

# MATERIAL SAFETY DATA SHEET



Date Issued: 2/12/2009  
MSDS No: 152  
Revision No: New MSDS

## MIL-DTL-53039B Ty. I #34094 Flat Green Polyurethane

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MIL-DTL-53039B Ty. I #34094 Flat Green Polyurethane

**PRODUCT CODE:** 700G374

**ALTERNATE TRADE NAME(S):** None Known

#### MANUFACTURER

TriCom Coatings, Inc.  
2639 North 31<sup>st</sup> Avenue  
Phoenix AZ 85009  
**Service Number:** 602-243-3293

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CHEMTREC (US Transportation) :**(800) 424 - 9300  
**CHEMTREC (International Transportation) :**(202)483-7616

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** DANGER! Flammable liquid and vapor. May cause eye, skin and respiratory tract irritation. May cause asphyxiation, or brain, lung or other organ injury if inhaled, swallowed or absorbed by the skin.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Liquid is severely irritating to the eyes. High vapor concentrations are also irritating.

**SKIN:** Liquid is moderately irritating to the skin. Prolonged or repeated contact can result in drying of the skin which may result in skin irritation and dermatitis (rash). Liquid may be absorbed through the skin.

**INGESTION:** Ingestion may cause headache, dizziness, fatigue, and central nervous system depression along with gastrointestinal disturbances.

**INHALATION:** Vapors may be irritating to the nose, throat, and respiratory tract. Exposure to high vapor concentrations may cause central nervous system (CNS) depression. Aspiration of liquid may cause pneumonitis, pulmonary edema, and hemorrhaging.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**ACUTE TOXICITY:** Irritation as noted above. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing eye and skin disorders may be aggravated by exposure.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Weight Percentage	CAS Number
Toluene*	5	108-88-3
Ethylbenzene*	2	100-41-4
Xylene*	11	1330-20-7
Methyl Isobutyl Ketone*	5	108-10-1
n-Butyl Acetate*	1	123-86-4
Isooctyl Acetate*	3	108419-32-5
Medium Aromatic Hydrocarbons	3	64742-94-5
Naphthalene	1	91-20-3
Chromium Oxide	8	1308-38-9
Hexamethylene Diisocyanate Polymer	22	28182-81-2
Quartz	9	14808-60-7
Cristobalite	9	14464-46-1
Cobalt Chromite Green Spinel	6	98187-49-5
Proprietary Ingredients	15	N/A

\* Toxic chemical subject to the reporting requirements of section 313 of Title III and of 40 CFR 372. "WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM."

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Seek medical aid if irritation persists.

**SKIN:** Flush skin with soap and water while removing contaminated clothing. If irritation occurs, seek immediate medical attention. Do not reuse clothing or shoes until thoroughly cleaned.

**INGESTION:** Do not induce vomiting, and seek immediate medical attention. Do not attempt to give any liquids if victim is unconscious.

**INHALATION:** Immediately remove victim to fresh air. If victim is not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**NOTES TO PHYSICIAN:** If the victim is a child, give no more than 1 glass of water and 15cc (1 tablespoon) syrup of ipecac. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** 44° Fahrenheit, Tagliabue Closed Cup

**FLAMMABLE LIMITS IN AIR BY VOLUME:** 0.8% - 7.6%

**AUTOIGNITION TEMPERATURE:** No data available.

**EXTINGUISHING MEDIA:** Use water fog, "alcohol" foam, dry chemical, or CO<sub>2</sub>.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

**EXPLOSION HAZARDS:** When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

**FIRE FIGHTING PROCEDURES:** WARNING! Flammable Liquid. Clear the fire area of unprotected personnel. Do not enter confined fire space without full bunker gear; including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water. If water is used, fog nozzles are preferred

## 6. ACCIDENTAL RELEASE MEASURES

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Keep material out of storm sewers and ditches which lead to waterways.

**GENERAL PROCEDURES:** WARNING. Flammable. Ventilate area of leak or spill for at least 24 hours or until it has been declared safe. Remove all sources of ignition. Stop the leak if there is no risk involved. Clean-up personnel require protective clothing and respiratory protection from vapors. Absorb liquid with inert material. Only specially trained or qualified personnel should handle the emergency.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Keep away from heat, sparks, and flame. Surfaces that are hot may ignite liquid even in the absence of sparks or flame. Extinguish pilot lights, cigarettes, and turn off all other sources of ignition prior to use, and until all vapors are gone. Keep containers tightly closed and upright to prevent leakage.

**COMMENTS:** KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES:**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sub>3</sub>	ppm	mg/m <sub>3</sub>
Toluene	TWA	100	NL	20	NL
	STEL	150	NL	NL	NL
Ethylbenzene	TWA	100	NL	100	NL
	STEL	125	NL	125	NL
Xylene	TWA	100	NL	100	NL
	STEL	150	NL	150	NL
Methyl Isobutyl Ketone	TWA	50	NL	50	NL
	STEL	75	NL	75	NL
n-Butyl Acetate	TWA	150	NL	150	NL
	STEL	200	NL	200	NL
Quartz	TWA	NL	0.025	NL	0.1
	STEL	NL	NL	NL	NL
Cristobalite	TWA	NL	0.025	NL	0.05
	STEL	NL	NL	NL	NL
Chromium Oxide	TWA	NL	0.005	NL	0.5
	STEL	NL	NL	NL	NL
Cobal Chromite Green Spinel	TWA	NL	0.1	NL	0.02
	STEL	NL	NL	NL	NL

**OSHA TABLE COMMENTS:**

NL = Not Listed

**ENGINEERING CONTROLS:** Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

**SKIN:** Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**RESPIRATORY:** If exposure may or does exceed occupational exposure limits (Section 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

**WORK HYGIENIC PRACTICES:** Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

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

**COMMENTS:** May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Typical paint odor.

**COLOR:** Green liquid.

**pH:** N/A = Not Applicable

**PERCENT VOLATILE BY VOLUME:** 46.00%

**VOLATILE ORGANIC COMPOUNDS:** 3.28 LB/GL (393 G/L)  
(VOC Theoretical – As Packaged)

**VAPOR PRESSURE:** 22 mmHg at (68°F)

**VAPOR DENSITY:** Heavier than Air

**BOILING POINT:** (222°F) to (415°F)

**FREEZING POINT:** No data available

**MELTING POINT:** No data available.

**SOLUBILITY IN WATER:** Soluble in most organic solvents. Not soluble in water.

**EVAPORATION RATE:** Slower than ether

**DENSITY (LBS/GALLON):** 11.05

**SPECIFIC GRAVITY:** 1.33

**MOLECULAR WEIGHT:** N/A = Not applicable

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** Will not occur

**POLYMERIZATION:** Avoid heat, flame, and other sources of ignition.

**CONDITIONS TO AVOID:** Avoid heat, sparks, flame and contact with strong oxidizing agents. Prevent vapor accumulation. Contamination with water, alcohols, amines, and other compounds which react to isocyanates may result in pressure in, and possible bursting of, closed containers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

**INCOMPATIBLE MATERIALS:** Strong oxidizers.

## 11. TOXICOLOGICAL INFORMATION

Chemical Name	LC50 / LD50 (4 Hours)	CAS Number
Toluene*	4,000 ppm / 5,000 mg/kg	108-88-3
Ethylbenzene*	Not Available / 3,500 mg/kg	100-41-4
Xylene*	5,000 ppm / 4,300 mg/kg	1330-20-7
Methyl Isobutyl Ketone*	Not Available / 2,080 mg/kg	108-10-1
n-Butyl Acetate*	2,000 ppm / 13,100 mg/kg	123-86-4
Isooctyl Acetate*	Not Available / Not Available	108419-32-5
Hexamethylene Diisocyanate Polymer	Not Available / Not Available	28182-81-2
Quartz	Not Available / Not Available	14808-60-7
Cristobalite	Not Available / Not Available	14464-46-1
Chromium Oxide	Not Available / Not Available	1308-38-9
Cobalt Chromite Green Spinel	Not Available / Not Available	68187-49-5
Medium Aromatic Hydrocarbons	Not Available / Not Available	64742-94-5
Proprietary Ingredients	Not Available / Not Available	N/A

## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** Keep out of waterways.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** This material is a US EPA defined ignitable hazardous waste. The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

**EMPTY CONTAINER:** KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

**RCRA/EPA WASTE INFORMATION:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Paint  
**PRIMARY HAZARD CLASS/DIVISION:** 3  
**UN/NA NUMBER:** UN 1263  
**PACKING GROUP:** II  
**NAERG:** 128  
**LABEL:** Flammable Liquid

**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

**FIRE:** Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

**313 REPORTABLE INGREDIENTS:** To the best of our knowledge, this product is not listed as a toxic chemical.

**302/304 EMERGENCY PLANNING**

**EMERGENCY PLAN:** To the best of our knowledge, this product is not listed as an extremely hazardous substance.

**16. OTHER INFORMATION**

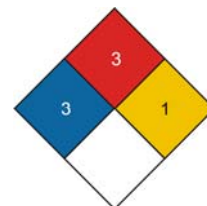
**REASON FOR ISSUE:** New product.

**PREPARED BY:** Robert D. Commisso / President

**REVISION SUMMARY:** New MSDS

**HMIS RATING**

Health	3
Flammability	3
Reactivity	1
Personal Protection	H

**NFPA CODES**

**ADDITIONAL MSDS INFORMATION:** Last revision 2/12/2009.

**MANUFACTURER DISCLAIMER:** The information contained herein is based on the data available to us and is believed to be accurate. However, TriCom Coatings, Inc. makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. TriCom Coatings, Inc. assumes no responsibility for injuries from the use of the product described herein.