



DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 8/2/2010

SECTION I - IDENTIFICATION	HAZARD RATING 0 = Least 1 = Slight 2 = Moderate 3 = High 4 = Extreme	Health	1
		Flammability	1
		Reactivity	0
		Personal Protection	G
IDENTITY (As Used on Label)		Dur-A-Glaze Novolac/Pigmented Resin and Dur-A-Gard Novolac Resin	
COMMON NAME		Clear and Pigmented (all colors) Novolac Resin	

SECTION II - PRODUCT COMPONENTS	CAS.#	OSHA PEL	ACGIH TLV
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	N.E. ¹	N.E.
Aromatic Glycidyl Ether Diluent	2210-79-9	N.E.	N.E.
Novolac Epoxy Resin	28064-14-4	N.E.	N.E.
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 ²	7727-43-7	10mg/m ³	10mg/m ³
Inorganic Iron Oxides	1309-37-1	15mg/m ³	10mg/m ³
Chromium(III) Oxide Green(trivalent chromium) ^{*3}	1308-38-9	1mg/m ³	0.5mg/m ³

¹Not Established

²Barium Sulfate is listed in SARA III, Part 372, Section 313.

^{*3}This 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.

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

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS			
Boiling Point	N/A	Specific Gravity (H2O = 1)	1.55
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)	0 g/L		
Solubility in Water	NONE		
Appearance and Odor	Pigmented viscous liquid. Mild characteristic odor.		

SECTION IV - FIRE and EXPLOSION HAZARD DATA			
Flash Point (Closed Cup Method)	485°F	Flammable Limits	LEL N/A UEL N/A
Extinguishing Media	Water spray, Foam, CO ₂ , Dry Chemicals.		
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.
Incompatibility (Materials to Avoid)	Uncontrolled reaction with amines.		
Hazardous Decomposition or Byproducts	By Fire - Carbon monoxide, Carbon dioxide, Nitrogen oxides, 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? YES	Skin? YES	Ingestion? 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.			
Persons with lung disorders or who are sensitized should not use this product.			

Carcinogenicity:	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO
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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 rubber or Neoprene.	Eye Protection	Splash goggles or face shield.
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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 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 - 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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SECTION I - IDENTIFICATION	HAZARD RATING	Health	3
	0 = Least	Flammability	1
	1 = Slight	Reactivity	0
	2 = Moderate	Personal Protection	G
3 = High			
4 = Extreme			
IDENTITY (As Used on Label)	Novolac Hardener		
COMMON NAME	Epoxy Hardener		

SECTION II - PRODUCT COMPONENTS	CAS.#	%	OSHA PEL	ACGIH TLV
Benzyl Alcohol	100-51-6		N.E. ¹	N.E.
3, Aminomethyl -3,5,5-Trimethyl	2855-13-2		N.E.	N.E.
1, 5 Pentanediamine, 2 Methyl	15520-10-2		N.E.	N.E.
N, Aminoethyl Piperazine	140-31-8		N.E.	N.E.
Diglycidyl Ether Bisphenol A Epoxy Resin	25085-99-8		N.E.	N.E.
Salicylic Acid	69-72-7		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	485°F	Specific Gravity (H2O = 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)	0 g/L		
Solubility in Water	Partially Soluble.		
Appearance and Odor	Pale yellow colored liquid. 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 Dry chemicals, carbon dioxide, foam water spray.

Special Firefighting Procedures

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

Unusual Fire and Explosion Hazards

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

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 Fire- Carbon Monoxide, Carbon Dioxide, Nitrogen, Aldehydes.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	Uncontrolled reaction with epoxy resin. Avoid breathing fumes generated by hardener and epoxy mixture when not used in 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, eyes or respiratory tract.

Health Hazards (Acute and Chronic) Note: Persons with lung disorders or who are sensitized should not use this product.

ACUTE - prolonged skin exposure can cause irritation, dermatitis. Inhalation of vapors can cause nasal and respiratory irritation, dizziness, headache, nausea.

CHRONIC - prolonged or repeated exposure to vapors may cause liver and kidney damage. Lung disorders may be aggravated by exposure.

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

Medical Conditions Generally Aggravated by Exposure Allergy, eczema, skin conditions, and lung 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	Use in confined areas.	Special	Explosion-proof fans when needed.
	Mechanical	Must be sufficient to maintain area below established TLV/PEL.		

Protective Gloves	Neoprene rubber gloves.	Eye Protection	Splash goggles or face shield.
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Other Protective Clothing or Equipment

Use other protective equipment such as rubber aprons and a faceshield if danger of splashing is possible.

Eye wash station or clear water must be readily available. ENFORCE GOOD HYGIENE PRACTICES. No smoking or open lights in work area. Exposure to liquid, vapors, mists or fumes must be minimized. Use air supplied respirators in enclosed areas and when PEL/TLV is higher than established level.

Work/Hygienic Practices Launder contaminated clothing before use. Dispose contaminated leather shoes or sneakers.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE**Steps to be Taken in Case Material is Released or Spilled**

Shut off and eliminate all ignition sources. Keep people away. Add sand, earth or other absorbent to spill area.

Ventilate confined spaces. Open windows and doors, minimize breathing vapors and skin contact. Keep spill out of sewers by diking. Observe precautions for flammable vapors from absorbed materials.

Waste Disposal Method

Burn in an adequate incinerator or bury in an approved landfill in accordance with federal, state and local regulations.

Precautions to be Taken in Handling and Storing Keep containers tightly closed when not in use and away from excessive heat and flame. Do not pressurize, cut, weld, solder, drill, or grind the containers.

Other Precautions NONE KNOWN.

Prepared by Samet Dy - Chemist

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