (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator

FOR LARGE SPILLS: Contain material and call local authorities for emergency assistance. In consultation with the appropriate authorities, determine the disposal method or contact the manufacturer.

PRODUCT DISPOSAL: Dispose of at a supervised incineration facility or an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal.

EMPTY CONTAINER: Contaminated bags should be cleaned and disposed of in the same manner as the product in accordance with applicable regulations.

GENERAL COMMENTS: Refer to Section 6, Accidental Release Measures for additional information.

14. TRANSPORT INFORMATION

Not considered a Dangerous Good.

CFR / DOT (U.S. DEPARTMENT OF TRANSPORTATION): Not Regulated

AIR (ICAO/IATA): Not Regulated

VESSEL (IMO/IMDG): Not Regulated

15. REGULATORY INFORMATION

UNITED STATES FEDERAL REGULATIONS

REPORTABLE QUANTITY (RQ): 1000 POUNDS

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) All ingredients are subject to the reporting requirements of Section 313 of Title III of the 1986 Superfund Amendments and Reauthorization Act.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

REPORTABLE QUANTITY (RQ): 1000 POUNDS

TSCA (TOXIC SUBSTANCE CONTROL ÁCT): All ingredients are listed on the TSCA Inventory. NATIONAL RESPONSE CENTER: U.S. Coast Guard National Center telephone # 1-800-424-8802

CANADA

WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM): The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D1B - poisonous substance defined by TDG regulations D2A - possible, probable or known human carcinogen according to classifications by IARC or ACGIH

D2B - eye or skin irritant

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

CANADA INGREDIENT DISCLOSURE LIST: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

| Chemical Name | <u>Wt.%</u> | <u>CAS #</u> |
|---------------------|-------------|--------------|
| Dichloromethane | 70-90 | 75-09-2 |
| Tetrachloroethylene | 5-15 | 127-18-4 |

CANADIAN ENVIRONMENTAL PROTECTION ACT: All intentional ingredients are listed on the DSL (Domestic Substance List).

EUROPEAN COMMUNITY

EUROPEAN COMMUNITY REGULATORY: All intentional ingredients are listed on the European's EINECS Inventory.

MEXICO This product is considered to be an irritant according to Mexican Standard, Instruction No. 9, ANNEX 1.

STATE REGULATIONS Not Available

REGULATIONS

STATE REGULATIONS: Not Available LOCAL REGULATIONS: Not Available

16. OTHER INFORMATION

REASON FOR ISSUE: New 16 Part MSDS

APPROVED BY: Nicholas Kondrats TITLE: General Manager

PREPARED BY: Product Stewardship Department INFORMATION CONTACT: Product Stewardship Analyst

HMIS RATING NFPA CODES

| HEALTH: | 0 |
|-------------------------|------------|
| FLAMMABILITY: | 0 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | SEE SEC. 8 |

HEALTH: 0
FLAMMABILITY: 0
REACTIVITY: 0

MANUFACTURER DISCLAIMER: Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.