DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

HAZARD RATING	
0 = Least	
1 = Slight	
2 = Moderate	
3 = High	
4 = Extreme	

Health	3
Flammability	1
Reactivity	0
Personal Protection	G

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label)	**Dur-A-Glaze #4 WB Primer-Sealer Hardener**
COMMON NAME	Emulsified Amine Curative

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Water	7732-18-5	N.E. [1]	N.E.
Polyamine Curative	Proprietary [2]	N.E.	N.E.
Modified Epoxy Resin Adhesion Promotor	Proprietary	N.E.	N.E.

[1] None Established

[2] The manufacturer of the component states that they will provide additional information to a health professional in the event of a medical 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	>400ºF	Specific Gravity (H2O = 1)	1.07
Vapor Pressure (mm Hg)	not known	Melting Point	N/A
Vapor Density (AIR = 1)	not known	Evaporation rate (Butyl Acetate = 1)	not known

Volatile Organic Compounds (VOC) = < 2 grams/liter

Solubility in Water: Soluble

Appearance and Odor: Pale yellow viscous liquid. Mild ester-like odor.

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	212ºF	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.

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	None known
Incompatibility (Materials to Avoid)			None known
Hazardous Decomposition or Byproducts			By Fire - Carbon monoxide, Carbon dioxide, Nitrogen oxides.
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	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.

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

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 rubber or Neoprene.	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, but 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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 6/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) **Dur-A-Glaze #4 RESIN/ Bio-Pruf®**

COMMON NAME Epoxy Resin

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.
Film Additives	Proprietary[2]	N.E.	N.E.

[1]Not Established

[2]The manufacturer of these component states that they will provide additional information to a 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	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)	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)	Flammable Limits	LEL	UEL
485°F		N/A	N/A

Extinguishing Media: Foam, CO_2, 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

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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label)	**Dur-A-Glaze #4 Hardener: Regular, Fast, Cold Cure, CR4, Damp-Primer, Water Clear**
COMMON NAME	Epoxy Resin Curatives

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.
Benzene-1,3-Dimethaneamine	1477-550	N.E.	N.E.
Phenol	108-95-2	N.E.	N.E.
Triphenyl phosphite	101-02-0	N.E.	N.E.

[1]None 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	485ºF	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)	220ºF	Flammable Limits	LEL N/A	UEL 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 Polymerizati	May Occur		Conditions to Avoid: Uncontrolled reaction with epoxy resins. Avoid breathing fumes
	Will Not Occur	X	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: Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) **Shop Floor Resin: all colors**

COMMON NAME Pigmented Epoxy Resin

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	N.E.[1]	N.E.
Aliphatic Glycidyl Ether Diluent	68609-97-2	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	1.0mg/m^3	0.5mg/m^3

[1]Not Established

[2]Barium 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)	1.2
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	>1
Volatile Organic Compounds	0 g/L		
Solubility in Water	Not Soluble		
Appearance and Odor	Pigmented viscous liquid. Mild characteristic odor.		

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	485ºF	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?	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.

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

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 rubber or Neoprene.	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 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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) **Flintshot, Qrok, 290 Flour, 1/4 NJ, 1/2 NJ, F-70, Q28 all colors, Q11 all colors**

COMMON NAME: Natural Sands/Quartz/Colored Quartz

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Crystalline Silica (Quartz)[1]	14808-60-7	10mg/m^3 %Si02+2	0.05 mg/m^3
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

Do Not use Natural Sands/Aggregates/Quartz/Colored Quartz material for sandblasting.

[1]Crystalline 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.

Crystalline silica (quartz) is not known to be an environmental hazard.

California Proposition 65: Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen.

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	4046ºF	Specific Gravity (H2O = 1)	2.65
Vapor Pressure (mm Hg)	N/A	Melting Point	2930ºF
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 N/A	UEL N/A
Extinguishing Media	N/A			

Special Firefighting Procedures

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

Crystalline silica (quartz) is not flammable, combustible or explosive.

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 physcian. 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): When possible reduce airborne exposure level. Use sufficient local exhaust ventilation to reduce crystalline silica level below OSHA PEL. Use only NIOSH approved respirator as outlined in 42 CFR 84 and 29 CFR 1910.134

Ventilation				
	Local Exhaust	If needed.	Special	None Known.
	Mechanical	Adequate exhaust ventilation must exhaust AWAY from applicator and near by people.		

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

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), MHSA (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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Armor Top, Armor Top HH Resin

COMMON NAME Blocked Cycloaliphatic Diamine

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Blocked Cycloaliphatic Diamine	Proprietary[2]	N.E.[1]	N.E.

[1]None Established

[2]The manufacturer of the component states that they will provide additional information to a health professional in the event of a medical 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	N.E.	Specific Gravity (H2O = 1)	0.8-0.9
Vapor Pressure (mm Hg)	N.E.	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A

Volatile Organic Compounds = Nil

Solubility in Water: Minimal, Reacts slowly with water

Appearance and Odor: Pale yellow colored liquid. Amine odor.

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	Flammable Limits	LEL	UEL
171ºF		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: Rags or waste soaked with this product and/or solvents, may spontaneously combust if improperly discarded. Prior to disposal, spread out all rags or other waste to dry before disposal.

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	Keep container closed when not in use, protect from moisture.

Incompatibility (Materials to Avoid): Strong oxidizers, alkaline materials and acids. Avoid moisture prior to use

Hazardous Decomposition or Byproducts: By Fire- carbon monoxide, carbon dioxide, aldehydes, nitrogen.

Hazardous Polymerization	May Occur		Conditions to Avoid: Decomposition products from hydrolisis in water isophorone diamine and isobutyraldehyde
	Will Not Occur	X	

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. Corrosive

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

SKIN - **CORROSIVE;** PROMPTLY wash with soap and water. DO NOT wash with solvents. Seek medical advice 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 as outlined in 42 CFR 84 and 29 CFR 1910.134 effective for solvent and diisocyanate vapors.

Ventilation				
	Local Exhaust	Use in confined areas.	Special	Explosion proof fans when needed.
	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. Protective skin creams elp 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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Armor Top Colorant: all colors

COMMON NAME Liquid Colorant Additive for Urethane

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Dipropylene glycol monomethyl ether acetate	88917-22-0	NE[1]	NE
Titanium Dioxide	13463-67-7	15mg/m^3(Dust)	10mmg/m^3
Red Iron Oxide	1332-37-2	10mg/m^3	5mg/m^3
Yellow Iron Oxide	51274-00-1	NE	NE
Carbon Black	1333-86-4	3.5mg/m^3(dust)	3.5mg/m^3(dust)

[1]not 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	DPMA	392ºF	Specific Gravity (H2O = 1)	1.11
Vapor Pressure (mm Hg)	77ºF	0.05	Melting Point	N/A
Vapor Density (AIR = 1)	DPMA	6.6	Evaporation rate (Butyl Acetate = 1)	0.015

Volatile Organic Compounds (VOC) = 572 grams/liter
Mixed with Armor Top Gloss System = 95 grams/liter
Mixed with Armor Top Satin System = 82 grams/liter

Solubility in Water: NOT SOLUBLE.

Appearance and Odor: Clear, mild ester-like odor.

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	Flammable Limits	LEL	UEL
186ºF	N/A	1.21 vol%	5.35 vol%

Extinguishing Media: Dry Chemicals, CO_2, Universal Type Foam.

Special Firefighting Procedures

Wear full protective equipment including self-contained breathing apparatus. During a fire, HDI vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Closed container may explode when exposed to extreme heat or burst when contaminated with water (CO2 evolved).

Unusual Fire and Explosion Hazards

Spills of this on hot fibrous insulations may lead to lowering of the autoignition temperatures resulting in possible spontaneous combustion

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	Keep containers closed when not in use. Avoid static discharge. Flammable vapors released at elevated temps.

Incompatibility (Materials to Avoid): Avoid oxidizers and phosphorus-containing materials.

Hazardous Decomposition or Byproducts: Fire may yield carbon monoxide and/or carbon dioxide.

Hazardous Polymerization	May Occur	X	Conditions to Avoid
	Will Not Occur		Contact with moisture or other materials which react with isocyanates or temperatures above 400F.

SECTION VI - HEALTH HAZARD DATA

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

Signs and Symptoms of Exposure: Irritation and redness of skin and eyes. Breathing difficulty.

Health Hazards (Acute and Chronic)

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 lung damage as wel l as increased sensitivity.

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

Medical Conditions Generally Aggravated by Exposure

Asthma and other respiratory disorders(bronchitis, emphysema, hyperreactivity), skin allergies, eczema.

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.

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 as outlined in 42 CFR 84 and 29 CFR 1910.134 effective for solvent and diisocyanate vapors.

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 proof goggles.

Other Protective Clothing or Equipment

Use other protective equipment such as rubber aprons and a face shield 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.

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

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 volatile, flammable vapors from absorbed material.

Waste Disposal Method

Incineration in accordance with local, state, and federal 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: Store in an OSHA approved area for flammable materials.

Prepared by Murty Bhamidipati - Chemist

PLEASE NOTE

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Armor Top Hardener

COMMON NAME Aliphatic Polyisocyanate Resin Solution

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Homopolymer of HDI	28182-81-2	N.E.[1]	N.E.
Hexamethylene Diisocyanate (HDI)[2]	822-06-0	N.E.	0.005ppm
Dimethyl Ester	Proprietary	N.E.	N.E.
Methyl-1,3-dioxolan-2-one	108-32-7	N.E.	N.E.

[1]not established

[2]Residual monomer content is less than 0.5% based on resin solids at the time of manufacture.

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	DPMA	392°F	Specific Gravity (H2O = 1)	1.11
Vapor Pressure (mm Hg)	HDI	4.7×10^{-7}	Melting Point	N/A
Vapor Density (AIR = 1)	DPMA	6.6	Evaporation rate (Butyl Acetate = 1)	0.015

Volatile Organic Compounds (VOC) = Nil

Solubility in Water NOT SOLUBLE.

Appearance and Odor Clear, mild ester-like odor.

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)		Flammable Limits	LEL	UEL
	110°F	N/A	4.22%	12.87%

Extinguishing Media Dry Chemicals, CO_2, Universal Type Foam.

Special Firefighting Procedures

Wear full protective equipment including self-contained breathing apparatus. During a fire, HDI vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Closed container may explode when exposed to extreme heat or burst when contaminated with water (CO2 evolved).

Unusual Fire and Explosion Hazards Rags or waste soaked with this product and/or solvents, may spontaneously combust if improperly discarded. Prior to disposal, spread out all rags or other waste to dry before disposal.

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	Keep containers closed when not in use. Avoid static discharge. Flammable vapors released at elevated temps.

Incompatibility (Materials to Avoid) Avoid oxidizers and phosphorus-containing materials.

Hazardous Decomposition or Byproducts Fire may yield carbon monoxide and/or carbon dioxide.

Hazardous Polymerization	May Occur	X	Conditions to Avoid
	Will Not Occur		Contact with moisture or other materials which react with isocyanates or temperatures above 400F.

SECTION VI - HEALTH HAZARD DATA

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

Signs and Symptoms of Exposure: Irritation and redness of skin and eyes. Breathing difficulty.

Health Hazards (Acute and Chronic)

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 lung damage as wel l as increased sensitivity.

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

Medical Conditions Generally Aggravated by Exposure

Asthma and other respiratory disorders(bronchitis, emphysema, hyperreactivity), skin allergies, eczema.

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.

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 as outlined in 42 CFR 84 and 29 CFR 1910.134 effective for solvent and diisocyanate vapors.

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 proof goggles.

Other Protective Clothing or Equipment

Use other protective equipment such as rubber aprons and a face shield 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

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 volatile, flammable vapors from absorbed material.

Waste Disposal Method

Incineration in accordance with local, state, and federal 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: Store in an OSHA approved area for flammable materials.

Prepared by: Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 06/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Armor Top Satin Resin

COMMON NAME Blocked Cycloaliphatic Diamine

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Blocked Cycloaliphatic Diamine	Proprietary[1]	N.E.[2]	N.E.
Polypropylene Wax	Proprietary	N.E.	N.E.
Dimethyl Ester	Proprietary	N.E.	N.E.

[2]None Established

[2]The manufacturer of the component states that they will provide additional information to a health professional in the event of a medical 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	N.E.	Specific Gravity (H2O = 1)	0.8-0.9
Vapor Pressure (mm Hg)	N.E.	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A

Volatile Organic Compounds = Nil

Solubility in Water: Minimal, Reacts slowly with water

Appearance and Odor: Pale yellow colored liquid. Amine odor.

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	110ºF	Flammable Limits	LEL 4.22%	UEL 12.87%

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: Rags or waste soaked with this product and/or solvents, may spontaneously combust if improperly discarded. Prior to disposal, spread out all rags or other waste to dry before disposal.

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	Keep container closed when not in use, protect from moisture.
Incompatibility (Materials to Avoid)			Strong oxidizers, alkaline materials and acids. Avoid moisture prior to use
Hazardous Decomposition or Byproducts			By Fire- carbon monoxide, carbon dioxide, aldehydes, nitrogen.
Hazardous Polymerization	May Occur		Conditions to Avoid: Decomposition products from hydrolisis in water isophorone diamine and isobutyraldehyde
	Will Not Occur	X	

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. Corrosive

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

SKIN - **CORROSIVE;** PROMPTLY wash with soap and water. DO NOT wash with solvents. Seek medical advice 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 as outlined in 42 CFR 84 and 29 CFR 1910.134 effective for solvent and diisocyanate vapors.

Ventilation				
	Local Exhaust	Use in confined areas.	Special	Explosion proof fans when needed.
	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 Murty Bhamidipati - Chemist

DUR-A-FLEX
INNOVATION FROM THE FLOOR UP

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

Material Safety Data Sheet

Date Prepared 6/13/2014

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

SECTION I - IDENTIFICATION

IDENTITY (As Used on Label) Armor Top Grit

COMMON NAME WHITE ALUMINUM OXIDE

SECTION II - PRODUCT COMPONENTS

	CAS.#	OSHA PEL	ACGIH TLV
Aluminum Oxide	1344-28-1	5 mg/m^3 (resp)	10 mg/m^3
Other Oxides (Total) (SiO2+Fe2O3+Na2O+MgO+Tio2)=1%			

T.S.C.A. Status - O.K. on above component.

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)	3.95
Vapor Pressure (mm Hg)	N/A	Melting Point	2070
Vapor Density (AIR = 1)	N/A	Evaporation rate (Butyl Acetate = 1)	N/A

Volatile Organic Compounds (VOC) = Nil

Solubility in Water INSOLUBLE

Appearance and Odor Granular, White, Odorless

SECTION IV - FIRE and EXPLOSION HAZARD DATA

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

Extinguishing Media N/A

Special Firefighting Procedures

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

Aluminum Oxide is not flammable, combustible or explosive.

Unusual Fire and Explosion Hazards

None Known.

SECTION V - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid) None known.

Hazardous Decomposition or Byproducts None Known.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

SECTION VI - HEALTH HAZARD DATA

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

Signs and Symptoms of Exposure: Temporary Inhalation Discomfort.

Health Hazards (Acute and Chronic)

ACUTE - None known other than possible temporary discomfort due to inhalation of dust concentration.

CHRONIC - Potential chronic respiratory distress/irritation. Can aggravate pre-existing lung conditions.

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

Medical Conditions Generally Aggravated by Exposure

None Known.

Emergency and First Aid Procedures

EYES - hold eyes apart and flush with clean water for 15 minutes. If irritation or redness develops and persists seek medical attention.

INHALATION - For inhalation discomfort move person to fresh air.

SECTION VII - CONTROL MEASURES

Respiratory Protection (Specify Type): Provide adequate exhaust ventilation. Use a NIOSH approved respirator as outlined in 42 CFR 84 and 29 CFR 1910.134 effective for solvent and diisocyanate vapors.

Ventilation				
	Local Exhaust	If necessary.	Special	None Known
	Mechanical	Adequate for dusty environments		

Protective Gloves	Wear gloves	Eye Protection	Safety goggles, do not wear contact lenses.

Other Protective Clothing or Equipment

NONE KNOWN.

Work/Hygienic Practices: Avoid unnecessary formation of dust.

SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled

Non - Skid Grit may be swept or vacuumed for normal disposal.

Waste Disposal Method

Non - Skid Grit is not a hazardous waste under U.S. Federal RCRA regulations.

Precautions to be Taken in Handling and Storing

Same as given in Section VII (ventilation, gloves, and goggles.)

Other Precautions: Dry powders can build static charges when subjected to friction.

Prepared by: Murty Bhamidipati - 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 use."