



Rutland Plastic Technologies, Inc.  
 10021 Rodney Street  
 Pineville, NC 28134

## MATERIAL SAFETY DATA SHEET

### 1. Chemical Product and Company Identification

**MANUFACTURING LOCATION:**

Rutland Plastic Technologies, Inc.  
 10021 Rodney Street  
 Pineville, NC 28134  
 704/553-0046

**HAZARDOUS MATERIAL INFORMATION SYSTEM:**

<b>Health:</b>	<b>2</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	<b>D</b>

**IN CASE OF EMERGENCY CONTACT:** Infotrac: 1-800-535-5053

**PRODUCT NAME:** Fiberbond  
**CHEMICAL FAMILY:** Mixture  
**PRODUCT CODE:** MZ0001

**MSDS NUMBER:** 54  
**DATE REVISED:** 4/8/01  
**DATE PRINTED:** 4/8/01

### 2. Hazardous Ingredients

HAZARDOUS INGREDIENT	CAS #	% BY WEIGHT	TLV	PEL
Homopolymer of 1,3-Diisocyanato-Methyl Benzene	26603-40-7	~25%	ND	ND
Toluene-2,4-Diisocyanate (TDI)	584-84-9	<0.5%	0.005 ppm	0.02 ppm
Dibutyl Phthalate	84-74-2	~75%	5 ppm	5 ppm

### 3. HAZARDS IDENTIFICATION

**EYE CONTACT:** Isocyanate vapor will irritate the membranes of the eyes.

**SKIN CONTACT:** May cause skin irritation or dermatitis.

**INGESTION:** Oral toxicity is low, but swallowing should be avoided.

**INHALATION:** Isocyanate vapor will irritate the membranes of the nose throat and lungs. Isocyanate vapor may induce an allergic response, and repeated exposure may lead to sensitization.

#### 4. FIRST AID MEASURES

<b>EYES:</b>	Flush with water for 15 minutes. Get medical attention.
<b>SKIN:</b>	Remove contaminated clothing. Wash with soap and water.
<b>INHALATION:</b>	Remove to fresh air. Get medical attention. The onset of symptoms may be delayed for several hours up to two days after exposure.
<b>INGESTION:</b>	If the chemical is confined to the mouth, wash out mouth, and do not swallow mouth wash. If swallowed, give liquids if victim is conscious. Do not induce vomiting except on the orders of a physician.
<b>MEDICAL CONDITIONS AGGRAVATED:</b>	Isocyanate sensitization.
<b>NOTE TO PHYSICIAN:</b>	Treatment for inhalation is essentially symptomatic for primary irritation or for allergic bronchospasm.

#### 5. FIRE FIGHTING MEASURES

<b>FLASH POINT (° F):</b>	295° F (PMCC)
<b>OSHA FLAMMABILITY CLASSIFICATION:</b>	None
<b>EXTINGUISHING MEDIA:</b>	Dry chemical, CO <sub>2</sub> , High expansion (proteinic) chemical foam, Water spray for cooling in large fires.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Wear self contained breathing apparatus and full protective clothing.
<b>EXPLOSION LIMITS IN AIR - LOWER (%):</b>	0.50%
<b>EXPLOSION LIMITS IN AIR - UPPER (%):</b>	2.50%
<b>AUTO IGNITION TEMP (° F):</b>	Unknown
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	TDI and other toxic vapors generated by decomposition or combustion may present an inhalation health hazards.

#### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Ventilate spill area. Wear full protective equipment during clean up. Use absorbent materials. Shovel into properly labeled containers.

#### 7. HANDLING AND STORAGE

<b>HANDLING:</b>	Insure that the level of isocyanate vapor does not exceed the permitted maximum. The odor threshold is generally above the MEL (Maximum Exposure Level), so do not use odor as an indicator.
<b>STORAGE:</b>	Do not store or heat with flame. Keep containers closed. Store between 70° F and 95° F in a well ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>ENGINEERING CONTROLS:</b>	Unknown
<b>RESPIRATORY PROTECTION EQUIPMENT:</b>	NIOSH approved combination dust/ vapor respirator if exposure limits are exceeded.
<b>PROTECTIVE GLOVES:</b>	Recommended
<b>EYE AND FACE PROTECTION:</b>	Splash proof recommended
<b>OTHER PROTECTIVE EQUIPMENT:</b>	Apron or coverall
<b>VENTILATION:</b>	Good mechanical ventilation and exhaust should be provided in the areas where this product is used or heated.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Boiling Range/Point:</b>	383° F
<b>Vapor Pressure:</b>	<5 mm Hg at 55° C
<b>Vapor Density (AIR=1):</b>	>1
<b>Freezing Point:</b>	Low temperature properties not determined
<b>Melting Point:</b>	Low temperature properties not determined
<b>Physical State:</b>	Liquid
<b>Color:</b>	Light yellow
<b>% Volatile by Weight:</b>	2.13
<b>VOC (lbs/gal):</b>	0.2 lbs/gal
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not determined
<b>Specific Gravity @ 25° C:</b>	1.13
<b>Weight per gallon:</b>	9.40

## 10. STABILITY AND REACTIVITY

<b>STABILITY:</b>	The product is stable under normal conditions
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur
<b>HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS:</b>	CO, CO <sub>2</sub> , oxides of nitrogen, traces of HCN, TDI vapors.
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b>	Water, amines, strong bases, alcohols, or oxidizers.
<b>CONDITIONS TO AVOID:</b>	Elevated temperatures

## 11. TOXICOLOGICAL INFORMATION

<b>CARCINOGENICITY:</b>	This product is not listed as a carcinogen by NTP, IARC, or OSHA.
<b>TOXICITY DATA:</b>	Low acute toxicity (ingestion). Respiratory irritant and sensitizer.
<b>ACUTE ORAL LD50:</b>	>5000 mg/kg
<b>ACUTE DERMAL LD50:</b>	Not Available
<b>ACUTE INHALATION LC50:</b>	Not Available

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** No data has been measured on this product.

**CHEMICAL FATE INFORMATION:** Unknown

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** This product is not a listed hazardous waste. Under RCRA, it is the responsibility of the user of a product to determine, at the time of disposal, whether the product falls under any of the hazardous waste classifications (ignitability, corrosivity, reactivity, and toxicity). This is because the user's processes might change the characteristics of the product. Dispose of this material in accordance with all applicable local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

**DOT SHIPPING NAME:** Environmentally Hazardous Substance, liquid, n.o.s.

**DOT HAZARD CLASS:** 9

**UN/NA NUMBER:** UN3082

**DOT PACKING GROUP:** III

**AIR FREIGHT TRANSPORTATION:** Not classified as dangerous under ICAO regulations.

**OCEAN TRANSPORTATION:** Marine Pollutant

## 15. REGULATORY INFORMATION

**TSCA STATUS:** All components of these products are on the US TSCA Inventory.

**CALIFORNIA PROPOSITION 65:** Toluene-2,4-diisocyanate; CAS# 584-84-9

**SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST:** Toluene-2,4-diisocyanate; CAS# 584-84-9

**SARA (311,312) HAZARD CLASS:** Acute, Chronic

**SARA SECTION 313 TOXIC CHEMICALS:** Toluene-2,4-diisocyanate; CAS# 584-84-9 <0.5%  
Dibutyl Phthalate; CAS# 84-74-2 ~75%

**CARCINOGENS ACCORDING TO NTP, IARC, OR OSHA:** Toluene-2,4-diisocyanate (TDI);  
CAS# 584-84-9

**CERCLA RQ** 13 lbs

**AUSTRALIAN INVENTORY CHEMICAL SUBSTANCES:** Unknown

**CANADIAN INVENTORY:** Toluene-2,4-diisocyanate; CAS# 584-84-9 <0.5%  
Dibutyl Phthalate; CAS# 84-74-2 ~75%

**EINECS REGULATIONS:** This product only contains substances which are on the EINECS.

**JAPAN:** Unknown

**KOREAN CHEMICAL INVENTORY:** Unknown

## 16. OTHER INFORMATION

### DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

All recommendations and statements made, if any, are based on Rutland's research and experience. However, since Rutland has no control over the conditions of use or storage of the product sold, Rutland cannot guarantee the results obtained through the use of its products. All products are sold and samples are given without any representation or warranty, expressed or implied, of fitness for any particular purpose or otherwise, and upon condition that the buyer shall determine the suitability of the product for its own purposes. This applies also where protective rights of third parties are involved. It does not release the user from the obligation to test the suitability of the product for the intended use and application.

## 17. LABEL INFORMATION

<b>SINGLE WORD:</b>	Harmful		
<b>EYES:</b>	Irritating to eyes		
<b>SKIN:</b>	Irritating to skin. May cause sensitization by skin contact.		
<b>INHALATION:</b>	May cause sensitization by inhalation		
<b>HANDLING:</b>	NIOSH approved combination dust/ vapor respirator if exposure limits are exceeded.		
<b>RIGHT-TO-KNOW CHEMICALS:</b>	Toluene-2,4-diisocyanate;	CAS# 584-84-9	<0.5%
	Dibutyl Phthalate;	CAS# 84-74-2	~75%