

Issuing Date: 22-Dec-2011

Revision Date: 04-Oct-2018

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Product Code: 35502CMU

Product Name: CURING AGENT FOR FLAT  
MIL-PRF-85285E, TY IV, CL H, PART BMILSPRAY Military Technologies  
Lakewood, NJ 08701

Company Phone Number: +1 732-886-2223

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

**2. HAZARDS IDENTIFICATION**Classification**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Flammable Liquids	Category 2

Label Elements**Emergency Overview****DANGER****Hazard Statements**

Causes skin irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

Highly flammable liquid and vapor

**Appearance** Clear**Physical state** Liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ ventilating/ lighting/ equipment

Use only non-sparking tools

Take precautionary measures against static discharge

If skin irritation or rash occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- May be harmful if swallowed
- May be harmful in contact with skin

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**There are no known carcinogenic chemicals in this product**

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

Chemical Name	CAS No	Weight-%	ACGIH	OSHA
HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE	28182-81-2	50% - 60%	N/A	N/A
HEXAMETHYLENE DIISOCYANATE MONOMER	822-06-0	0% - 1%	TWA: 0.005 ppm	N/A

**4. FIRST AID MEASURES**

**First Aid Measures**

**General advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. If symptoms persist, call a physician.

**Eye Contact**

Immediately flush eyes with water for at least 15 minutes. Get medical attention. If easy to do, remove contact lenses. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water. Consult a physician if necessary. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Inhalation**

Consult a physician if necessary. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Asthma-like and/ or skin allergy-like symptoms. Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.

**Ingestion**

Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Self-protection of the first aider**

Remove all sources of ignition. Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

### **Suitable Extinguishing Media**

Use: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available.

### **Specific hazards arising from the chemical**

Containers may explode when heated or if contaminated with water. Keep product and empty container away from heat and sources of ignition. Risk of ignition. Flammable.

### **Explosion Data**

**Sensitivity to Mechanical Impact** no data available.

**Sensitivity to Static Discharge** Yes.

### **Protective equipment and precautions for firefighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area.

**Other information** DECONTAMINATION SOLUTION: Concentrated ammonia (3 - 8%), detergent (2%) and water (90 - 95%), a solution of Union Carbide's Tergitol TMN-10 (20%) and water (80%) or a solution of 50% isopropanol, 45% water, and 5% concentrated ammonia solution(% by weight).

### **Environmental Precautions**

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

### **Methods and materials for containment and cleaning up**

**Methods for Containment** Decontaminate floor with decontamination solution letting stand for at least 15 minutes. Soak up with inert absorbent material.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof

electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe vapor or mist. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture.

**Incompatible Products** Water. Glycol ethers. Alcohols. Epoxies. Bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH	OSHA	NIOSH IDLH
TERTIARY BUTYL ACETATE 540-88-5	STEL: 150 ppm TWA: 50 ppm	TWA: 200 ppm TWA: 950 mg/m <sup>3</sup>	IDLH: 1500 ppm TWA: 200 ppm TWA: 950 mg/m <sup>3</sup>
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	TWA: 0.005 ppm	N/A	Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m <sup>3</sup> 10 min TWA: 0.005 ppm TWA: 0.035 mg/m <sup>3</sup>

NIOSH IDLH: Immediately Dangerous to Life or Health

**Exposure controls**

**Engineering Measures** Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Use personal protective equipment as required.

**Skin and Body Protection** Chemical resistant apron.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	Liquid	<b>Appearance</b>	Clear
<b>Odor</b>	Solvent.	<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available	<b>Flash Point</b>	40 °F / 4 °C
<b>Decomposition temperature</b>	No data available	<b>Boiling Point</b>	183 °F / 84 °C
<b>Melting Point / Melting Range</b>	No data available	<b>Freezing Point</b>	No data available
<b>Vapor Pressure @20°C (kPa)</b>	No data available	<b>Partition coefficient:</b>	No data available
<b>Vapor Density</b>	No data available	<b>Density</b>	No data available
<b>Bulk density</b>	No data available	<b>Specific Gravity</b>	1.01
<b>Evaporation Rate</b>	No data available	<b>Water solubility</b>	No data available
<b>Dynamic viscosity</b>	No data available	<b>Weight per Gallon (lbs/gal):</b>	8.43
		<b>Flammability Limits in Air</b>	

Upper 2.73 %  
Lower 0.51 %

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Conditions to Avoid

Heat, flames and sparks.

### Incompatible Materials

Water. Glycol ethers. Alcohols. Epoxies. Bases.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	The product has not been tested
<b>Inhalation</b>	There is no data for this product.
<b>Eye Contact</b>	There is no data for this product.
<b>Skin Contact</b>	There is no data for this product.
<b>Ingestion</b>	There is no data for this product.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
TERTIARY BUTYL ACETATE 540-88-5	= 4100 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 9482 mg/m <sup>3</sup> ( Rat ) 4 h
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	= 710 µL/kg ( Rat )	= 593 mg/kg ( Rabbit )	= 0.06 mg/L ( Rat ) 4 h

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	No information available.
<b>MUTAGENIC EFFECTS</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Legend:</b>	
<b>Reproductive Toxicity</b>	No information available.
<b>Specific target organ systemic toxicity (single exposure)</b>	No information available.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	No information available.
<b>Chronic Toxicity</b>	Avoid repeated exposure.
<b>Target Organ Effects</b>	Central nervous system (CNS), Eyes, Peripheral Nervous System (PNS), Respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	4115 mg/kg
ATEmix (dermal)	2009 mg/kg
ATEmix (inhalation-dust/mist)	139.5 mg/l
Oral LD50	10183 mg/kg (rat) Estimated
Dermal LD50	5008 mg/kg (rat) Estimated
Inhalation LC50	717166 mg/l (mist) (dust) mg/m <sup>3</sup> Estimated
Inhalation LC50	

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
TERTIARY BUTYL ACETATE 540-88-5	N/A	296 - 362: 96 h Pimephales promelas mg/L LC50 flow-through	N/A
HEXAMETHYLENE DIISOCYANATE MONOMER 822-06-0	N/A	26.1: 96 h Brachydanio rerio mg/L LC50 static	N/A

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste treatment methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**US EPA Waste Number** D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. TRANSPORT INFORMATION

### DOT

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3
Packing Group	II
Special Provisions	149, B52, IB2, T4, TP1, TP8, TP28
Description	UN1263, Paint, 3, II, RQ
Emergency Response Guide Number	128

### TDG

UN-No	UN1263
Proper shipping name	Paint
Hazard class	3

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**Packing Group** II  
**Description** UN1263, Paint, 3, II

**MEX**

**UN-No** UN1263  
**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Description** UN1263, Paint, 3, II

**ICAO**

**UN-No** UN1263  
**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Special Provisions** A3, A72  
**Description** UN1263, Paint, 3, II

**IATA**

**UN-No** UN1263  
**Hazard class** 3  
**Packing Group** II  
**ERG Code** 3L  
**Special Provisions** A3, A72, A192

**IMDG/IMO**

**UN-No** UN1263  
**Hazard class** 3  
**Packing Group** II  
**EmS-No** F-E, S-E  
**Special Provisions** 163, 367

**RID**

**UN-No** UN1263  
**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Classification Code** F1  
**Description** UN1263, Paint, 3, II

**ADR/RID**

**UN-No** UN1263  
**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Classification Code** F1  
**Tunnel restriction code** (D/E)  
**Special Provisions** 163, 640C, 650, 367  
**Description** UN1263, Paint, 3, II, (D/E)  
**ADR/RID-Labels** 3

**ADN**

**Proper shipping name** Paint  
**Hazard class** 3  
**Packing Group** II  
**Classification Code** F1  
**Special Provisions** 163, 640C, 650  
**Description** UN1263, Paint, 3, II  
**Hazard Labels** 3  
**Limited Quantity (LQ)** 5 L  
**Ventilation** VE01

**15. REGULATORY INFORMATION**

**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**CAA (Clean Air Act)**

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

Chemical Name	CAS No	Hazardous air pollutants (HAPs) content
HEXAMETHYLENE DIISOCYANATE MONOMER	822-06-0	Present

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
TERTIARY BUTYL ACETATE	N/A	N/A	N/A	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ (reportable quantity)
TERTIARY BUTYL ACETATE	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ
HEXAMETHYLENE DIISOCYANATE MONOMER	100 lb	N/A	RQ 100 lb final RQ RQ 45.4 kg final RQ

**State Regulations**



**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
TERTIARY BUTYL ACETATE	X	X	X	N/A	X

**International Regulations**

**Mexico - Grade** Serious risk, Grade 3

Chemical Name	Carcinogenic Status	Exposure Limits
TERTIARY BUTYL ACETATE	N/A	Mexico: TWA 200 ppm Mexico: TWA 950 mg/m <sup>3</sup> Mexico: STEL 250 ppm Mexico: STEL 1190 mg/m <sup>3</sup>

**16. OTHER INFORMATION**

**NFPA** Health Hazard 2 Flammability 3 Instability 0 Physical and Chemical Hazards -

NFPA Rating



**HMIS** Health Hazard 2 \* Flammability 3 Physical Hazard 1 Personal protection X

*Chronic Hazard Star Legend*

*\* Chronic Health Hazard*

**Issuing Date:** 22-Dec-2011

**Revision Date:** 04-Oct-2018

**Revision Note**

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. 35502CMU

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