



# Material Safety Data Sheet

95 Goodwin Street, East Hartford, CT., 06108 (860) 528-9838

Date Prepared 9/1/2008

## SECTION I - IDENTIFICATION

**IDENTITY (As Used on Label)** Ultra Clear Hardener

**COMMON NAME** Cycloaliphatic Diamine Epoxy Hardener

HAZARD RATING	Health	3
0 = Least	Flammability	1
1 = Slight	Reactivity	0
2 = Moderate	Personal Protection	G
3 = High		
4 = Extreme		

## SECTION II - PRODUCT COMPONENTS

CAS.#	OSHA PEL	ACGIH TLV
Benzyl Alcohol	100-51-6	N.E. <sup>1</sup>
Nonyl Phenol	25154-52-3	N.E.
Cycloaliphatic Diamine	2855-13-2	N.E.
Aliphatic Diamine	2579-20-6	N.E.
Diluents Modifier	Proprietary <sup>2</sup>	N.E.

<sup>1</sup>None Established

<sup>2</sup>The manufacturer of these component states that they will provide additional information to health professional in the event of an emergency

T.S.C.A. Status - O.K. on all above components.

**\*FOR SPILL, LEAK, FIRE, OR ACCIDENT, CALL CHEMTREC 24-HOUR EMERGENCY NUMBER 1-800-424-9300\***

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	485F	Specific Gravity (H <sub>2</sub> O = 1)	<1
Vapor Pressure (mm Hg)	0.02	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A
Volatile Organic Compounds (VOC)	<100g/l		
Solubility in Water	Partially soluble.		
Appearance and Odor	Yellow colored liquid. Amine odor.		

## SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	220F	Flammable Limits	LEL	UEL
			N/A	N/A

Extinguishing Media Dry chemicals, carbon dioxide, foam, water spray.

Special Firefighting Procedures

Firefighters should wear full emergency equipment with self-contained breathing apparatus. Irritating gases may be generated by fire.

Unusual Fire and Explosion Hazards

Cool exposed containers with cold water spray to prevent pressure buildup that may rupture the containers.

## SECTION V - REACTIVITY DATA

Stability	Unstable	Conditions to Avoid
	Stable	X Keep container closed when not in use.
Incompatibility (Materials to Avoid)	Strong oxidizers and acids.	
Hazardous Decomposition or Byproducts	By Fire- carbon monoxide, carbon dioxide, aldehydes, nitrogen.	
Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	X Uncontrolled reaction with epoxy resins. Avoid breathing fumes generated by hardener and epoxy mixture when not used within established pot life.

## SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	YES	YES	YES

Signs and Symptoms of Exposure Irritation on skin.

Health Hazards (Acute and Chronic)

Note: Persons with lung disorders or who are sensitized should not use this product.

ACUTE - Irritation on skin and dermatitis.

CHRONIC - Repeated overexposure will cause severe skin irritation, dermatitis and sensitization.

Sensitized persons may experience rapid irritation of skin upon exposure.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Medical Conditions Generally Aggravated by Exposure

Allergy, skin disorders.

Emergency and First Aid Procedures

EYES - Flush with water, holding lids open for 15 minutes or more. Call physician for advice if necessary.

SKIN - PROMPTLY wash with soap and water. DO NOT wash with solvents. Seek medical advice if irritation develops or persists.

INHALATION - Move person to fresh air if effects occur. If needed, give oxygen or artificial respiration to improve breathing. Consult physician.

INGESTION - Get medical attention immediately. Never give liquids to an unconscious or convulsing person.

## SECTION VII - CONTROL MEASURES

Respiratory Protection (Specify Type)

"Provide adequate exhaust ventilation ; use a NIOSH - approved respirator if PELs/TLVs are exceeded."

Ventilation	Local Exhaust	If needed.	Special	None known.
	Mechanical	Adequate exhaust ventilation	must exhaust AWAY from applicator.	

Protective Gloves Natural or Neoprene gloves. Eye Protection Splash goggles or face shield.

Other Protective Clothing or Equipment

Use rubber apron, face shield and appropriate clothing to prevent contact with skin. Launder contaminated clothing before reuse. Discard contaminated leather shoes and canvas sneakers. Protective skin creams help cleaning with soap and water, gloves must be still be worn. An eye wash station or an adequate supply of clean water must be available at work area.

Work/Hygienic Practices Enforce careful handling to prevent splashing. Wash thoroughly after use.

## SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled

Wear protective equipment to prevent exposure. Stop spill and dike to prevent spreading. Cover spill with absorbent materials and collect into containers. Clean contaminated area with detergent and water or a steam cleaner for best results.

Waste Disposal Method

Dispose in accordance with Federal, State, and Local requirements.

Precautions to be Taken in Handling and Storing

Keep containers tightly closed when not in use.

Other Precautions NONE KNOWN.

Prepared by Samet Dy - R&D Chemist

**PLEASE NOTE** "The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, Dur-A-Flex, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use."



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Date Prepared 9/1/2008

## SECTION I - IDENTIFICATION

**IDENTITY (As Used on Label)** Ultra Clear Cove Resin

**COMMON NAME** Epoxy Resin

HAZARD RATING 0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme	Health	1
	Flammability	1
	Reactivity	0
	Personal Protection	G

## SECTION II - PRODUCT COMPONENTS

CAS.#	OSHA PEL	ACGIH TLV
Diglycidyl Ether Bisphenol A Epoxy Resin	25085-99-8	N.E. <sup>1</sup> N.E.
Aliphatic Glycidyl Ether Diluent	68609-97-2	N.E. N.E.
Amorphous Fumed Silica	7631-86-9	10mg/m <sup>3</sup> 10mg/m <sup>3</sup>

<sup>1</sup>Not Established

T.S.C.A. Status - O.K. on all above components.

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## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	N/A	Specific Gravity (H2O = 1)	>1
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A
Volatile Organic Compounds (VOC)	<100g/l		
Solubility in Water	None		
Appearance and Odor	Viscous liquid. Mild characteristic odor.		

## SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	485F	Flammable Limits	LEL	UEL
			N/A	N/A

Extinguishing Media Foam, CO<sub>2</sub>, Dry Chemical, Water Spray.

Special Firefighting Procedures

Firefighters should wear full emergency equipment with self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Cool fire - exposed containers with cold water spray to prevent pressure build - up that may rupture the container. Combustion products may be toxic.

## SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	Excess heating over long periods of time degrades the resin.
Incompatibility (Materials to Avoid)	Uncontrolled reaction with amines.		
Hazardous Decomposition or Byproducts	Fire- Carbon Monoxide, Carbon Dioxide, Nitrogen Oxide, Aldehydes.		
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	Uncontrolled reaction with amines.

## SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	YES	YES	YES

Signs and Symptoms of Exposure Irritation on skin.

Health Hazards (Acute and Chronic)

ACUTE - Irritation on skin and dermatitis.

CHRONIC - Repeated overexposure will cause severe skin irritation, dermatitis and sensitization.

Sensitized persons may experience rapid irritation of skin upon exposure.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	NO	NO	NO

Medical Conditions Generally Aggravated by Exposure

Allergy, skin disorders.

Emergency and First Aid Procedures

EYES - Flush with water, holding lids open for 15 minutes or more. Call physician for advice if necessary.

SKIN - PROMPTLY wash with soap and water. DO NOT wash with solvents. Seek medical advice if irritation develops or persists.

INHALATION - Move person to fresh air if effects occur. If needed, give oxygen or artificial respiration to improve breathing. Consult physician.

INGESTION - Get medical attention immediately. Never give liquids to an unconscious or convulsing person.

Note: Persons with lung disorders or who are sensitized should not use this product.

## SECTION VII - CONTROL MEASURES

Respiratory Protection (Specify Type)

Provide adequate exhaust ventilation; use a NIOSH - approved respirator if PELS/TLVS are exceeded.

Ventilation	Local Exhaust	If needed.	Special	None known.
	Mechanical	Adequate exhaust ventilation must exhaust AWAY from applicator.		

Protective Gloves Natural or Neoprene gloves. Eye Protection Splash goggles or face shield.

Other Protective Clothing or Equipment

Use rubber apron, face shield and appropriate clothing to prevent contact with skin. Launder contaminated clothing before reuse. Discard contaminated leather shoes and canvas sneakers. Protective skin creams help cleaning with soap and water, gloves must be still be worn. An eye wash station or an adequate supply of clean water must be available at work area.

Work/Hygienic Practices Enforce careful handling to prevent splashing. Wash thoroughly after use.

## SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled

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Waste Disposal Method

Dispose in accordance with Federal, State, and Local requirements.

Precautions to be Taken in Handling and Storing

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Other Precautions NONE KNOWN.

Prepared by Samet Dy - Chemist

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COMMON NAME Epoxy Resin

HAZARD RATING	Health	1
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## SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Diglycidyl Ether Bisphenol A Epoxy Resin	25085-99-8	N.E. <sup>1</sup>	N.E.
Diluents	Proprietary <sup>2</sup>	N.E.	N.E.
Surfactants	Proprietary	N.E.	N.E.

<sup>1</sup>Not Established

<sup>2</sup>The manufacturer of these component states that they will provide additional information to health professional in the event of an emergency

T.S.C.A. Status - O.K. on all above components.

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Volatile Organic Compounds (VOC)	<100g/l		
Solubility in Water	None		
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