

**Dur-A-Glaze #4 Hardener
Regular, Fast, Damp-Primer, Water Clear
SAFETY DATA SHEET**

1. IDENTIFICATION

Product Identifier: Dur-A-Glaze #4 Hardener – Regular, Fast, Damp-Primer, Water Clear

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: January 15, 2014

2. HAZARD(S) IDENTIFICATION

This product is one part of a 2 part product. Read and understand the hazard information on the SDS for Dur-A-Glaze Resin before using this product.

Classification:

Physical	Health
Not Hazardous	Acute Toxicity Category 4 (Oral) Skin Corrosion Category 1A Eye Damage Category 1 Specific Target Organ Toxicity – Repeat Exposure Category 2 Germ Cell Mutagenicity Category 2

Labeling:

Danger!



Hazard statement(s)

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause damage to liver, kidneys and central nervous system through prolonged or repeated exposure.

Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapors or spray.
Wash thoroughly after handling.

Suspected of causing genetic defects.

Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing, eye protection and face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water.
Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical attention. Store locked up.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Benzyl Alcohol	100-51-6	25-50
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	1-15
Salicylic Acid	69-72-7	1-10
3, Aminomethyl -3,5,5-Trimethylcyclohexylamine	2855-13-2	0-40
1,3-cyclohexanedimethanamine	2579-20-6	0-40
Polyoxypropylenediamine	9046-10-0	0-20
1, 5 Pentanediamine, 2 Methyl	15520-10-2	0-10
Triphenyl Phosphite	101-02-0	0-10
Phenol	108-95-2	0-5
Benzene-1,3-Dimethanamine	1477-55-0	0-5

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Skin contact: Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get immediate medical attention. If rash occurs, get medical attention. Launder clothing before re-use.

Eye contact: Immediately flush with large quantities of water for 15 minutes, holding the eyelids apart. Get immediate medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. DO NOT INDUCE VOMITING. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: May cause severe eye and skin irritation with possible burns. May cause allergic skin reaction. Inhalation of vapors or mists may cause irritation of mucous membranes and upper respiratory tract. Harmful if swallowed. Prolonged over exposure to phenol may cause kidney, liver and central nervous system effects.

Indication of immediate medical attention and special treatment, if necessary: For eye and skin contact, get immediate attention. If swallowed, get immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use water spray, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific hazards arising from the chemical: Combustion may produce carbon and nitrogen oxides and aldehydes.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Prevent release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Prevent contact with eyes and skin. Avoid breathing vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Do not taste or swallow. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Benzyl Alcohol	10 ppm TWA AIHA WEEL
Diglycidyl Ether Bisphenol A Epoxy Resin	None Established

Salicylic Acid	None Established
3, Aminomethyl -3,5,5-Trimethyl	None Established
1,3-cyclohexanedimethanamine	None Established
Polyoxypropylenediamine	None Established
1, 5 Pentanediamine, 2 Methyl	None Established
Triphenyl Phosphite	None Established
Phenol	5 ppm, skin TWA OSHA PEL 5 ppm, skin TWA ACGIH TLV
Benzene-1,3-Dimethaneamine	0.1 mg/m ³ Ceiling ACGIH TLV

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits.

Personal Protective Equipment:

Respiratory protection: If the exposures are exceeded, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as Viton or Saranex.

Eye protection: Chemical safety goggles and faceshield recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES
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Appearance (physical state, color, etc.): Pale yellow liquid

Odor: Amine odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: 485°F / 251.6°C
Flash point: >220 °F / >104.4°C	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: 0.02 mmHg	Vapor density: Not available
Relative density: <1	Solubility(is): Partially soluble
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.

Chemical stability: Stable

Possibility of hazardous reactions: None known.

Conditions to avoid: Avoid uncontrolled reaction with epoxy resins.

Incompatible materials: Avoid contact with oxidizing agents and acids.

Hazardous decomposition products: Thermal decomposition may produce carbon and nitrogen oxides and aldehydes.

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of vapors and mists may cause mucous membrane and upper respiratory tract irritation. Excessive vapors may cause burns to the mucous membranes and cause lung damage.

Ingestion: Swallowing may cause burns to the mouth, throat and stomach with nausea, vomiting and diarrhea.

Skin contact: May cause severe irritation or burns. May cause allergic skin reaction.

Eye contact: May cause severe irritation or burns with redness, tearing, stinging and swelling. May cause permanent damage.

Chronic effects from short- and long-term exposure: Prolonged overexposure to phenol has been shown to cause kidney, liver and central nervous system damage.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects.

Sensitization: 3-Aminomethyl -3,5,5-trimethyl, diglycidyl ether bisphenol A epoxy resin, triphenyl phosphite and benzene-1,3-dimethanamine have been shown to cause sensitization in studies with laboratory animals.

Mutagenicity: Phenol has been shown to cause mutagenicity in in vitro mammalian mutagenicity assays.

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values: No toxicity data for the product. The acute toxicity value for the product: Oral 968-1360 mg/kg.

Benzyl Alcohol: Oral rat LD50 1620 mg/kg; Inhalation rat LC50 > 4.178 mg/L

Salicylic Acid: Oral rat LD50 891 mg/kg; Dermal rabbit LD50 > 2000 mg/kg

3, Aminomethyl -3,5,5-Trimethyl: Oral rat LD50 1030 mg/kg; Inhalation rat LC50 >5.01 mg/L/4 hr; Dermal rabbit LD50 >2000 mg/kg

Polyoxypropylenediamine: Oral rat LD50 2885 mg/kg; Inhalation rat LC50 >0.74 mg/L/8 hr (highest dose tested); Dermal rabbit LD50 2980 mg/kg.

Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Dermal rabbit LD50 >2000 mg/kg

1, 5 Pentanediamine, 2 Methyl: Oral rat LD50 1690 mg/kg; Inhalation rat LC50 4.9 mg/L/1 hr.; Dermal rabbit LD50 1870 mg/kg

Triphenyl Phosphite: Oral rat LD50 1.59 g/kg; Inhalation rat LC50 > 6.7 mg/L/1 hr; Dermal rabbit LD50 >2000 mg/kg

Phenol: Oral rat LD50 650 mg/kg; Inhalation rat LC50 >900 mg/m³/8 hr.; Dermal rabbit LD50 660 mg/kg

Benzene-1,3-Dimethanamine: Oral rat LD50 500 mg/kg; Inhalation rat LC50 1.34 mg/L/4 hr; Dermal rat LD50 > 3100 mg/kg

1,3-Cyclohexanedimethanamine: Oral rat LD50 >300 – 2000 mg/kg; Dermal rabbit LD50 1700 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Benzyl Alcohol: 96 hr LC50 Pimephales promelas 770 mg/L; 48 hr EC50 daphnia magna 230 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 770 mg/L

Salicylic Acid: 48 hr EC50 daphnia magna 870 mg/L; 72 hr EC50 Desmodesmus subspicatus > 100 mg/L

3, Aminomethyl -3,5,5-Trimethyl: 96 hr LC50 Leuciscus idus 110 mg/L; 48 hr EC50 daphnia magna 23 mg/L; 72 hr EC50 Desmodesmus subspicatus 37 mg/L

Polyoxypropylenediamine: 96 hr LC50 Oncorhynchus mykiss > 1000 mg/L (structurally similar chemical); 48 hr EC50 daphnia magna 80 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 15 mg/L

Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 Oryzias latipes > 15 mg/L; 48 hr EC50 daphnia magna > 100 mg/L; 72 hr EC50 Desmodemus subspicatus > 100 mg/L

1, 5 Pentanediamine, 2 Methyl: 96 hr LC50 Pimephales promelas 1825 mg/L (structurally similar chemical); 48 hr EC50 daphnia magna 50 mg/L(structurally similar chemical); 72 hr EC50 Pseudokirchnerella subcapitata > 100 mg/L (structurally similar chemical)

Triphenyl Phosphite: No data available

Phenol: 96 hr LC50 Pimephales promelas 67.5 mg/L; 48 hr EC50 daphnia magna 3.1 mg/L; 72 hr EC50 Selenastrum capricornutum 61.1 mg/L

Benzene-1,3-Dimethanamine: No data available

1,3-Cyclohexanedimethanamine: 96 hr LC50 Leuciscus idus 130 mg/L; 48 hr EC50 daphnia magna 33.1 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 56.7 mg/L

Persistence and degradability: Benzyl alcohol, 1, 5 pentanediamine and phenol are readily biodegradable.

Bioaccumulative potential: Benzyl alcohol, 1, 5 pentanediamine and salicylic acid has a BCF of <5.

Mobility in soil: Benzyl alcohol and phenol are highly mobility in soil. Salicylic Acid is moderately mobile in soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
TDG	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
IMDG	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
IATA	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 20,000 lbs. based on the RQ for Phenol of 1,000 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

SARA Hazard Category (311/312): Acute Health, Chronic Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Phenol	108-95-2	1-5%
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California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): Epichlorhydrin 106-89-8 (cancer, male reproductive toxicity) <106 ppm

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 3 Flammability = 1 Instability = 0
HMIS Rating: Health = 3 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: January 31, 2014

Date of last revision: New SDS

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.

Dur-A-Glaze #4 Resin SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Glaze #4 Resin

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: January 31, 2014

2. HAZARD(S) IDENTIFICATION

This product is one part of a 2 part product. Read and understand the hazard information on the SDS for Hardener before using this product.

Classification:

Physical	Health
Not Hazardous	Skin Irritation Category 2 Eye Irritation Category 2A Skin Sensitization Category 1

Labeling:

Warning!



Hazard statement(s)

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary statement(s)

Avoid breathing mist, vapors or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, eye protection and face protection.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue

rinsing.
If eye irritation persists: Get medical attention.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	50-90%
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	68609-97-2	5-25%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If irritation occurs or breathing is difficult, get medical attention.

Skin contact: Remove contaminated clothing. Wash with soap and water. If irritation or rash develops, get medical attention.

Eye contact: Immediately flush with large quantities of water for 15 minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

Most important symptoms/effects, acute and delayed: May cause eye and skin irritation. May cause allergic skin reaction.

Indication of immediate medical attention and special treatment, if necessary: None expected under normal conditions of use. If allergic skin reaction occurs, discontinue use and get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use media appropriate for the surrounding fire.

Specific hazards arising from the chemical: Combustion may produce carbon oxides.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents, acids and bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	None Established

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposures.

Personal Protective Equipment:

Respiratory protection: If the exposures are excessive, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as butyl rubber.

Eye protection: Chemical safety goggles recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Viscous liquid

Odor: Mild characteristic odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: Not available
Flash point: 485 °F / 251.6°C	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: Not available	Vapor density: Not available
Relative density: >1	Solubility(is): Insoluble
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.

Chemical stability: Stable.

Possibility of hazardous reactions: May polymerize with amines, mercaptans and Lewis acids.

Conditions to avoid: Avoid excessive heat.

Incompatible materials: Avoid contact with oxidizing agents, acids and bases.

Hazardous decomposition products: Thermal decomposition may produce carbon oxides.

11. TOXICOLOGICAL INFORMATION

Inhalation: Excessive inhalation of mists may cause mucous membrane and upper respiratory tract irritation.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea and diarrhea.

Skin contact: May cause skin irritation with redness, itching and pain. May cause allergic skin reaction (sensitization).

Eye contact: May cause irritation with redness, tearing, stinging and swelling.

Chronic effects from short- and long-term exposure: None known.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects.

Sensitization: Diglycidyl ether bisphenol A epoxy resin and aliphatic glycidyl ether diluent causes sensitization in laboratory animals.

Mutagenicity: This product is not expected to cause mutagenic activity.

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values:

Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC0 – no deaths at saturation; Dermal rabbit LD50 > 2000 mg/kg

Aliphatic Glycidyl Ether Diluent: Oral rat LD50 26.8 g/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 *Oncorhynchus mykiss* 1.2 mg/L; 48 hr EC50 *daphnia magna* 1.1 mg/L; 72 hr EC50 *Scenedesmus capricornutum* 9.4 mg/L

Aliphatic Glycidyl Ether Diluent: 96 hr LC50 *Oncorhynchus mykiss* > 5000 mg/L; 72 hr IC50

Pseudokirchnerella subcapitata 843.75 mg/L

Persistence and degradability: Diglycidyl ether bisphenol A epoxy resin is not readily biodegradable.

Aliphatic glycidyl ether diluent is readily biodegradable.

Bioaccumulative potential: Diglycidyl ether bisphenol A epoxy resin has a BCF of 31. Aliphatic glycidyl ether diluent has a BCF 160-263.

Mobility in soil: No data available.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	None	Not Regulated	None	None	None
TDG	None	Not Regulated	None	None	None
IMDG	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Marine Pollutant
IATA	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Yes

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): epichlorohydrin 106-89-8 <0.1% (cancer, male reproductive toxicity)

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 1 Instability = 0
HMIS Rating: Health = 2 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: January 31, 2014

Date of last revision: New SDS

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.

Dur-A-Crete Hardener SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Crete Hardener

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: May 19, 2014

2. HAZARD(S) IDENTIFICATION

This product is one part of a 2 part product. Read and understand the hazard information on the SDS for Dur-A-Crete Resin before using this product.

Classification:

Physical	Health
Not Hazardous	Acute Toxicity Category 4 (Oral) Skin Corrosion Category 1A Eye Damage Category 1 Skin Sensitization Category 1

Labeling:

Danger!



Hazard statement(s)

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statement(s)

Do not breathe mist, vapors or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing, eye protection and face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Immediately call a POISON CENTER or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water.
Wash contaminated clothing before reuse.
Immediately call a POISON CENTER or doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Benzyl Alcohol	100-51-6	30-50
3, Aminomethyl -3,5,5-Trimethylcyclohexylamine	2855-13-2	20-40
1, 5 Pentanediamine, 2 Methyl	15520-10-2	1-10
Polymer of Epichlorohydrin-Polyglycol	Proprietary	1-10
Triphenyl Phosphite	101-02-0	1-5
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	1-5
Salicylic Acid	69-72-7	1-5
Benzene-1,3-Dimethanamine	1477-55-0	0.1-1

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Skin contact: Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get immediate medical attention. If rash occurs, get medical attention. Launder clothing before re-use.

Eye contact: Immediately flush with large quantities of water for 15 minutes, holding the eyelids apart. Get immediate medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. DO NOT INDUCE VOMITING. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: May cause severe eye and skin irritation with possible burns. May cause allergic skin reaction. Inhalation of vapors or mists may cause irritation of mucous membranes and upper respiratory tract. Harmful if swallowed.

Indication of immediate medical attention and special treatment, if necessary: For eye and skin contact, get immediate attention. If swallowed, get immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use water spray, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific hazards arising from the chemical: Combustion may produce carbon, nitrogen and phosphorus oxides, aldehydes, ammonia and hydrocarbon fragments

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Prevent release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Prevent contact with eyes and skin. Do not breathe vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Do not taste or swallow. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Benzyl Alcohol	10 ppm TWA AIHA WEEL
3, Aminomethyl -3,5,5-Trimethyl	None Established
1, 5 Pentanediamine, 2 Methyl	None Established
Polymer of Epichlorohydrin-Polyglycol	None Established
Triphenyl Phosphite	None Established
Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Salicylic Acid	None Established
Benzene-1,3-Dimethaneamine	0.1 mg/m ³ Ceiling ACGIH TLV

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits.

Personal Protective Equipment:

Respiratory protection: If the exposures are exceeded, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as 4H™.

Eye protection: Chemical safety goggles and faceshield recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Clear liquid

Odor: Mild amine odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: 485°F / 251.6°C
Flash point: 220 °F / 104.4°C	Evaporation rate: 0.7 (butyl acetate =1)
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: 12.6 mmHg	Vapor density: Not available
Relative density: <1	Solubility(is): Partially soluble in water
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.

Chemical stability: Stable

Possibility of hazardous reactions:

Conditions to avoid: Avoid uncontrolled reaction with epoxy resins.

Incompatible materials: Avoid contact with oxidizing agents, acids, bases, reactive metals, ammonia, ketones, aldehydes, acetaldehyde, aluminum alkyl compounds and halogenated compounds. .

Hazardous decomposition products: Thermal decomposition may produce carbon, nitrogen and phosphorus oxides, aldehydes, ammonia and hydrocarbon fragments.

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of vapors and mists may cause mucous membrane and upper respiratory tract irritation. Excessive vapors may cause burns to the mucous membranes and cause lung damage.

Ingestion: Swallowing may cause burns to the mouth, throat and stomach with nausea, vomiting and diarrhea.

Skin contact: May cause severe irritation or burns. May cause allergic skin reaction.

Eye contact: May cause severe irritation or burns with redness, tearing, stinging and swelling. May cause permanent damage.

Chronic effects from short- and long-term exposure: Prolonged exposure to dilute solution may cause dermatitis.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects.

Sensitization: 1, 5 pentanediamine, 2 methyl, 3, aminomethyl -3,5,5-trimethyl, benzene-1,3-dimethanamine, triphenyl phosphite, polymer of epichlorohydrin-polyglycol, diglycidyl ether bisphenol a epoxy resin have been shown to cause sensitization in studies with laboratory animals.

Mutagenicity: None of the components have been shown to cause mutagenicity in bacteria or animal studies.

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values: No toxicity data for the product. The acute toxicity estimate for the product: Oral 1698 mg/kg.

Benzyl Alcohol: Oral rat LD50 1620 mg/kg; Inhalation rat LC50 > 4.178 mg/L

3, Aminomethyl -3,5,5-Trimethyl: Oral rat LD50 1030 mg/kg; Inhalation rat LC50 >5.01 mg/L/4 hr; Dermal rabbit LD50 >2000 mg/kg

1, 5 Pentanediamine, 2 Methyl: Oral rat LD50 1690 mg/kg; Inhalation rat LC50 4.9 mg/L/1 hr.; Dermal rabbit LD50 1870 mg/kg

Polymer of Epichlorohydrin-Polyglycol: Oral rat LD50 >2000 mg/kg, Dermal rabbit LD50 >2000

Triphenyl Phosphite: Oral rat LD50 1.59 g/kg; Inhalation rat LC50 > 6.7 mg/L/1 hr; Dermal rabbit LD50 >2000 mg/kg

Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Dermal rabbit LD50 >2000 mg/kg

Salicylic Acid: Oral rat LD50 891 mg/kg; Dermal rabbit LD50 > 2000 mg/kg

Benzene-1,3-Dimethanamine: Oral rat LD50 500 mg/kg; Inhalation rat LC50 1.34 mg/L/4 hr; Dermal rat LD50 > 3100 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Benzyl Alcohol: 96 hr LC50 Pimephales promelas 770 mg/L; 48 hr EC50 daphnia magna 230 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 770 mg/L

3, Aminomethyl -3,5,5-Trimethyl: 96 hr LC50 Leuciscus idus 110 mg/L; 48 hr EC50 daphnia magna 23 mg/L; 72 hr EC50 Desmodesmus subspicatus 37 mg/L

1, 5 Pentanediamine, 2 Methyl: 96 hr LC50 Pimephales promelas 1825 mg/L (structurally similar chemical); 48 hr EC50 daphnia magna 50 mg/L(structurally similar chemical); 72 hr EC50 Pseudokirchnerella subcapitata > 100 mg/L (structurally similar chemical)

Polymer of Epichlorohydrin-Polyglycol: 96 hr LC50 Leuciscus idus 67 mg/L; 48 hr EC50 daphnia magna 90 mg/L

Triphenyl Phosphite: No data available

Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 Oryzias latipes > 15 mg/L; 48 hr EC50 daphnia magna > 100 mg/L; 72 hr EC50 Desmodesmus subspicatus > 100 mg/L

Salicylic Acid: 48 hr EC50 daphnia magna 870 mg/L; 72 hr EC50 Desmodesmus subspicatus > 100 mg/L

Benzene-1,3-Dimethanamine: No data available

Persistence and degradability: Benzyl alcohol and 1, 5 pentanediamine are readily biodegradable.

Bioaccumulative potential: Benzyl alcohol and 1, 5 pentanediamine and salicylic acid has a BCF of <5.

Mobility in soil: Benzyl alcohol is highly mobility in soil. Salicylic Acid is moderately mobile is soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN 2735	Amines, liquid, corrosive n.o.s. (3, Aminomethyl -3,5,5-Trimethyl, 3, Aminomethyl - 3,5,5-Trimethyl)	8	PG II	None
TDG	UN 2735	Amines, liquid, corrosive n.o.s. (3, Aminomethyl -3,5,5-Trimethyl, 3, Aminomethyl - 3,5,5-Trimethyl)	8	PG II	None
IMDG	UN 2735	Amines, liquid, corrosive n.o.s. (3, Aminomethyl -3,5,5-Trimethyl, 3, Aminomethyl - 3,5,5-Trimethyl)	8	PG II	None
IATA	UN 2735	Amines, liquid, corrosive n.o.s. (3, Aminomethyl -3,5,5-Trimethyl, 3, Aminomethyl - 3,5,5-Trimethyl)	8	PG II	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): Epichlorhydrin 106-89-8 (cancer, male reproductive toxicity) <18 ppm

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class E (Corrosive), Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 3 Flammability = 1 Instability = 0
HMIS Rating: Health = 3 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: May 19, 2014

Date of last revision: New SDS

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.

Shop Floor Resin SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Shop Floor Resin

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: September 8, 2014

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Not Hazardous	Skin Irritation Category 2 Eye Irritation Category 2A Skin Sensitization Category 1

Labeling:

Warning!



Hazard statement(s)

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary statement(s)

Avoid breathing mist, vapors or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, eye protection and face protection.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical attention.
Dispose of contents and container in accordance with local

and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	40-85%
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	68609-97-2	5-25%
Epoxy Resin	25085-99-8	1-5%
Titanium Dioxide*	13463-67-7	1-5

*The titanium dioxide in this product are inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore this product is not classified as a carcinogen.

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If irritation occurs or breathing is difficult, get medical attention.

Skin contact: Remove contaminated clothing. Wash with soap and water. If irritation or rash develops, get medical attention.

Eye contact: Immediately flush with large quantities of water for several minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

Most important symptoms/effects, acute and delayed: May cause eye and skin irritation. May cause allergic skin reaction.

Indication of immediate medical attention and special treatment, if necessary: None expected under normal conditions of use. If allergic skin reaction occurs, discontinue use and get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use media appropriate for the surrounding fire.

Specific hazards arising from the chemical: Combustion may produce carbon oxides.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents, acids and bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	None Established
Epoxy Resin	None Established
Titanium Dioxide	15 mg/m ³ TWA OSHA PEL (total dust) 10 mg/m ³ TWA ACGIH TLV

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposures.

Personal Protective Equipment:

Respiratory protection: If the exposures are excessive, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as butyl rubber.

Eye protection: Chemical safety goggles recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Viscous colored liquid

Odor: Mild characteristic odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: Not available
Flash point: 485 °F / 251.6°C	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: Not available	Vapor density: Not available
Relative density: >1	Solubility(is): Insoluble
Partition coefficient: n-Octanol/water: Not	Auto-ignition temperature: Not available

applicable	
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.
Chemical stability: Stable.
Possibility of hazardous reactions: May polymerize with amines, mercaptans and Lewis acids.
Conditions to avoid: Avoid excessive heat.
Incompatible materials: Avoid contact with oxidizing agents, acids and bases.
Hazardous decomposition products: Thermal decomposition may produce carbon oxides.

11. TOXICOLOGICAL INFORMATION

Inhalation: Excessive inhalation of mists may cause mucous membrane and upper respiratory tract irritation.
Ingestion: Swallowing may cause gastrointestinal irritation, nausea and diarrhea.
Skin contact: May cause skin irritation with redness, itching and pain. May cause allergic skin reaction (sensitization).
Eye contact: May cause irritation with redness, tearing, stinging and swelling.

Chronic effects from short- and long-term exposure: None known.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects.

Sensitization: Diglycidyl ether bisphenol A epoxy resin and aliphatic glycidyl ether diluent causes sensitization in laboratory animals.

Mutagenicity: This product is not expected to cause mutagenic activity.

Carcinogenicity: Titanium dioxide is listed by IARC as “Probably Carcinogenic to Humans” (Group 2B). The titanium dioxide in this product is bound in the epoxy so there is no exposure expected during the use of this product. None of the other components greater than 0.1% are listed as a carcinogen by IARC, NTP ACGIH or OSHA.

Acute Toxicity Values:

Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC0 – no deaths at saturation; Dermal rabbit LD50 > 2000 mg/kg
Aliphatic Glycidyl Ether Diluent: Oral rat LD50 26.8 g/kg
Epoxy Resin: No toxicity data available
Titanium Dioxide: Oral mouse LD50 >5000 mg/kg; Inhalation rat LC50 >6.82 mg/L/4 hr;

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 *Oncorhynchus mykiss* 1.2 mg/L; 48 hr EC50 *daphnia magna* 1.1 mg/L; 72 hr EC50 *Scenedesmus capricornutum* 9.4 mg/L
Aliphatic Glycidyl Ether Diluent: 96 hr LC50 *Oncorhynchus mykiss* > 5000 mg/L; 72 hr IC50 *Pseudokirchnerella subcapitata* 843.75 mg/L
Epoxy Resin: No data available
Titanium Dioxide: 72 hr EC50 *Pseudokirchnerella subcapitata* 12.7 mg/L

Persistence and degradability: Diglycidyl ether bisphenol A epoxy resin is not readily biodegradable. Aliphatic glycidyl ether diluent is readily biodegradable.

Bioaccumulative potential: Diglycidyl ether bisphenol A epoxy resin has a BCF of 31. Aliphatic glycidyl ether diluent has a BCF 160-263.

Mobility in soil: No data available.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	None	Not Regulated	None	None	None
TDG	None	Not Regulated	None	None	None
IMDG	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Marine Pollutant
IATA	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Yes

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): epichlorohydrin 106-89-8 <0.0.095% (cancer, male reproductive toxicity)

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian WHMIS Classification: Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 1 Instability = 0
HMIS Rating: Health = 2 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: September 8, 2014

Date of last revision: New SDS

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.

Dur-A-Crete Aggregate SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Crete Aggregate

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: January 30, 2015

2. HAZARD(S) IDENTIFICATION

Classification:

Physical	Health
Not Hazardous	Carcinogenicity Category 1A Specific Target Organ Toxicity – Repeat Exposure Category 1

Labeling:

Danger!



Hazard statement(s)

May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated inhalation exposure.

Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
In case of inadequate ventilation wear respiratory protection.
IF exposed or concerned: Get medical attention.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Crystalline Silica	14808-60-7	99-100%

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. Get medical attention if irritation persists.

Skin contact: Remove contaminated clothing and launder before reuse. Wash skin with soap and water. Get medical attention if irritation develops or persists.

Eye contact: Immediately flush eyes with large quantities of water for several minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: If swallowed, rinse mouth with water.

Most important symptoms/effects, acute and delayed: Dust may cause mechanical eye and skin irritation. Inhalation of dust may cause respiratory irritation, coughing and difficulty in breathing. Prolonged overexposure to respirable crystalline silica may cause lung disease (silicosis) and increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure

Indication of immediate medical attention and special treatment, if necessary: None required under normal conditions of use.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use media appropriate to the surrounding fire.

Specific hazards arising from the chemical: Not flammable or combustible. Dry powders may accumulate static charge in handling which can be a source of ignition for flammable atmospheres.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Report releases as required by local and federal authorities.

Methods and materials for containment and cleaning up: Collect using dustless method and place in appropriate container for use or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation and proper dust

collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after use.

Dust can accumulate electrostatic charges due to friction from transfer and mixing operations and cause an electrical spark (ignition source) which can ignite flammable liquids and atmospheres. Provide adequate precautions when adding this product to flammable and combustible mixtures like paints and coating, such as electrical grounding and bonding, inert atmosphere or non-sparking tools. However, bonding and grounds may not eliminate the hazard for static accumulation.

Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated area. Protect from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Crystalline Silica	10 mg/m ³ TWA OSHA PEL (respirable fraction)
	% Silica + 2
	30 mg/m ³ TWA OSHA PEL (total dust)
	% Silica + 2
	0.025 mg/m ³ TWA ACGIH TLV (respirable fraction)

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

Individual protection measures, such as personal protective equipment:

Respiratory protection: If the exposure limits are exceeded a NIOSH approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Skin protection: Abrasive resistant gloves are recommended to prevent skin contact.

Eye protection: Chemical safety glasses with sideshields are recommended to prevent eye contact.

Other: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Natural aggregate

Odor: No odor

Odor threshold: Not available	pH: Not applicable
Melting Point/Freezing Point: 3000°F / 1648.9°C	Boiling Point: 4000°F/2204.4°C
Flash point: Not flammable	Evaporation rate: Not applicable
Flammability (solid, gas): Not flammable or combustible	
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: Not applicable	Vapor density: Not applicable
Relative density: >1	Solubility(is): Insoluble in water

Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not applicable
Decomposition temperature: Not available	Viscosity: Not applicable

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable

Possibility of hazardous reactions: Crystalline silica will dissolve in hydrofluoric acid and produce silicone tetrafluoride.

Conditions to avoid: None known.

Incompatible materials: Avoid contact with oxidizing agents.

Hazardous decomposition products: None known.

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of dust may cause irritation to the nose, throat and upper respiratory tract with coughing and shortness of breath.

Ingestion: Not expected to cause adverse effects.

Skin contact: Prolonged skin contact may cause mechanical irritation and abrasions.

Eye contact: Dust may cause irritation or redness with inflammation of the cornea. May cause mechanical irritation.

Chronic effects from short- and long-term exposure: Chronic inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.

Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental toxicity.

Sensitization: None of the components have been shown to cause sensitization in animals or humans.

Mutagenicity: None of the components have been shown to cause mutagenic activity.

Carcinogenicity: Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC and "Known to be a Human Carcinogen" by NTP. None of the other components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values:

Crystalline Silica, Quartz: Oral rat LD50 >22,500 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Crystalline Silica, Quartz: No data available

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential: Not expected to be bioaccumulative.

Mobility in soil: No data available.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	None	Not Regulated	None	None	None
TDG	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA	None	Not Regulated	None	None	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Chronic Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): Crystalline silica, quartz (14808-60-7) 90-100% cancer

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian WHMIS Classification: Class D Division 2A (Very toxic material causing other toxic effects)

This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 0 Flammability = 0 Instability = 0
HMIS Rating: Health = 0* Flammability = 0 Physical Hazard = 0

SDS Revision History: All sections revised – Converted to GHS format

Date of preparation: January 30, 2015

Date of last revision: New SDS

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.

**Dur-A-Gard Hardener
Regular, Fast, OPF, No Sag
SAFETY DATA SHEET**

1. IDENTIFICATION

Product Identifier: Dur-A-Gard Hardener – Regular, Fast, OPF, NoSag

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: May 19, 2014

2. HAZARD(S) IDENTIFICATION

This product is one part of a 2 part product. Read and understand the hazard information on the SDS for Dur-A-Gard Resin before using this product.

Classification:

Physical	Health
Not Hazardous	Acute Toxicity Category 4 (Oral) Skin Corrosion Category 1A Eye Damage Category 1 Skin Sensitization Category 1 Specific Target Organ Toxicity – Repeat Exposure Category 2 Germ Cell Mutagenicity Category 2 Toxic to Reproduction Category 1B

Labeling:

Danger!



Hazard statement(s)

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause damage to liver, kidneys and

Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapors or spray.

central nervous system through prolonged or repeated exposure.
Suspected of causing genetic defects.
May damage the unborn child.

Contaminated work clothing should not be allowed out of the workplace.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing and eye and face protection.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water.
Wash contaminated clothing before reuse.
Immediately call a POISON CENTER or doctor.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
IF exposed or concerned: Get medical attention. Store locked up.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Benzyl Alcohol	100-51-6	30-50
Salicylic Acid	69-72-7	1-10
Polymer of Epichlorohydrin-Polyglycol	Proprietary	1-10
3, Aminomethyl -3,5,5-Trimethylcyclohexylamine	2855-13-2	0-40
1,3-cyclohexanedimethanamine	2579-20-6	0-30
Polyoxypropylenediamine	9046-10-0	0-20
1-Methoxy-1 propanol (PGME)	107-98-2	0-20
1, 5 Pentanediamine, 2 Methyl	15520-10-2	0-10
Triphenyl Phosphite	101-02-0	0-10
Phenol	108-95-2	0-5
Benzene-1,3-Dimethanamine	1477-55-0	0-5
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	0-5
2-Methoxy-1-propanol	1589-47-5	<1

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.

Skin contact: Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get immediate medical attention. If rash occurs, get medical attention. Launder clothing before re-use.

Eye contact: Immediately flush with large quantities of water for 15 minutes, holding the eyelids apart. Get immediate medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. DO NOT INDUCE VOMITING. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: May cause severe eye and skin irritation with possible burns. May cause allergic skin reaction. Inhalation of vapors or mists may cause irritation of mucous membranes and upper respiratory tract. Harmful if swallowed. Prolonged over exposure to phenol may cause kidney, liver and central nervous system effects. Possible developmental hazard. Possible mutagen.

Indication of immediate medical attention and special treatment, if necessary: For eye and skin contact, get immediate attention. If swallowed, get immediate medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use water spray, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

Specific hazards arising from the chemical: Combustion may produce carbon and nitrogen oxides, aldehydes, ammonia, hydrocarbon fragments, phosphorous and phosphorous acid.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Prevent release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Prevent contact with eyes and skin. Do not breathe vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Do not taste or swallow. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Benzyl Alcohol	10 ppm TWA AIHA WEEL
Salicylic Acid	None Established
Polymer of Epichlorohydrin-Polyglycol	None Established
3, Aminomethyl -3,5,5-Trimethyl	None Established
1,3-cyclohexanedimethanamine	None Established
Polyoxypropylenediamine	None Established
1-Methoxy-1 propanol (PGME)	50 ppm TWA ACGIH TLV 100 ppm STEL ACGIH TLV
1, 5 Pentanediamine, 2 Methyl	None Established
Triphenyl Phosphite	None Established
Phenol	5 ppm, skin TWA OSHA PEL 5 ppm, skin TWA ACGIH TLV
Benzene-1,3-Dimethaneamine	0.1 mg/m ³ Ceiling ACGIH TLV
Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
2-Methoxy-1-propanol	None Established

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits.

Personal Protective Equipment:

Respiratory protection: If the exposures are exceeded, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as 4H™.

Eye protection: Chemical safety goggles and faceshield recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Clear liquid

Odor: Mild amine odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: 485°F / 251.6°C
Flash point: 220 °F / 104.4°C	Evaporation rate: 0.7 (butyl acetate =1)
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: 12.6 mmHg	Vapor density: Not available
Relative density: <1	Solubility(is): Partially soluble in water
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.

Chemical stability: Stable

Possibility of hazardous reactions:

Conditions to avoid: Avoid uncontrolled reaction with epoxy resins.

Incompatible materials: Avoid contact with oxidizing agents, acids, bases, reactive metals, ammonia, ketones, aldehydes, acetaldehyde, aluminum alkyl compounds and halogenated compounds. .

Hazardous decomposition products: Thermal decomposition may produce carbon and nitrogen oxides, aldehydes, ammonia, hydrocarbon fragments, phosphorous and phosphorous acid.

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of vapors and mists may cause mucous membrane and upper respiratory tract irritation. Excessive vapors may cause burns to the mucous membranes and cause lung damage.

Ingestion: Swallowing may cause burns to the mouth, throat and stomach with nausea, vomiting and diarrhea.

Skin contact: May cause severe irritation or burns. May cause allergic skin reaction.

Eye contact: May cause severe irritation or burns with redness, tearing, stinging and swelling. May cause permanent damage.

Chronic effects from short- and long-term exposure: Prolonged overexposure to phenol has been shown to cause kidney, liver and central nervous system damage.

Reproductive Toxicity: No information is available on potential developmental toxicity via oral administration of 2-methoxypropanol. It is recognized that 2-methoxypropanoic acid is the putatively developmentally toxic metabolite of 2-methoxypropanol. Pregnant rabbits were administered 2-methoxypropanoic acid via gavage during gestation days 7–19, followed by evaluation on day 28. Significantly increased fetal resorption and incidence of fetal variations and malformations, such as missing ribs, delayed ossifications, retrocaval ureter and paraovarian cyst, were observed at 78 mg of 2-methoxypropanoic acid/kg (equivalent to 67.6 mg 2-methoxypropanol/kg, based on same molar amount conversion). The NOEL was determined to be of 26 mg/kg (equivalent to 22.5 mg/kg of 2-methoxypropanol)

Sensitization: 3, Aminomethyl -3,5,5-trimethyl, diglycidyl ether bisphenol A epoxy resin, triphenyl phosphite and Benzene-1,3-Dimethanamine have been shown to cause sensitization in studies with laboratory animals.

Mutagenicity: Phenol has been shown to cause mutagenicity in in vitro mammalian mutagenicity assays.

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values: No toxicity data for the product. The acute toxicity value for the product: Oral 1072-1885 mg/kg.

Benzyl Alcohol: Oral rat LD50 1620 mg/kg; Inhalation rat LC50 > 4.178 mg/L

Salicylic Acid: Oral rat LD50 891 mg/kg; Dermal rabbit LD50 > 2000 mg/kg

Polymer of Epichlorohydrin-Polyglycol: Oral rat LD50 >2000 mg/kg, Dermal rabbit LD50 >2000

3, Aminomethyl -3,5,5-Trimethyl: Oral rat LD50 1030 mg/kg; Inhalation rat LC50 >5.01 mg/L/4 hr; Dermal rabbit LD50 >2000 mg/kg

1,3-cyclohexanedimethanamine: Oral rat LD50 >300 – 2000 mg/kg; Dermal rabbit LD50 1700 mg/kg

Polyoxypropylenediamine: Oral rat LD50 2885 mg/kg; Inhalation rat LC50 >0.74 mg/L/8 hr (highest dose tested); Dermal rabbit LD50 2980 mg/kg.
1-Methoxy-1 propanol: Oral rat LD50 4016 mg/kg; Inhalation rat LC50 > 7000 ppm/6 hr; Dermal rabbit LD50 > 2000 mg/kg
1, 5 Pentanediamine, 2 Methyl: Oral rat LD50 1690 mg/kg; Inhalation rat LC50 4.9 mg/L/1 hr.; Dermal rabbit LD50 1870 mg/kg
Triphenyl Phosphite: Oral rat LD50 1.59 g/kg; Inhalation rat LC50 > 6.7 mg/L/1 hr; Dermal rabbit LD50 >2000 mg/kg
Phenol: Oral rat LD50 650 mg/kg; Inhalation rat LC50 >900 mg/m³/8 hr.; Dermal rabbit LD50 660 mg/kg
Benzene-1,3-Dimethanamine: Oral rat LD50 500 mg/kg; Inhalation rat LC50 1.34 mg/L/4 hr; Dermal rat LD50 > 3100 mg/kg
Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Dermal rabbit LD50 >2000 mg/kg
2-Methoxy-1-propanol: Oral rat LD50 5710; Dermal rabbit 5660 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Benzyl Alcohol: 96 hr LC50 *Pimephales promelas* 770 mg/L; 48 hr EC50 *daphnia magna* 230 mg/L; 72 hr EC50 *Pseudokirchnerella subcapitata* 770 mg/L
Salicylic Acid: 48 hr EC50 *daphnia magna* 870 mg/L; 72 hr EC50 *Desmodesmus subspicatus* > 100 mg/L
Polymer of Epichlorohydrin-Polyglycol: 96 hr LC50 *Leuciscus idus* 67 mg/L; 48 hr EC50 *daphnia magna* 90 mg/L
3, Aminomethyl -3,5,5-Trimethyl: 96 hr LC50 *Leuciscus idus* 110 mg/L; 48 hr EC50 *daphnia magna* 23 mg/L; 72 hr EC50 *Desmodesmus subspicatus* 37 mg/L
1,3-cyclohexanedimethanamine: 96 hr LC50 *Leuciscus idus* 130 mg/L; 48 hr EC50 *daphnia magna* 33.1 mg/L; 72 hr EC50 *Pseudokirchnerella subcapitata* 56.7 mg/L
Polyoxypropylenediamine: 96 hr LC50 *Oncorhynchus mykiss* > 1000 mg/L (structurally similar chemical); 48 hr EC50 *daphnia magna* 80 mg/L; 72 hr EC50 *Pseudokirchnerella subcapitata* 15 mg/L
1-Methoxy-1 propanol: 96 hr LC50 *Pimephales promelas* 20800 mg/L; 48 hr EC50 *daphnia magna* 23,300 mg/L;
1, 5 Pentanediamine, 2 Methyl: 96 hr LC50 *Pimephales promelas* 1825 mg/L (structurally similar chemical); 48 hr EC50 *daphnia magna* 50 mg/L (structurally similar chemical); 72 hr EC50 *Pseudokirchnerella subcapitata* > 100 mg/L (structurally similar chemical)
Triphenyl Phosphite: No data available
Phenol: 96 hr LC50 *Pimephales promelas* 67.5 mg/L; 48 hr EC50 *daphnia magna* 3.1 mg/L; 72 hr EC50 *Selenastrum capricornutum* 61.1 mg/L
Benzene-1,3-Dimethanamine: No data available
Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 *Oryzias latipes* > 15 mg/L; 48 hr EC50 *daphnia magna* > 100 mg/L; 72 hr EC50 *Desmodesmus subspicatus* > 100 mg/L
2-Methoxy-1-propanol: No data available

Persistence and degradability: Benzyl alcohol, 1, 5 pentanediamine, 1-methoxy-1 propanol, 2-methoxy-1-propanol and phenol are readily biodegradable.

Bioaccumulative potential: Benzyl alcohol, 1, 5 pentanediamine, 1-methoxy-1 propanol, methoxy-1-propanol and salicylic acid has a BCF of <5.

Mobility in soil: Benzyl alcohol, 1-methoxy-1 propanol, methoxy-1-propanol and phenol are highly mobility in soil. Salicylic Acid is moderately mobile in soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
TDG	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
IMDG	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None
IATA	UN 2735	Amines, liquid, corrosive n.o.s. (1,3-cyclohexanedimethanamine, 1, 5 Pentanediamine, 2 Methyl)	8	PG II	None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 20,000 lbs. based on the RQ for Phenol of 1,000 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

SARA Hazard Category (311/312): Acute Health, Chronic Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Phenol	108-95-2	1-5%
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California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): Epichlorohydrin 106-89-8 (cancer, male reproductive toxicity) <106 ppm

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class E (Corrosive), Class D Division 2 Subdivision A (Very Toxic Material Causing other Toxic Effects), Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 3 Flammability = 1 Instability = 0
HMIS Rating: Health = 3 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: May 19, 2014

Date of last revision: New SDS

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.

Dur-A-Gard & Dur-A-Gard w/BioPruf Resin SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Gard & Dur-A-Gard w/BioPruf Resin

Recommended use: Floor Surfacing

Manufacturer Name: Dur-A-Flex, Inc.
95 Goodwin Street
East Hartford, CT 06108

Telephone number: 860-528-9838

Emergency phone number: 1-800- 424-9300 (CHEMTREC)

Date of Preparation: May 19, 2014

2. HAZARD(S) IDENTIFICATION

This product is one part of a 2 part product. Read and understand the hazard information on the SDS for Dur-A-Gard Hardener before using this product.

Classification:

Physical	Health
Not Hazardous	Skin Irritation Category 2 Eye Irritation Category 2A Skin Sensitization Category 1

Labeling:

Warning!



Hazard statement(s)

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.

Precautionary statement(s)

Avoid breathing mist, vapors or spray.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, eye protection and face protection.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue

rinsing.
If eye irritation persists: Get medical attention.
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	50-90%
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	68609-97-2	5-25%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation: Remove victim to fresh air. If irritation occurs or breathing is difficult, get medical attention.

Skin contact: Remove contaminated clothing. Wash with soap and water. If irritation or rash develops, get medical attention.

Eye contact: Immediately flush with large quantities of water for 15 minutes, holding the eyelids apart. Get medical attention if irritation persists.

Ingestion: If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

Most important symptoms/effects, acute and delayed: May cause eye and skin irritation. May cause allergic skin reaction.

Indication of immediate medical attention and special treatment, if necessary: None expected under normal conditions of use. If allergic skin reaction occurs, discontinue use and get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use media appropriate for the surrounding fire.

Specific hazards arising from the chemical: Combustion may produce carbon oxides.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing as described in Section 8.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent. Place into an appropriate container for disposal. Caution slip hazard. Wash spill site with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling and before eating, drinking, smoking or using the toilet. Use with adequate ventilation.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from physical damage. Store away from oxidizing agents, acids and bases.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	None Established

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposures.

Personal Protective Equipment:

Respiratory protection: If the exposures are excessive, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin protection: Wear impervious gloves such as butyl rubber.

Eye protection: Chemical safety goggles recommended.

Other: Impervious clothing as needed to prevent contact. An eye wash and safety shower should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Viscous liquid

Odor: Mild characteristic odor

Odor threshold: Not available	pH: Not available
Melting Point/Freezing Point: - Not available	Boiling Point: Not available
Flash point: 485 °F / 251.6°C	Evaporation rate: Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not available	UEL: Not available
Vapor pressure: Not available	Vapor density: Not available
Relative density: >1	Solubility(is): Insoluble
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: None known.

Chemical stability: Stable.

Possibility of hazardous reactions: May polymerize with amines, mercaptans and Lewis acids.

Conditions to avoid: Avoid excessive heat.

Incompatible materials: Avoid contact with oxidizing agents, acids and bases.

Hazardous decomposition products: Thermal decomposition may produce carbon oxides.

11. TOXICOLOGICAL INFORMATION

Inhalation: Excessive inhalation of mists may cause mucous membrane and upper respiratory tract irritation.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea and diarrhea.

Skin contact: May cause skin irritation with redness, itching and pain. May cause allergic skin reaction (sensitization).

Eye contact: May cause irritation with redness, tearing, stinging and swelling.

Chronic effects from short- and long-term exposure: None known.

Reproductive Toxicity: This product is not expected to cause adverse reproductive or developmental effects.

Sensitization: Diglycidyl ether bisphenol A epoxy resin and aliphatic glycidyl ether diluent causes sensitization in laboratory animals.

Mutagenicity: This product is not expected to cause mutagenic activity.

Carcinogenicity: None of the components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values:

Diglycidyl Ether Bisphenol A Epoxy Resin: Oral rat LD50 > 2000 mg/kg; Inhalation rat LC0 – no deaths at saturation; Dermal rabbit LD50 > 2000 mg/kg

Aliphatic Glycidyl Ether Diluent: Oral rat LD50 26.8 g/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Diglycidyl Ether Bisphenol A Epoxy Resin: 96 hr LC50 *Oncorhynchus mykiss* 1.2 mg/L; 48 hr EC50 daphnia magna 1.1 mg/L; 72 hr EC50 *Scenedesmus capricornutum* 9.4 mg/L

Aliphatic Glycidyl Ether Diluent: 96 hr LC50 *Oncorhynchus mykiss* > 5000 mg/L; 72 hr IC50

Pseudokirchnerella subcapitata 843.75 mg/L

Persistence and degradability: Diglycidyl ether bisphenol A epoxy resin is not readily biodegradable.

Aliphatic glycidyl ether diluent is readily biodegradable.

Bioaccumulative potential: Diglycidyl ether bisphenol A epoxy resin has a BCF of 31. Aliphatic glycidyl ether diluent has a BCF 160-263.

Mobility in soil: No data available.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	None	Not Regulated	None	None	None
TDG	None	Not Regulated	None	None	None
IMDG	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Marine Pollutant
IATA	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Yes

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health

SARA 313 Information: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects): epichlorohydrin 106-89-8 <0.1% (cancer, male reproductive toxicity)

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CANADA:

Canadian CEPA: All of the ingredients in this product are listed on the Canadian DSL.

Canadian WHMIS Classification: Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health = 2 Flammability = 1 Instability = 0
HMIS Rating: Health = 2 Flammability = 1 Physical Hazard = 0

SDS Revision History: Converted to GHS format. All sections revised.

Date of preparation: May 19, 2014

Date of last revision: New SDS

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