

## U-499 Part B

**1 PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** U-499 Part B  
**Common Name:** Polyamide epoxy curing agent  
**SDS Number:** I75  
**Revision Date:** 11/15/2015  
**Version:** 1  
**Supplier Details:** Coatings For Industry, Inc.  
 319 Township Line Road  
 Souderton, PA 18964  
**Emergency:** Infotrac  
**Contact:** USA: 1-800-535-5053 / International :352-323-3500  
**Phone:** 215-723-0919  
**Fax:** 215-723-0911  
**Email:** cs@cficoatings.com  
**Web:** www.cficoatings.com

**2 HAZARDS IDENTIFICATION****Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):**

Physical, Flammable Liquids, 3  
 Health, Acute toxicity, 5 Oral  
 Health, Acute toxicity, 4 Dermal  
 Health, Skin corrosion/irritation, 2  
 Health, Serious Eye Damage/Eye Irritation, 1  
 Health, Acute toxicity, 4 Inhalation  
 Environmental, Hazards to the aquatic environment - Acute, 2

**GHS Label elements, including precautionary statements****GHS Signal Word:** DANGER**GHS Hazard Pictograms:****GHS Hazard Statements:**

H226 - Flammable liquid and vapor  
 H303 - May be harmful if swallowed  
 H312 - Harmful in contact with skin  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H332 - Harmful if inhaled  
 H401 - Toxic to aquatic life

**GHS Precautionary Statements:**

P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking  
 P271 - Use only outdoors or in a well-ventilated area.  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
 P243 - Take precautionary measures against static discharge.  
 P241 - Use explosion-proof electrical/ventilating/light/equipment.

## U-499 Part B

P264 - Wash with plenty of water and soap thoroughly after handling.  
 P403+235 - Store in a well ventilated place. Keep cool.  
 P501 - Dispose of contents/container in accordance with existing federal, state and local environmental control laws.

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:**

Cas#	%	Chemical Name
68410-23-1	>65%	Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines
1330-20-7	<30%	Xylene
112-24-3	<5%	Triethylenetetramine

### 4 FIRST AID MEASURES

**Inhalation:** If inhaled, remove to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and footwear immediately, and wash before reuse. Discard clothing and footwear which cannot be decontaminated.  
 Wash with plenty of soap and water. Get medical attention if needed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.  
 Then remove contact lenses, if easily removable, and continue irrigation for not less than 15 minutes. Get immediate medical attention.

**Ingestion:** Do not induce vomiting. Drink large quantities of water. If vomiting occurs naturally, keep airway clear. Immediate medical attention required. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

### 5 FIRE FIGHTING MEASURES

**Flash Point:** 75 °F (23.89 °C)

Suitable extinguishing media :

Alcohol-resistant foam.  
 Carbon dioxide (CO<sub>2</sub>).  
 Dry chemical.  
 Dry sand.  
 Limestone powder.

Specific hazards : Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NO<sub>x</sub>) is to be expected. Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. In the event of fire, cool tanks with water spray . Downwind personnel must be evacuated. Fire or intense heat may cause violent rupture of packages. May form explosive mixtures in air.

Special protective equipment for fire-fighters: Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

### 6 ACCIDENTAL RELEASE MEASURES

**If Material is Spilled:** Eliminate all ignition sources. Persons not wearing appropriate protective equipment (see below) should be excluded from the area of spill until clean-up is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on clay, diatomaceous earth or other absorbent, and shoveled into disposal containers.

**Waste Disposal Method:** Dispose of waste in accordance with federal, state, and local regulations.

## U-499 Part B

### 7 HANDLING AND STORAGE

- Handling Precautions:** See "Flammable and Combustible Liquid Code" NFPA No. 30, National Fire Protection Association, Boston, MA.  
Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancercausing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use only in well-ventilated areas. Avoid contact with eyes. Avoid breathing vapors and/or aerosols. Use personal protective equipment.  
When using, do not eat, drink or smoke
- Storage Requirements:** Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat and sources of ignition. Keep in a dry, cool place. Keep away from oxidizers.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Use explosion-proof equipment.  
Apply process controls to ensure safe operating conditions. Assess potential flammability hazards based on flashpoint and potential ignition sources.  
Provide readily accessible eye wash stations and safety showers.  
Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.
- Personal Protective Equipment:** Respiratory protection : Wear appropriate respirator when ventilation is inadequate.
- Hand protection : Polyvinyl Alcohol Gloves (PVA), Nitrile rubber, Impervious gloves.  
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection : Chemical resistant goggles must be worn.
- Skin and body protection : Long sleeve shirts and trousers without cuffs.
- Environmental exposure controls: Shut off or remove all ignition sources.
- Special instructions for protection and hygiene: Wash hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

Components with workplace control parameters

#### Xylene (1330-20-7) [<30%]

TWA	100 ppm 435 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
TWA	100 ppm 435 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
STEL	150 ppm 655 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA	100 ppm 434 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

## U-499 Part B

Not classifiable as a human carcinogen

STEL 150 ppm USA. ACGIH Threshold Limit Values (TLV)  
651 mg/m<sup>3</sup>

Not classifiable as a human carcinogen

TWA 100 ppm USA. ACGIH Threshold Limit Values (TLV)  
Eye & Upper Respiratory Tract irritation Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI section) Not classifiable as a human carcinogen

STEL 150 ppm USA. ACGIH Threshold Limit Values (TLV)  
Eye & Upper Respiratory Tract irritation Central Nervous System impairment Substances for which there is a Biological Exposure Index or Indices (see BEI section) Not classifiable as a human carcinogen

### Triethylenetetramine (112-24-3) [<5%]

TWA 1 ppm USA. Workplace Environmental Exposure Levels (WEEL)  
Skin

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
----------	-----------------------------------------

<b>Appearance:</b>	Amber	<b>Odor:</b>	Aromatic
<b>Physical State:</b>	Viscous Liquid	<b>Flash Point:</b>	75 °F (23.89 °C)
<b>Spec Grav./Density:</b>	0.93 (water = 1)		
<b>Viscosity:</b>	700 - 1,800 mPa.s at 77 °F (25 °C)		
<b>Vapor Pressure:</b>	< 10.34 mmHg at 70 °F (21 °C)		
<b>pH:</b>	Alkaline		

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
-----------	---------------------------------

<b>Chemical Stability:</b>	Product is stable under normal conditions.
<b>Conditions to Avoid:</b>	Heat, flames and sparks
<b>Materials to Avoid:</b>	CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.
<b>Hazardous Decomposition:</b>	Nitric acid. Ammonia Nitrogen oxides (NO <sub>x</sub> ). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ). Nitrosamine.
<b>Hazardous Polymerization:</b>	Will not occur.

11

**TOXICOLOGICAL INFORMATION****Likely routes of exposure**

Effects on Eye : Causes eye irritation.

Effects on Skin : Causes skin irritation.

Inhalation Effects : Harmful if inhaled and may cause delayed lung injury. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Ingestion Effects : No data available.

Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Eye disease., Asthma., Skin disorders and Allergies.

**Acute toxicity**

Acute Oral Toxicity : LD50 : > 4,300 mg/kg Species : Rat.

Inhalation : LC50 (4 h) : Species : Rat.

Acute Dermal Toxicity : LD50 : > 2,000 mg/kg Species : Rabbit.

Method : Estimated.

Skin corrosion/irritation : Moderate skin irritation.

Serious eye damage/eye irritation: Moderate eye irritation.

Sensitization. : Sensitization has occurred in laboratory animals after repeated exposures.

**Chronic toxicity or effects from long term exposures**

Carcinogenicity : Mixed xylenes contain ethylbenzene as an impurity. Ethylbenzene has been shown to cause cancer in laboratory animals. In a study done by the NTP (National Toxicology Program), mixed xylene containing up to 17% ethylbenzene was determined not to be carcinogenic.

Reproductive toxicity : No data is available on the product itself.

Germ cell mutagenicity : This product or a component was mutagenic in a bacterial assay. This product or a component did not cause chromosome damage in an in vivo micronucleus assay.

Specific target organ systemic toxicity (single exposure): No data available.

Specific target organ systemic toxicity (repeated exposure): No data available.

Aspiration hazard : No data available.

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction. Eye disease., Asthma., Skin disorders and Allergies.

12

**ECOLOGICAL INFORMATION****Ecotoxicity effects**

Aquatic toxicity : No data is available on the product itself.

Toxicity to fish - Components

Xylene LC50 (96 h) : 3.3 mg/l Species : Rainbow trout (*Oncorhynchus mykiss*).

Xylene LC50 (96 h) : 8.2 mg/l Species : Rainbow trout (*Oncorhynchus mykiss*).

Xylene LC50 (96 h) : 8.6 mg/l Species : Bluegill sunfish (*Lepomis macrochirus*).

Toxicity to other organisms : No data available.

**Persistence and degradability**

Biodegradability : No data is available on the product itself.

Mobility : No data available.

Bioaccumulation : No data is available on the product itself.

Bioaccumulation - Components

Xylene Moderate bioaccumulation potential.

13

**DISPOSAL CONSIDERATIONS**

<b>14</b>	<b>TRANSPORT INFORMATION</b>
-----------	------------------------------

UN1263, Paint, 3, PGIII

\* NOTE: This product contains a USDOT Hazardous Substance and will meet the Reportable Quantity definition when shipped to, from, or within the United States, in the amount specified in 49CFR 172.101 Appendix A.

**IATA**

UN/ID No. : UN1263  
 Proper shipping name :Paint  
 Class or Division : 3  
 Packing group : III  
 Label(s) : 3  
 RQ Substance : Yes  
 Marine Pollutant : No

**IMDG**

UN/ID No. : UN1263  
 Proper shipping name : Paint  
 Class or Division : 3  
 Packing group : III  
 Label(s) : 3  
 RQ Substance : Yes  
 Marine Pollutant : No

<b>15</b>	<b>REGULATORY INFORMATION</b>
-----------	-------------------------------

Component (CAS#) [%] - CODES

-----  
 Fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines (68410-23-1) [>65%] TSCA

RQ(100LBS), Xylene (1330-20-7) [<30%] CERCLA, CSWHS, EPCRAWPC, HAP, MASS, NJHS, OSHAWAC, PA, SARA313, TOXICRCRA, TSCA, TXAIR, TXHWL

Triethylenetetramine (112-24-3) [<5%] MASS, PA, TSCA

Regulatory CODE Descriptions

-----  
 RQ = Reportable Quantity  
 TSCA = Toxic Substances Control Act  
 CERCLA = Superfund clean up substance  
 CSWHS = Clean water Act Hazardous substances  
 EPCRAWPC = EPCRA Water Priority Chemicals  
 HAP = Hazardous Air Pollutants  
 MASS = MA Massachusetts Hazardous Substances List  
 NJHS = NJ Right-to-Know Hazardous Substances  
 OSHAWAC = OSHA workplace Air Contaminants  
 PA = PA Right-To-Know List of Hazardous Substances  
 SARA313 = SARA 313 Title III Toxic Chemicals  
 TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)  
 TXAIR = TX Air Contaminants with Health Effects Screening Level  
 TXHWL = TX Hazardous waste List

16

**OTHER INFORMATION**

**NOTICE:** This information is presented in good faith and believed to be accurate as of the effective date below. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another: it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The preceding specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations