

**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 6, 2019

**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 central nervous system through prolonged or

**Precautionary statement(s)**

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.

repeated exposure.  
Suspected of causing genetic defects.  
May damage the unborn child.

**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.  
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.

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-Trimethyl	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 <sup>3</sup> 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

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> - Not available	<b>Boiling Point:</b> 485°F / 251.6°C
<b>Flash point:</b> 220 °F / 104.4°C	<b>Evaporation rate:</b> 0.7 (butyl acetate =1)
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not available	<b>UEL:</b> Not available
<b>Vapor pressure:</b> 12.6 mmHg	<b>Vapor density:</b> Not available
<b>Relative density:</b> <1	<b>Solubility(is):</b> Partially soluble in water
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> 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/m<sup>3</sup>/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 Desmodosmus 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 Desmodosmus 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 Desmodosmus 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 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
<b>DOT</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamine)	8	PG I	None
<b>TDG</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamine)	8	PG I	None
<b>IMDG</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamine)	8	PG I	None
<b>IATA</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamine)	8	PG I	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):** Refer to Section 2 for the OSHA Hazard Classification

**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.

## 16. OTHER INFORMATION

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

**SDS Revision History:** Section 14-proper shipping name.

**Date of preparation:** May 6, 2019

**Date of last revision:** May 19, 2014

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/Micropel Resin SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product Identifier:** Dur-A-Gard & Dur-A-Gard w/Micropel 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:** Revised November 15, 2016

### 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

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> - Not available	<b>Boiling Point:</b> Not available
<b>Flash point:</b> 485 °F / 251.6°C	<b>Evaporation rate:</b> Not available
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not available	<b>UEL:</b> Not available
<b>Vapor pressure:</b> Not available	<b>Vapor density:</b> Not available
<b>Relative density:</b> >1	<b>Solubility(is):</b> Insoluble
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> 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
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None
<b>IMDG</b>	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Marine Pollutant
<b>IATA</b>	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

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.

## Poly-Thane #2 High Solids Resin SAFETY DATA SHEET

**1. IDENTIFICATION**

**Product identifier:** Poly-Thane #2 High Solids 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:** February 18, 2015

**2. HAZARD(S) IDENTIFICATION**

**Classification:**

Physical	Health
Flammable Liquid Category 3	Toxic to Reproduction Category 1B

**Labeling:**

**Danger!**



**Hazard statement(s)**

Flammable liquid and vapor.  
May damage the unborn child

**Precautionary statement(s)**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, sparks, open flames, and hot surfaces.  
No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment  
Use explosion-proof electrical, ventilating and lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves and eye protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

IF exposed or concerned: Get medical attention.  
In case of fire: Use water spray, carbon dioxide, alcohol foam or dry chemical to extinguish.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents and container in accordance with local and national regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
1-Methoxy-2-propyl acetate (PGMEA)	108-65-6	40-60%
2-Methoxy-1-propyl acetate	70657-70-4	0.1-0.5%

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 irritation occurs or breathing is difficult, get medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin with soap and water for several minutes. If irritation persists, get medical attention. Launder clothing before re-use.

**Eye contact:** Flush with large quantities of water, 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 mild eye irritation. Prolonged skin contact may cause irritation. Inhalation of vapors or mists may cause respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

### 5. FIRE-FIGHTING MEASURES

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

**Specific hazards arising from the chemical:** Flammable liquid and vapor. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce carbon oxides and nitrogen oxides.

**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:** Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources. Ventilate the area. Provide explosion-proof ventilation.

**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. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Ground container when pouring. Keep away from heat, sparks, flames and all sources of ignition. Do not expose to direct sunlight. Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well ventilated area. Keep container tightly closed when not in use. Protect from physical damage. Keep away from oxidizers and other incompatible materials.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

1-Methoxy-2-propyl acetate (PGMEA)	50 ppm AIHA WEEL
2-Methoxy-1-propyl acetate	None Established

**Appropriate engineering controls:** Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits. Use explosion-proof equipment where required.

### Personal Protective Equipment:

**Respiratory protection:** In operations where exposure limits are exceeded, an approved respirator with organic vapor cartridges or supplied air respirator should be used. Selection and use of respiratory equipment must be in accordance with appropriate regulations and good industrial hygiene practice.

**Skin protection:** Wear impervious gloves such as butyl rubber, nitrile or neoprene to prevent skin contact. .

**Eye protection:** Wear safety chemical goggles if contact is possible.

**Other:** Impervious clothing as needed to prevent contact and prevent contamination of personal clothing. Suitable washing facilities should be available in the work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

**Odor:** Fruity, aromatic odor



<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> 295°F / 145.8°C
<b>Flash point:</b> 107.6 °F / 42°C	<b>Evaporation rate:</b> 0.3 (PGMEA)
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> 1.5% (PGMEA)	<b>UEL:</b> 10.0 % (PGMEA)
<b>Vapor pressure:</b> 0.5 mmHg (PGMEA)	<b>Vapor density (air =1):</b> 4.6 (PGMEA)
<b>Relative density:</b> >1	<b>Solubility(is):</b> Appreciable in water
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> 518°F (270°C) (PGMEA)
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not available

## 10. STABILITY AND REACTIVITY

**Reactivity:** May react with oxygen.

**Chemical stability:** Stable under normal conditions of use.

**Possibility of hazardous reactions:** May react with oxygen to form peroxides.

**Conditions to avoid:** Avoid heat, sparks and open flames.

**Incompatible materials:** Avoid contact with oxidizing agents, reducing agents and peroxides.

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

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Vapors or mists may cause respiratory irritation and central nervous system effects including headache, dizziness, nausea and drowsiness.

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

**Skin contact:** Prolonged skin contact may cause redness and drying of the skin. 1-Methoxy-2-propyl acetate may be absorbed through the skin causing symptoms similar to those listed under inhalation.

**Eye contact:** May cause mild eye irritation with redness, tearing and swelling.

**Chronic effects from short- and long-term exposure:** Chronic absorption may cause kidney or liver damage based on studies with laboratory animals.

**Reproductive Toxicity:** 2-Methoxy-1-propanol has been shown to cause developmental effects in the offspring of female rabbits exposed by inhalation during pregnancy. The NOEL was 145 ppm. 2-Methoxy-1-propyl acetate is metabolized to 2-Methoxy-1-propanol in the body. 2-Methoxy-1-propyl acetate was also tested and found to cause developmental effects with a NOEL of 145 ppm in rabbits.

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

**Acute Toxicity Values:** No toxicity data for the product. Acute Toxicity Estimate: Oral rat LD50 14285 mg/kg, Dermal >2000 mg/kg

1-Methoxy-2-propyl acetate: Oral rat LD50 8532 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LC0 >23.4 mg/L/6 hr

2-Methoxy-1-propyl acetate: No toxicity data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

1-Methoxy-2-propyl acetate: 96 hr LC50 Oncorhynchus mykiss 100 mg/L, 48 hr EC50 daphnia magna > 500 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata > 1000 mg/L  
2-Methoxy-1-propyl acetate: No data available

**Persistence and degradability:** 1-Methoxy-2-propyl acetate is readily biodegradable.

**Bioaccumulative potential:** -Methoxy-2-propyl acetate has a calculated BCF of 3.16. This suggests the potential for bioaccumulation is low.

**Mobility in soil:** -Methoxy-2-propyl acetate is highly mobility on 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
<b>DOT</b>	UN1866	Exempted from HazMat Regulations (49CFR 173.150f)	3	III	None
<b>TDG</b>	UN1866	Exempted from Regulation (Section 1.33)	3	III	None
<b>IMDG</b>	UN1866	Resin Solution	3	III	None
<b>IATA</b>	UN1866	Resin Solution	3	III	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, Fire Hazard

**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):

Ethylbenzene	100-41-4	<0.02	Cancer
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Benzene	71-43-2,	<0.5 ppm	Cancer, developmental, male reproductive toxicity
toluene	108-88-3	<0.5 ppm	Developmental
Benzene, 1,3-Butadiene	106-99-0	<2.4 ppm	Cancer, developmental, male reproductive toxicity, female 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 B-3 (Combustible Liquid), Class D Division 2 Subdivision A (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 = 2    Flammability = 2    Instability = 0  
**HMIS Rating:** Health = 2\*    Flammability = 2    Physical Hazard = 0

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

**Date of preparation:** February 18, 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-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:** November 5, 2019

**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 1B 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)**

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. Immediately call a POISON CENTER or doctor.

Suspected of causing genetic defects.

**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.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves, protective clothing, eye protection and face protection.

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.

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	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-Trimethyl	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 <sup>3</sup> 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**

**Appearance (physical state, color, etc.):** Pale yellow liquid

**Odor:** Amine odor

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> - Not available	<b>Boiling Point:</b> 485°F / 251.6°C
<b>Flash point:</b> >220 °F / >104.4°C	<b>Evaporation rate:</b> Not available
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not available	<b>UEL:</b> Not available
<b>Vapor pressure:</b> 0.02 mmHg	<b>Vapor density:</b> Not available
<b>Relative density:</b> <1	<b>Solubility(is):</b> Partially soluble
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> 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/m<sup>3</sup>/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 *Desmodesmus 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 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
<b>DOT</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamines)	8	PG II	None
<b>TDG</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamines)	8	PG II	None
<b>IMDG</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamines)	8	PG II	None
<b>IATA</b>	UN 2735	Amines, liquid, corrosive n.o.s. (Polyamines)	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):** Refer to Section 2 for the OSHA Hazard Classification.

**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.

**16. OTHER INFORMATION**

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

**SDS Revision History:** Section 2 – revise hazard classification, Section 14 – correct packing group.

**Date of preparation:** November 5, 2019

**Date of last revision:** May 6, 2019

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

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> - Not available	<b>Boiling Point:</b> Not available
<b>Flash point:</b> 485 °F / 251.6°C	<b>Evaporation rate:</b> Not available
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not available	<b>UEL:</b> Not available
<b>Vapor pressure:</b> Not available	<b>Vapor density:</b> Not available
<b>Relative density:</b> >1	<b>Solubility(is):</b> Insoluble
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> 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
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None
<b>IMDG</b>	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)	9	PG III	Marine Pollutant
<b>IATA</b>	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.



## Poly-Thane #2 High Solids Hardener SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product Identifier:** Poly-Thane #2 High Solids 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:** December 12, 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 Poly-Thane #2 High Solids Resin before using this product.

**Classification:**

Physical	Health
Not Hazardous	Acute Toxicity Category 3 – Inhalation Skin Sensitization Category 1 Respiratory Sensitization Category 1 Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation)

**Labeling:**

**Danger!**



**Hazard statement(s)**

Toxic if inhaled.  
May cause an allergic skin reaction.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause respiratory irritation.

**Precautionary statement(s)**

Avoid breathing mist, vapors and spray.  
Use only outdoors or in a well-ventilated area.  
Contaminated work clothing should not be allowed out of the workplace.  
Wear protective gloves.  
In case of inadequate ventilation wear respiratory protection.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation or rash occurs: Get medical attention.

Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor.  
Store in a well-ventilated place. Keep container tightly closed.  
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
Homopolymer of Hexamethylene Diisocyanate	28182-81-2	80-100%
Hexamethylene-1,6-Diisocyanate	822-06-0	<0.4%

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

### 4. FIRST-AID MEASURES

**Inhalation:** Immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention. Asthma-like symptoms may develop immediately or delayed up to several hours.

**Skin contact:** Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. If rash or irritation develops, get medical attention. Launder clothing before re-use.

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

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

**Most important symptoms/effects, acute and delayed:** May be irritating to eyes, skin and respiratory system. May cause allergic skin and respiratory reaction. If an allergic respiratory reaction occurs, get immediate medical attention. Symptoms may be delayed. Individuals sensitized to isocyanates may have a life-threatening allergic reaction.

**Indication of immediate medical attention and special treatment, if necessary:** If skin or respiratory sensitization occurs, get immediate medical attention. Symptoms may be delayed for several hours after exposure. Respiratory sensitization may be life threatening.

**Notes to Physicians:** If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Inducing vomiting is contraindicated because of the irritating nature of the compound. There is no specific antidote for ingestions. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. Treatment is essentially symptomatic.

### 5. FIRE-FIGHTING MEASURES

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

**Specific hazards arising from the chemical:** This product reacts with water producing heat and gases. Reaction may be violent. Closed containers may rupture when exposed to extreme heat or contaminated with water. Combustion may produce isocyanate vapors and other irritating, highly toxic gases. Exposure to heated diisocyanates can be extremely dangerous.

**Special protective equipment and precautions for fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Do not allow run-off from fire fighting to enter drains or water courses. Decontaminate equipment and protective clothing before reuse.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Wear appropriate protective clothing as described in Section 8. Isolate the area and prevent access. Ventilate and remove ignition sources.

**Methods and materials for containment and cleaning up:** Contain and collect with an inert absorbent. Neutralize with a decontamination solution made up of 80% water and 20% non-ionic surfactant (such as Plurafac SL-60 or Tergitol TMN-10) or 90% water and 3-8% ammonium hydroxide or concentrated ammonia and 2% detergent. Wait 15 minutes. Collect into an open-head metal container. Repeat until the surface is completely decontaminated. Cover loosely with lid and allow container to vent for 72 hours to allow carbon dioxide to escape.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not breathe vapors or mists. Use only with adequate ventilation. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties are not adequate to prevent overexposure from inhalation. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating.

**Conditions for safe storage, including any incompatibilities:** Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Protect from physical damage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Homopolymer of Hexamethylene Diisocyanate	0.5 mg/m <sup>3</sup> TWA Manufacturer 1.0 mg/m <sup>3</sup> STEL Manufacturer
Hexamethylene-1,6-Diisocyanate	0.005 ppm TWA ACGIH TLV 0.02 ppm Ceiling Manufacturer

**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 or if exposure levels are unknown, a NIOSH approved positive pressure air supplied respirator with a full facepiece or air supplied hood should be used.

In some situations where exposure levels are known to be below 10 times the exposure limit an air purifying respirator (organic vapor with particulate prefilter) can be used. A change schedule for cartridges is required. 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. A safety shower and eye wash should be available in the immediate work area.

**Medical Surveillance:** A pre-placement physical should be given to all employees that will work with isocyanates. Employees with a prior isocyanate sensitization should be excluded from working with this product. A history of adult asthma, eczema and respiratory allergies are possible reasons for excluding or restricting the employee from working with this product. A comprehensive annual medical surveillance program should be instituted for all employees who work with isocyanates. Once a worker has been diagnosed as sensitized, no further exposure can be permitted.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

**Odor:** Odorless

<b>Odor threshold:</b> 0.01 (HDI)	<b>pH:</b> Not applicable
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> Decomposes
<b>Flash point:</b> 336.2°F / 169°C	<b>Evaporation rate:</b> Not available
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not applicable	<b>UEL:</b> Not applicable
<b>Vapor pressure:</b> <0.1 Hg @ 20°C	<b>Vapor density:</b> Not available
<b>Relative density:</b> 1.13	<b>Solubility(is):</b> Insoluble in Water
<b>Partition coefficient: n-Octanol/water:</b> Not available	<b>Auto-ignition temperature:</b> 840.2°F / 449°C
<b>Decomposition temperature:</b> 276.8°F (136°C )	<b>Viscosity:</b> Not available

## 10. STABILITY AND REACTIVITY

**Reactivity:** Contact with water or excessive temperatures may cause polymerization.

**Chemical stability:** Stable. Heating above 194°F (90°C) can result in the release of slight amounts of monomeric hexamethylene diisocyanate.

**Possibility of hazardous reactions:** Contact moisture or other material that react with isocyanates and temperatures >350°F (177°C) may cause polymerization.

**Conditions to avoid:** Avoid contact with heat, sparks and flames. Protect from freezing.

**Incompatible materials:** Avoid contact with water, oxidizing agents, alcohols, amines, bases and copper alloys.

**Hazardous decomposition products:** Thermal decomposition may produce carbon and nitrogen oxides, hydrogen cyanide, isocyanates, and isocyanic acid.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Inhalation of vapors or mists may cause mucous membrane and respiratory irritation.

Homopolymer of hexamethylene diisocyanate has been shown to cause respiratory sensitization. Symptoms

include dryness of the throat, tightness of chest and difficulty in breathing. Symptoms may be delayed for several hours after exposure. This product can produce asthmatic sensitization upon a single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist. The allergic respiratory reaction may be life threatening.

**Ingestion:** Swallowing may cause gastrointestinal irritation abdominal pain, nausea, vomiting and diarrhea.

**Skin contact:** Skin contact may cause irritation with redness, itching and swelling. May cause allergic skin reaction. Animal tests have indicated that respiratory sensitization can result from skin contact with isocyanates.

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

**Chronic effects from short- and long-term exposure:** Prolonged exposure to diisocyanates or polyisocyanates may cause chronic irritation, decreased lung function and lung damage and conjunctivitis.

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

**Sensitization:** Hexamethylene-1,6-diisocyanate has been shown to cause sensitization in a guinea pig maximization test.

**Mutagenicity:** Homopolymer of hexamethylene diisocyanate was negative the in the AMES test (with/without metabolic activation).

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

**Acute Toxicity Values:** Product acute toxicity estimate (ATE): Oral: 250,000 mg/kg, Dermal >5000 mg/kg, Inhalation 0.581 mg/L

Homopolymer of hexamethylene diisocyanate: Oral rat LD50 >5,000 mg/kg; Inhalation rat LC50 0.581 mg/L/4 hr; Dermal rabbit LD50 >5,000 mg/kg.

Hexamethylene-1,6-Diisocyanate: Oral rat LD50 746 mg/kg, Inhalation rat LC50 0.124 mg/L/4 hr, Dermal rabbit LD50 >7000 mg/kg.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Homopolymer of hexamethylene diisocyanate: 96 hr LC0 Brachydanio rerio >100 mg/L; 48 hr EC0 daphnia magna >100 mg/L; 72 hr EC50 Scenedesmus subspicatus >1,000 mg/L

Hexamethylene-1,6-Diisocyanate: 96 hr LC0 Danio rerio >82.8 mg/L, 48 hr EC0 daphnia magna >89.4 mg/L, 72 hr EC50 Desmodesmus subspicatus > 77.4 mg/L

**Persistence and degradability:** Homopolymer of hexamethylene diisocyanate and hexamethylene-1,6-diisocyanate are not readily biodegradable.

**Bioaccumulative potential:** Not expected to bioaccumulate.

**Mobility in soil:** No data available.

**Other adverse effects:** This product reacts with water forming CO<sub>2</sub> and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants or by water soluble solvents.

## 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. Incineration is the preferred method.

## 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None
<b>IMDG</b>	None	Not Regulated	None	None	None
<b>IATA</b>	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:**

**15. REGULATORY INFORMATION**

**CERCLA:** This product has a Reportable Quantity (RQ) of 10,000 lbs. (based on the RQ for Hexamethylene-1,6-Diisocyanate of 100 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):**

Hexamethylene-1,6-Diisocyanate	822-06-0	<0.3%
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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): None

**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 Subdivision 1 A (Very Toxic Material Causing Immediate and Serious Toxic Effects.), 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 = 1  
**HMIS Rating:** Health = 3\*    Flammability = 1    Physical Hazard = 1

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

**Date of preparation:** December 12, 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.

## Poly-Thane #2 High Solids Resin SAFETY DATA SHEET

<b>1. IDENTIFICATION</b>
--------------------------

**Product identifier:** Poly-Thane #2 High Solids 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:** February 18, 2015

<b>2. HAZARD(S) IDENTIFICATION</b>
------------------------------------

**Classification:**

Physical	Health
Flammable Liquid Category 3	Toxic to Reproduction Category 1B

**Labeling:**

**Danger!**



**Hazard statement(s)**

Flammable liquid and vapor.  
May damage the unborn child

**Precautionary statement(s)**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, sparks, open flames, and hot surfaces.  
No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment  
Use explosion-proof electrical, ventilating and lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Wear protective gloves and eye protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.



IF exposed or concerned: Get medical attention.  
In case of fire: Use water spray, carbon dioxide, alcohol foam or dry chemical to extinguish.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents and container in accordance with local and national regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
1-Methoxy-2-propyl acetate (PGMEA)	108-65-6	40-60%
2-Methoxy-1-propyl acetate	70657-70-4	0.1-0.5%

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 irritation occurs or breathing is difficult, get medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin with soap and water for several minutes. If irritation persists, get medical attention. Launder clothing before re-use.

**Eye contact:** Flush with large quantities of water, 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 mild eye irritation. Prolonged skin contact may cause irritation. Inhalation of vapors or mists may cause respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

### 5. FIRE-FIGHTING MEASURES

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

**Specific hazards arising from the chemical:** Flammable liquid and vapor. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce carbon oxides and nitrogen oxides.

**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:** Avoid contact with skin, eyes or clothing. Avoid breathing vapors. Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources. Ventilate the area. Provide explosion-proof ventilation.

**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. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Ground container when pouring. Keep away from heat, sparks, flames and all sources of ignition. Do not expose to direct sunlight. Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well ventilated area. Keep container tightly closed when not in use. Protect from physical damage. Keep away from oxidizers and other incompatible materials.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

1-Methoxy-2-propyl acetate (PGMEA)	50 ppm AIHA WEEL
2-Methoxy-1-propyl acetate	None Established

**Appropriate engineering controls:** Use with adequate general or local exhaust ventilation to maintain exposures below occupational exposure limits. Use explosion-proof equipment where required.

### Personal Protective Equipment:

**Respiratory protection:** In operations where exposure limits are exceeded, an approved respirator with organic vapor cartridges or supplied air respirator should be used. Selection and use of respiratory equipment must be in accordance with appropriate regulations and good industrial hygiene practice.

**Skin protection:** Wear impervious gloves such as butyl rubber, nitrile or neoprene to prevent skin contact. .

**Eye protection:** Wear safety chemical goggles if contact is possible.

**Other:** Impervious clothing as needed to prevent contact and prevent contamination of personal clothing. Suitable washing facilities should be available in the work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

**Odor:** Fruity, aromatic odor

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> 295°F / 145.8°C
<b>Flash point:</b> 107.6 °F / 42°C	<b>Evaporation rate:</b> 0.3 (PGMEA)
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> 1.5% (PGMEA)	<b>UEL:</b> 10.0 % (PGMEA)
<b>Vapor pressure:</b> 0.5 mmHg (PGMEA)	<b>Vapor density (air =1):</b> 4.6 (PGMEA)
<b>Relative density:</b> >1	<b>Solubility(is):</b> Appreciable in water
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> 518°F (270°C) (PGMEA)
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not available

## 10. STABILITY AND REACTIVITY

**Reactivity:** May react with oxygen.

**Chemical stability:** Stable under normal conditions of use.

**Possibility of hazardous reactions:** May react with oxygen to form peroxides.

**Conditions to avoid:** Avoid heat, sparks and open flames.

**Incompatible materials:** Avoid contact with oxidizing agents, reducing agents and peroxides.

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

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Vapors or mists may cause respiratory irritation and central nervous system effects including headache, dizziness, nausea and drowsiness.

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

**Skin contact:** Prolonged skin contact may cause redness and drying of the skin. 1-Methoxy-2-propyl acetate may be absorbed through the skin causing symptoms similar to those listed under inhalation.

**Eye contact:** May cause mild eye irritation with redness, tearing and swelling.

**Chronic effects from short- and long-term exposure:** Chronic absorption may cause kidney or liver damage based on studies with laboratory animals.

**Reproductive Toxicity:** 2-Methoxy-1-propanol has been shown to cause developmental effects in the offspring of female rabbits exposed by inhalation during pregnancy. The NOEL was 145 ppm. 2-Methoxy-1-propyl acetate is metabolized to 2-Methoxy-1-propanol in the body. 2-Methoxy-1-propyl acetate was also tested and found to cause developmental effects with a NOEL of 145 ppm in rabbits.

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

**Acute Toxicity Values:** No toxicity data for the product. Acute Toxicity Estimate: Oral rat LD50 14285 mg/kg, Dermal >2000 mg/kg

1-Methoxy-2-propyl acetate: Oral rat LD50 8532 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LC0 >23.4 mg/L/6 hr

2-Methoxy-1-propyl acetate: No toxicity data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

1-Methoxy-2-propyl acetate: 96 hr LC50 Oncorhynchus mykiss 100 mg/L, 48 hr EC50 daphnia magna > 500 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata > 1000 mg/L  
2-Methoxy-1-propyl acetate: No data available

**Persistence and degradability:** 1-Methoxy-2-propyl acetate is readily biodegradable.

**Bioaccumulative potential:** -Methoxy-2-propyl acetate has a calculated BCF of 3.16. This suggests the potential for bioaccumulation is low.

**Mobility in soil:** -Methoxy-2-propyl acetate is highly mobility on 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
<b>DOT</b>	UN1866	Exempted from HazMat Regulations (49CFR 173.150f)	3	III	None
<b>TDG</b>	UN1866	Exempted from Regulation (Section 1.33)	3	III	None
<b>IMDG</b>	UN1866	Resin Solution	3	III	None
<b>IATA</b>	UN1866	Resin Solution	3	III	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, Fire Hazard

**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):

Ethylbenzene	100-41-4	<0.02	Cancer
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Benzene	71-43-2,	<0.5 ppm	Cancer, developmental, male reproductive toxicity
toluene	108-88-3	<0.5 ppm	Developmental
Benzene, 1,3-Butadiene	106-99-0	<2.4 ppm	Cancer, developmental, male reproductive toxicity, female 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 B-3 (Combustible Liquid), Class D Division 2 Subdivision A (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 = 2    Flammability = 2    Instability = 0  
**HMIS Rating:** Health = 2\*    Flammability = 2    Physical Hazard = 0

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

**Date of preparation:** February 18, 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.

## Add A Color #4 Colorants SAFETY DATA SHEET

<b>1. IDENTIFICATION</b>
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**Product Identifier:** Add A Color #4 Colorants

**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:** February 28, 2015

<b>2. HAZARD(S) IDENTIFICATION</b>
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Physical	Health
Not Hazardous	Skin Irritation Category 2 Eye Damage Category 1

**Labeling:**

**Danger!**



**Hazard statement(s)**

Causes serious eye damage.  
Causes skin irritation

**Precautionary statement(s)**

Wash thoroughly after handling.  
Wear protective gloves and eye protection.  
IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation 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.  
Immediately call a POISON CENTER or doctor.

<b>3. COMPOSITION / INFORMATION ON INGREDIENTS</b>
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Chemical name	CAS No.	Concentration
Polyester Resin	Mixture	25-100%
CI Pigment Yellow**	14059-33-7	0-50%
Carbon Black*	1333-86-4	0-25%

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

\*\* The CI Pigment Yellow in this product is inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore the product is not classified for Specific Target Organ Toxicity Repeat Exposure Category 2.

**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. Seek medical attention if irritation or other symptoms develop.

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

**Eye contact:** Immediately flush eyes with large amounts of water for 20 minutes, holding eyelids open. Get immediate medical attention.

**Ingestion:** If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

**Most important symptoms/effects, acute and delayed:** May cause eye irritation or burns. Permanent damage may occur. Causes skin irritation. May cause respiratory irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting or diarrhea.

**Indication of immediate medical attention and special treatment, if necessary:** If eye contact occurs, get immediate 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 and various hydrocarbons.

**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:** Collect with an inert absorbent and place into a container for disposal. Wash spill site with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Prevent contact with eyes. Avoid contact with skin and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Use with adequate ventilation.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry location away from oxidizing agents and other incompatible materials. Protect from physical damage.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Polyester Resin	None Established
CI Pigment Yellow	0.5 mg/m <sup>3</sup> Ceiling OSHA PEL (respirable dust) (as vanadium pentoxide) 0.1 mg/mg Ceiling OSHA PEL (fume) (as vanadium pentoxide) 0.05 mg/m <sup>3</sup> TWA ACGIH TLV (as vanadium pentoxide)
Carbon Black	3.5 mg/m <sup>3</sup> TWA OSHA PEL 3 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable)

**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 excessive, a NIOSH approved respirator with a dust/mist filter 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:** Impervious gloves such as buty rubber or nitrile gloves are recommended to prevent skin contact

**Eye protection:** Chemical goggles are recommended if eye contact is possible.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color, etc.):** Colored viscous liquid.

**Odor:** Slight odor.

<b>Odor threshold:</b> Not available	<b>pH:</b> Not available
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> Not available
<b>Flash point:</b> >230°F (110°C)	<b>Evaporation rate:</b> <1
<b>Flammability (solid, gas):</b> Not applicable	
<b>Flammable limits: LEL:</b> Not available	<b>UEL:</b> Not available
<b>Vapor pressure:</b> Not available	<b>Vapor density:</b> Not available
<b>Relative density:</b> >1	<b>Solubility(is):</b> Negligible
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not available



**Decomposition temperature:** Not available

**Viscosity:** Not available

## 10. STABILITY AND REACTIVITY

**Reactivity:** None known.

**Chemical stability:** Stable.

**Possibility of hazardous reactions:** Not expected to be reactive.

**Conditions to avoid:** None known.

**Incompatible materials:** Avoid strong oxidizing agents, strong alkalis, peroxides and acids.

**Hazardous decomposition products:** Thermal decomposition may produce carbon monoxide, carbon dioxide and various hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Inhalation of vapors or mists may cause irritation of the nose, throat and upper respiratory tract, difficulty in breathing and coughing.

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

**Skin contact:** Causes skin irritation with redness.

**Eye contact:** May cause severe irritation or burns with redness, tearing, itching and blurred vision. Permanent damage may occur.

**Chronic effects from short- and long-term exposure:** Prolonged overexposure to bismuth vanadate by inhalation may cause lung damage.

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

**Sensitization:** This product has not been shown to cause sensitization in animals or humans.

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

**Carcinogenicity:** Carbon black is listed by IARC as a group 2B carcinogen (possibly carcinogenic to humans), and by ACGIH as an A3 (confirmed animal carcinogen with unknown relevance to humans). These components are encapsulated in a polymer matrix so no inhalable exposure occurs during use or disposal. None of the other components greater than 0.1% are listed by OSHA, IARC, NTP or ACGIH as a carcinogen.

### Acute Toxicity Values:

Polyester Resin: No toxicity data available

Carbon Black: Oral rat LD50 > 8000 mg/kg, Inhalation rat LC50 > 4.6 mg/m<sup>3</sup>/4 hr.

CI Pigment Yellow: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 > 5.15 mg/L

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Polyester Resin: No data available

Carbon Black: 96 hr LC0 Danio rerio 1000 mg/L, 24 hr EC50 daphnia magna > 5600 mg/L, EC50

Desmodesmus subspicatus > 10000 mg/L

CI Pigment Yellow: 96 hr LC50 Danio rerio > 10000 mg/L, 48 hr EC50 daphnia magna > 100 mg/L, 72 hr EC50 > 100 mg/L

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

**Bioaccumulative potential:** No data available.

**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
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None
<b>IMDG</b>	None	Not Regulated	None	None	None
<b>IATA</b>	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):** Not hazardous

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

CI Pigment Yellow (Bismuth Vanadate)	14059-33-7	45-50%
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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): None

**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 = 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:** February 28, 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.

## Vinyl Chips SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product Identifier:** Vinyl Chips

**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:** October 22, 2014

### 2. HAZARD(S) IDENTIFICATION

**Classification:**

Physical	Health
Not Hazardous	Not Hazardous

**Labeling:** None Required

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Barium Sulfate	7727-43-7	70-85%
Resin	Proprietary	10-15%
Titanium Dioxide*	13463-67-7	0-10%
Pigments	Proprietary	<3%

\* The titanium dioxide in this product is 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. Seek medical attention if irritation or other symptoms develop.

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

**Eye contact:** Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation occurs and persists, seek medical attention.

**Ingestion:** If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

**Most important symptoms/effects, acute and delayed:** Dust may cause eye and respiratory irritation. May cause mechanical skin irritation.

**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 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. Avoid breathing dust.

**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:** Scoop or sweep up and place into a container for disposal. Avoid generating dust.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling. Use with adequate ventilation.

**Conditions for safe storage, including any incompatibilities:** No special storage required.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Barium Sulfate	5 mg/m <sup>3</sup> TWA OSHA PEL (respirable), 10 mg/m <sup>3</sup> TWA (total dust) 5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable dust)
Resin	None Established
Titanium Dioxide	10 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable dust)
Pigments	None Established

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

**Personal Protective Equipment:**

**Respiratory protection:** If the exposures are excessive, a NIOSH approved respirator with a dust/mist filter 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:** Abrasive resistant gloves are recommended to prevent skin contact

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

**Other:** None known.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance (physical state, color, etc.):** White or colored flakes.

**Odor:** No odor

<b>Odor threshold:</b> Not available	<b>pH:</b> Not applicable
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> Not applicable
<b>Flash point:</b> Not applicable	<b>Evaporation rate:</b> Not applicable
<b>Flammability (solid, gas):</b> Not flammable	
<b>Flammable limits: LEL:</b> Not applicable	<b>UEL:</b> Not applicable
<b>Vapor pressure:</b> Not applicable	<b>Vapor density:</b> Not applicable
<b>Relative density:</b> 3.6	<b>Solubility(is):</b> Insoluble
<b>Partition coefficient: n-Octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not applicable
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not applicable

**10. STABILITY AND REACTIVITY**

**Reactivity:** None known.

**Chemical stability:** Stable.

**Possibility of hazardous reactions:** Not expected to be reactive.

**Conditions to avoid:** None known.

**Incompatible materials:** None known.

**Hazardous decomposition products:** Thermal decomposition may produce carbon oxides.

**11. TOXICOLOGICAL INFORMATION**

**Inhalation:** Excessive inhalation of dust may cause upper respiratory tract irritation, coughing and difficulty in breathing.

**Ingestion:** Swallowing may cause gastrointestinal irritation and nausea.

**Skin contact:** May cause mechanical skin irritation.

**Eye contact:** May cause mechanical irritation with redness and tearing.

**Chronic effects from short- and long-term exposure:** Prolonged inhalation of respirable dust may cause adverse lung effects.

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

**Sensitization:** This product has not been shown to cause sensitization in animals or humans.

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

**Carcinogenicity:** Titanium dioxide is listed by IARC as “Possibly Carcinogenic to Humans”, Group 2B. The titanium dioxide in this product is inextricably bound in a manner that no exposure occurs during normal use and handling. None of the other components are listed as a carcinogen by IARC, NTP, ACGIH or OSHA.

**Acute Toxicity Values:**

Barium Sulfate: Oral rat LD50 307 g/kg, Dermal rat LD50 >2000 mg/kg

Resin: No toxicity data available

Titanium Dioxide: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >6.82 mg/L/4 hr

Pigments: No toxicity data available

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:**

Barium Sulfate: 96 he LC50 Danio rerio >3.5 mg/L, 48 hr EC50 daphnia magna 14500 ug/L, 72 he EC50

Pseudokirchnerella subcapitata > 1.15 mg/L

Resin: No data available

Titanium Dioxide: 72 hr EC50 61 mg/L

Pigments: No data available

**Persistence and degradability:** Biodegradation is not applicable to inorganic substances such as barium sulfate and titanium dioxide.

**Bioaccumulative potential:** No data available.

**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
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None
<b>IMDG</b>	None	Not Regulated	None	None	None
<b>IATA</b>	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):** Not hazardous

**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):

Titanium Dioxide\*      13463-67-7      0-10%      Cancer

\* The titanium dioxide in this product is inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore this product is not regulated under California Proposition 65

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

**CANADA:**

**Canadian WHMIS Classification:** Not a controlled product

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

<b>16. OTHER INFORMATION</b>
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**NFPA Rating:** Health = 1      Flammability = 1      Instability = 0  
**HMIS Rating:** Health = 1      Flammability = 1      Physical Hazard = 0

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

**Date of preparation:** October 22, 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.