



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) Dur-A-Glaze #4 All Hardeners

COMMON NAME Epoxy Hardeners: Regular, Water Clear, Damp Primer, Fast, Cold Cure, CR4

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. 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.
1, 5 Pentanediamine, 2 Methyl	15520-10-2	N.E. N.E.
N, Aminoethyl Piperazine	140-31-8	N.E. N.E.
Benzene-1,3-Dimethanamine	1477-550	N.E. N.E.
Phenol	108-95-2	N.E. N.E.
Triphenyl phosphite	101-02-0	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

Bolling Point	485F	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)	83 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)	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	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 Polymerizati	May Occur	Conditions to Avoid
	Will Not Occur	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 - Chemist		

PLEASE *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.*



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) Dur-A-Glaze #4 RESIN/ Bio-Pruf®

COMMON NAME Epoxy Resin

HAZARD RATING	Health	1
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
Diglycidyl Ether Bisphenol A Epoxy Resin	25085-99-8	N.E. ¹	N.E.
Aliphatic Glycidyl Ether Diluent	68609-97-2	N.E.	N.E.
Mineral Spirits	8052-41-3	200 ppm	100ppm

¹Not 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 (H ₂ O = 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)	0 g/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, CO₂, 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	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	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 Protector 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 - Chemist

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SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) **Q28, Q11 Colored Quartz and Natural Sands**

COMMON NAME: **Pigmented Sands* and Flintshot, 00, 0, 290 Flour, Special Bond Sands****

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

SECTION II - PRODUCT COMPONENTS

CAS.#	OSHA PEL	ACGIH TLV
Crystalline Silica (Quartz) ¹	14808-60-7	10mg/m ³ 0.05 mg/m ³
		%SiO ₂ +2
Titanium Dioxide Pigment	13463-67-7	15mg/m ³ 10mg/m ³
Iron Oxide Pigment	1309-37-1	15mg/m ³ 10mg/m ³
Kaolin Clay	1332-58-7	15mg/m ³ 2mg/m ³
Chromium Oxide Green (trivalent chromium) ²	1308-38-9	1.0mg/m ³ 0.5mg/m ³

¹Crystalline silica can be a lung injury and cancer hazard. Do not breathe dust. May cause delayed lung injury. Long term

exposure can cause silicosis, a respiratory disease which can result in a delayed, disabling, and sometimes fatal lung injury.

Crystalline silica inhaled from occupational sources can from occupational sources can cause cancer in humans. Risk of injury is dependent on the duration and level of exposure. A single exposure will not result in serious and adverse effects.

² In Green quartz ONLY. This product only 1-3ppm (0.0003%) leachable hexavalent chromium. Trivalent chromium is not specifically listed as a possible carcinogen. It is regulated under SARA III, 40CFR Part 372, Section 313.

*Also includes Crystal Grades, Synthetic Turf Blends, T-32 colored Aggregate, and Progreen Blends

**Includes .45-.55 Sand, F-62, F-70 Grades, NJ 1/4, NJ 000, NJ 1/2, Q-Rok #2 and #3

T.S.C.A. Status - O.K.

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

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	4046°F	Specific Gravity (H ₂ O = 1)	2.65
Vapor Pressure (mm Hg)	N/A	Melting Point	2930°F
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A
Volatile Organic Compounds	0 g/L		
Solubility in Water	INSOLUBLE		
Appearance and Odor	Naturally rounded sand. Various sizes. No odor.		

SECTION IV - FIRE and EXPLOSION HAZARD DATA

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

Extinguishing Media Compatible with all extinguishing media. Use any media appropriate for the surrounding fire.

Special Firefighting Procedures

N/A

Unusual Fire and Explosion Hazards

N/A

SECTION V - REACTIVITY DATA

Stability	Unstable	Conditions to Avoid
	Stable	X NONE KNOWN.
Incompatibility (Materials to Avoid) Hydrofluoric Acid and powerful oxidizing agents.		
Hazardous Decomposition or Byproducts NONE KNOWN.		
Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	X NONE KNOWN.

SECTION VI - HEALTH HAZARD DATA

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	NO	NO

Signs and Symptoms of Exposure Shortness of breath and reduced pulmonary function.

Health Hazards (Acute and Chronic)

ACUTE - NO SYMPTOMS.

CHRONIC - excessive inhalation of dust may result in respiratory disease such as silicosis, pulmonary fibrosis, etc. The IARC has evaluated in Vol.42 (monographs) that there is "sufficient evidence for the Carcinogenicity of crystalline silica dust to experimental animal" and "limited evidence" with respect to humans.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	Yes (Respirable Silica)	YES*Level 2A Grouping	NO

Medical Conditions Generally Aggravated by Exposure

Lung disorders and persons subject to eye irritation.

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 area if effects occur. If needed, give oxygen or artificial respiration to improve breathing. Consult physician.

INGESTION - Expected to be slightly toxic by ingestion. If swallowed, induce vomiting immediately as directed by a physician.

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

OTHER HEALTH EFFECTS - Medical conditions which may be aggravated by exposure to this product include, conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases. Sensitization may occur by skin contact.

****NOTE**** persons with lung disorders or who are sensitized should not use this product.

SECTION VII - CONTROL MEASURES

Respiratory Protection (Specify Type): Atmospheric levels should be maintained below the exposure limits listed in section II by

using engineering controls. Provide adequate exhaust ventilation and/or NIOSH approved cartridge respirator.

Ventilation	Local Exhaust	To meet PEL requirements.	Special	None Known.
	Mechanical	Adequate to meet PEL requirements.		

Protective Gloves Recommended. Eye Protection Recommended

Other Protective Clothing or Equipment

Use adequate ventilation and dust collection. To minimize exposure, wear a respirator approved for silica dust when using, handling, storing or disposing of this product. Refer to the most recent standards of ANSI (Z88.2), OSHA (29 CFR 1910.134), MSHA (30 CFR Parts 56 and 57), and NIOSH Respirator Decision Logic. Maintain, clean and fit test respirators in accordance with OSHA regulations.

Work/Hygienic Practices Avoid creating and breathing dust.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled

Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Silica may be in the air without a visible dust cloud. Avoid creation of respirable dust

Waste Disposal Method

Dispose waste material in a sanitary land fill or as regulated by local, state and federal regulations.

Precautions to be Taken in Handling and Storing

Avoid creation of respirable dust. Take precaution against bag breakage.

Other Precautions None Known.

Prepared by Samet Dy - Urethane Chemist

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