

MATERIAL SAFETY DATA SHEET



Date Issued: 02/25/2008

MSDS No: 1402-02-02

Date-Revised: 02/22/2010

Revision No: 1

TB1401B

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TB1401B

PRODUCT DESCRIPTION: Agent for preventing screw loosening, leaking, and rusting.

MANUFACTURER

Three Bond Co., Ltd.
1456, Hazama-cho, Hachioji-shi
Tokyo, Japan,

DISTRIBUTOR

ThreeBond International, Inc.
6184 Schumacher Park Drive
West Chester, OH 45069
Product Stewardship: (513) 779-7300

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (Domestic North America) :(800) 424 - 9300

CHEMTREC (International) :(703) 527 - 3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Flammable liquid and vapor. Causes eye irritation. Ingestion may be fatal or cause blindness. May affect the kidney and liver. Possible cancer hazard.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation.

SKIN: May cause skin irritation.

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: Harmful if swallowed. Ingestion is an unlikely route of entry in industrial uses.

INHALATION: May cause irritation to the nose, throat, and respiratory tract.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

SKIN: Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of the skin, and skin burns.

INGESTION: Methanol- Swallowing may be fatal or cause blindness. Effects due to ingestion may include nausea, headache, vomiting, gastrointestinal disturbance, dizziness, weakness, confusion, drowsiness, unconsciousness, convulsions.

Toluene- May get into the lungs during ingestion, which may result in lung inflammation or other lung injury.

INHALATION: Methanol- Symptoms of overexposure to methanol may include stomach or intestinal upset, nose, throat, and respiratory tract irritation, central nervous system depression, cyanosis, visual impairment, coma, and death.

ACUTE TOXICITY: Methanol- Overexposure to methanol has been suggested to cause liver abnormalities and central nervous system damage in laboratory animals. Overexposure has been suggested to cause visual impairment in humans.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Methanol- has been found to cause birth defects in laboratory animals when inhaled at extremely high vapor concentrations. The relevance to humans is uncertain.

COMMENTS HEALTH: Toluene- Overexposure to this material has been found to cause the following effects on laboratory animals: mild, reversible liver effects; mild, reversible kidney effects; respiratory tract damage; effects on hearing; central nervous system damage.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Methanol	65 - 75	67-56-1
Toluene	1 - 2.5	108-88-3
Vinyl Acetate	< 1	108-05-4

4. FIRST AID MEASURES

EYES: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Immediately remove product from skin with dry cloth or towel. Wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: Do not induce vomiting unless directed to do so by medical personnel. Never give an unconscious person anything to ingest. Get medical attention immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. If signs or symptoms persist, seek medical attention.

NOTES TO PHYSICIAN: This product contains methanol which can cause intoxication and CNS depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 7.2°C (45°F)

Notes: Lowest known value.

FLAMMABLE CLASS: Flammable.

GENERAL HAZARD: Flammable liquid and vapor.

EXTINGUISHING MEDIA: Use dry chemical powder, alcohol foam, or carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides. May emit other toxic fumes under fire conditions.

EXPLOSION HAZARDS: High temperatures or fire may cause container to explode. Use water spray to cool fire exposed containers.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Eliminate all ignition sources. Absorb with an inert material and place in an appropriate waste disposal container.

LARGE SPILL: Extinguish all sources of ignition. Stop spill or leak at source. Dike if necessary. Absorb with an inert material and place in an appropriate waste disposal container. Use non-sparking tools.

RELEASE NOTES: Keep spilled material from entering storm drains, sewers, or other environmental mediums.

COMMENTS: Disposal of clean-up materials may be governmentally regulated. Observe all applicable local, state, and federal waste management regulations.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not breathe vapor. Keep away from heat, sparks and flame. Ground and bond containers when transferring material. Use spark proof tools and explosion proof equipment. Empty containers may retain product residue and flammable vapors. Keep away from heat, sparks, and flame. Do not cut, puncture, or weld on or near the empty container.

STORAGE: Keep container closed when not in use. Store in a cool, dry, well-ventilated area. Store and use away from heat, sparks, open flames, or other ignition sources. Do not store in direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Methanol	TWA	200	260	200- S _[1]	262 ^[1]
	STEL	NL	NL	250- S	328
Toluene	TWA	200	NL	20	NL
	STEL	C-300 ^[2]	NL ^[2]	NL	NL
Vinyl Acetate	TWA	NL	NL	10	35
	STEL	NL	NL	15	53
OSHA TABLE COMMENTS: 1. S = Skin 2. C = Ceiling Toluene: C-500 ppm; 10 minute peak per 8-hour shift.					

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses. Wear splash goggles if the potential for splashing or spraying exist.

SKIN: Gloves (impervious).

RESPIRATORY: In case of insufficient ventilation, wear suitable respiratory equipment.

PROTECTIVE CLOTHING: Chemically impervious clothing should be worn if potential for skin contact.

WORK HYGIENIC PRACTICES: Wash hands before eating, smoking, or using restroom. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Transparent.

COLOR: Green.

FLASHPOINT AND METHOD: 7.2°C (45°F)

Notes: Lowest known value.

SPECIFIC GRAVITY: 0.880

VISCOSITY #1: 350 mPa. s

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid ignition sources, excess heat, and direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. May emit other toxic fumes under fire conditions.

INCOMPATIBLE MATERIALS: Acids. Bases. Hypochlorites. Oxidizing agents. Peroxides. Sodium. Zinc.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	INHALATION LC ₅₀ (rat)
Toluene	636 mg/kg	49000 mg/kg

CHRONIC: Methanol- Swallowing may be fatal or cause blindness. Effects due to ingestion may include nausea, headache, vomiting, gastrointestinal disturbance, dizziness, weakness, confusion, drowsiness, unconsciousness, convulsions.

CARCINOGENICITY

Chemical Name	IARC Status	Other
Toluene	3	ACGIH: A4
Vinyl Acetate	2B	ACGIH: A3

REPEATED DOSE EFFECTS: Methanol- Overexposure to methanol has been suggested to cause liver abnormalities and central nervous system damage in laboratory animals. Overexposure has been suggested to cause visual impairment in humans.

Toluene- Overexposure to this material has been found to cause the following effects on laboratory animals: mild, reversible liver effects; mild, reversible kidney effects; respiratory tract damage; effects on hearing; central nervous system damage.

REPRODUCTIVE EFFECTS: Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. Relevance to humans is uncertain.

Toluene- Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects

in humans.

12. ECOLOGICAL INFORMATION

COMMENTS: Not Available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Consult your licensed waste contractor for detailed recommendations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquid, N.O.S.

TECHNICAL NAME: Contains Methanol and Toluene.

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN1993

PACKING GROUP: II

AIR (ICAO/IATA)

SHIPPING NAME: Flammable Liquid, N.O.S.

TECHNICAL NAME: Contains Methanol and Toluene.

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: Yes **ACUTE:** Yes **CHRONIC:** Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Methanol	65 - 75	67-56-1
Toluene	1 - 2.5	108-88-3
Vinyl Acetate	< 1	108-05-4

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt. %	CERCLA RQ
Methanol	65 - 75	5000 lbs.
Toluene	1 - 2.5	1000 lbs.
Vinyl Acetate	< 1	5000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Methanol	This product contains a component or components listed on the Massachusetts Right to Know list of hazardous substances. This product contains a component or components listed on the New Jersey Right to Know list of hazardous chemicals. This product contains a component or components listed on the Pennsylvania Right to Know list of hazardous substances.
Toluene	This product contains a component or components listed on the Massachusetts Right to Know list of hazardous substances. This product contains a component or components listed on the Michigan Critical Materials list. This product contains a component or components listed on the New Jersey Right to Know list of hazardous chemicals. This product contains a component or components listed on the Pennsylvania Right to Know list of hazardous substances.
Vinyl Acetate	This product contains a component or components listed on the Massachusetts Right to Know list of hazardous substances. This product contains a component or components listed on the New Jersey Right to Know list of hazardous chemicals. This product contains a component or components listed on the Pennsylvania Right to Know list of hazardous substances.

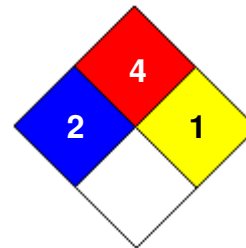
16. OTHER INFORMATION

INFORMATION CONTACT: (513) 779-7300, Regulatory Department

REVISION SUMMARY: Revision #: 1. This MSDS replaces the February 22, 2010 MSDS.

HMIS RATING

HEALTH:	*	2
FLAMMABILITY:		3
PHYSICAL HAZARD:		1
PERSONAL PROTECTION:		

NFPA CODES

MANUFACTURER DISCLAIMER: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.