



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) **Elast-O-Coat Hardener**

COMMON NAME Epoxy Resin Hardener

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

SECTION II - PRODUCT COMPONENTS

COMPONENTS	CAS.#	OSHA PEL	ACGIH TLV
Benzyl Alcohol	100-51-6	N.E. ¹	N.E.
Cycloaliphatic Diamine	2855-13-2	N.E.	N.E.
Salicylic Acid	69-72-7	N.E.	N.E.
1,5 Pentanediamine, 2 Methyl	15520-10-2	N.E.	N.E.
Tris (2,4,6, Dimethylaminomethyl) Phenol.	90-72-7	N.E.	N.E.

¹None Established.

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	425°F	Specific Gravity (H ₂ O = 1)	<1
Vapor Pressure (mm Hg)	0.1	Melting Point	N/A
Vapor Density (AIR = 1)	Not Volatile	Evaporation rate (Butyl Acetate = 1)	>1
Solubility in Water	Partially Soluble.	Volatiles Organic Compounds (VOC) =	Zero grams/liter
Appearance and Odor	Clear low viscosity liquid. Mild amine odor.		

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	220°F	Flammable Limits	LEL	UEL
			N/A	N/A
Extinguishing Media	Water spray, Foam, CO ₂ , Dry Chemicals.			
Special Firefighting Procedures				
Wear full protective equipment including self-contained breathing apparatus. Irritating and/or toxic gases may be generated by fire.				
Unusual Fire and Explosion Hazards				
Cool storage containers with water spray to prevent pressure build-up that may rupture the containers.				

SECTION V - REACTIVITY DATA

Stability	Unstable	Conditions to Avoid
	Stable	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, Nitrogen oxides.	
Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	Uncontrolled reaction with epoxy resins.

SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	YES	YES	YES
Signs and Symptoms of Exposure	Irritation of skin.		
Health Hazards (Acute and Chronic)			
ACUTE - Irritation of 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 - remove contaminated clothing. Clean affected area with mild soap and water. If irritation or redness develops, seek medical attention. INHALATION- move person away from source of exposure and into fresh air. If person is not breathing, give artificial respiration and seek medical attention immediately. If breathing difficulty develops, give oxygen and seek medical attention immediately. INGESTION - get medical attention immediately.		
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	Rubber 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 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 onto 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 - Urethane 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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95 Goodwin Street, East Hartford, CT., 06108 (860) 528-9838

Date Prepared 9/1/2008

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Elast-O-Coat Resin, Clear & Colors

COMMON NAME Modified Epoxy Resin

HAZARD RATING	Health	2
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
Alkyl Phenol Blocked Polyisocyanate	Proprietary ¹	not hazardous	not hazardous
Modified Diluents	Proprietary	N.E. ²	N.E.
Diglycidyl Ether Bisphenol A Epoxy Resin	25085-99-8	N.E.	N.E.
Rutile Titanium Dioxide	13463-67-7	15mg/m ³	10mg/m ³
Calcium Carbonate	1317-65-3	15mg/m ³	10mg/m ³
Aluminum Silicate	1332-58-7	15mg/m ³	2mg/m ³
Barium Sulfate ³	7727-43-7	10mg/m ³	10mg/m ³
Inorganic Iron Oxides	1309-37-1	15mg/m ³	10mg/m ³
Chromium(III)Oxide(trivalent chromium) ⁴	1308-38-9	1.0mg/m ³	0.5mg/m ³

¹The manufacturer of the component states that they will provide additional information to a health professional in the event of a medical emergency.

²Not Established

³Barium Sulfate is listed in SARA III, Part 372, Section 313.

⁴This product contains only 1-3ppm (0.0001%-0.0003%) leachable hexavalent chromium. Trivalent chromium is not specifically listed as a possible carcinogen. Only in Dark Green and Light Green pigmented systems.

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

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SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	>392°F	Specific Gravity (H ₂ O = 1)	>1
Vapor Pressure (mm Hg)	1 @ 356°F	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A
Solubility in Water	Insoluble	Volatile Organic Compounds (VOC) =	Zero grams/liter
Appearance and Odor	Clear viscous Liquid. Mild characteristic odor.		

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	490°F	Flammable Limits	LEL	UEL
			N/A	N/A

Extinguishing Media Foam, CO₂, Dry chemical, water spray.

Special Firefighting Procedures

Wear full protective equipment including self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Cool storage containers with water spray to prevent pressure build-up that may rupture the containers.

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 - avoid temperature >392°F.
Incompatibility (Materials to Avoid)	Uncontrolled reaction with amines.	
Hazardous Decomposition or Byproducts	By 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 of skin.

Health Hazards (Acute and Chronic)

ACUTE - Irritation of 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 - remove contaminate clothing. Clean affected area with mild soap and water. If irritation or redness develops, seek medical attention.

INHALATION- move person away from source of exposure and into fresh air. If person is not breathing, give artificial respiration and seek medical attention immediately. If breathing difficulty develops, give oxygen and seek medical attention immediately.

INGESTION - get medical attention immediately.

****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 Rubber 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 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.

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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 onto 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

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Other Precautions None Known.

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