

Dur-A-Shield II Resin SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: Dur-A-Shield II 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: March 3, 2015

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-Shield II Hardener before using this product.

Classification:

Physical	Health
Flammable Liquid Category 3	Aspiration Hazard Category 1 Skin Irritation Category 2 Eye Irritation Category 2A Skin Sensitization Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (Respiratory Irritation) Specific Target Organ Toxicity Repeat Exposure Category 2 Carcinogen Category 2

Labeling:

Danger!



Hazard statement(s)

Flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.

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.

Causes serious eye irritation.
 May cause respiratory irritation.
 May cause damage to central nervous system, kidneys and liver through prolonged or repeated exposure.
 Suspected of causing cancer.

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.
 Do not breathe mist, vapors or spray.
 Wash thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves and eye protection.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
 Do NOT induce vomiting.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
 If skin irritation or rash occurs: Get medical attention.
 Wash contaminated clothing 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.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor if you feel unwell.

Get medical attention if you feel unwell.
 In case of fire: Use water spray, carbon dioxide or dry chemical to extinguish.
 Store in a well-ventilated place. Keep cool. 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
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	30-60%
Xylene	1330-20-7	20-30%
1-Methoxy-2-Propanol	107-98-2	1-10%
Ethylbenzene	100-41-4	1-5%

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: Remove contaminated clothing. Wash skin thoroughly 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. Aspiration into the lungs during ingestion or vomiting may cause serious lung damage.

Most important symptoms/effects, acute and delayed: Causes eye and skin irritation. Inhalation of vapors or mists may cause respiratory irritation and central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard. May cause lung damage during swallowing or vomiting. Prolonged overexposure to xylene may cause damage to the central nervous system, kidneys and liver. May cause cancer based on animal data.

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

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use water spray, carbon dioxide 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 monoxide, carbon dioxide, hydrocarbons, aldehydes and formaldehyde.

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

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. Do not store in direct sunlight. Prevent moisture contact. Protect from physical damage. Keep away from oxidizers and other incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Xylene	100 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV, 150 ppm ACGIH STEL
1-Methoxy-2-Propanol	50 ppm TWA ACGIH TLV, 100 ppm ACGIH STEL
Ethylbenzene	100 ppm TWA OSHA PEL 20 ppm TWA ACGIH TLV

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 to prevent skin contact. .

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

Other: Impervious coveralls, apron and boots are required to prevent skin contact and contamination of personal clothing. A safety shower and eye wash should be available in the immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Odor: Solvent odor

Odor threshold: 0.49 (xylene)	pH: Not available
Melting Point/Freezing Point: Not available	Boiling Point: 290°F / 143.3°C (xylene)
Flash point: 82 °F / 27.8°C	Evaporation rate: 0.7 (butyl acetate =1)
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: 0.8% (ethylbenzene)	UEL: 7.0 % (xylene)
Vapor pressure: 6 mmHg	Vapor density (air =1): 3.7 (xylene)
Relative density: 1	Solubility(is): Negligible in water
Partition coefficient: n-Octanol/water: Not applicable	Auto-ignition temperature: Not available
Decomposition temperature: Not available	Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: Not expected to be reactive. .

Chemical stability: Stable under normal conditions of use.

Possibility of hazardous reactions: None known.

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

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

Hazardous decomposition products: Thermal decomposition may produce carbon oxides, aldehydes, hydrocarbons, silicon dioxide and formaldehydes.

11. TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause respiratory irritation, coughing, sore throat, headache, dizziness, drowsiness, nausea, vertigo, loss of appetite and unconsciousness.

Ingestion: Swallowing may cause gastrointestinal irritation, nausea and diarrhea. Aspiration during swallowing or vomiting may cause lung damage.

Skin contact: Causes skin irritation with redness, drying and cracking of the skin.

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

Chronic effects from short- and long-term exposure: Over exposure to xylenes may cause liver damage. In repeated dose studies, the principle effects of xylenes were adaptive changes in the liver, body weight changes, organ weight changes and altered motor coordination.

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

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: Ethylbenzene is listed by IARC as "Possibly Carcinogenic to Humans" Group 2B and by ACGIH as a "Confirmed Animals Carcinogen with Unknown Relevance to Humans", A3. None of the other 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 3703.7 mg/kg, Dermal >2000 mg/kg

Xylene: Oral rat LD50 5251 mg/kg, Inhalation rabbit LD50, Inhalation rat LC50 29091 mg/m³, Dermal rabbit LD50 >4200 mg/kg.

1-Methoxy-2-Propanol: Oral rat LD50 4277 mg/kg, Inhalation rat LD0 >7000 ppm/6 hr, Dermal rat LD50 >2000 mg/kg

Ethylbenzene: Oral rat LD50 3500 mg/kg, Dermal rabbit LD50 15.4 g/kg

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

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Xylene: 96 hr LC50 Oncorhynchus mykiss 2.6 mg/L, 24 hr IC50 daphnia magna 3.6 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 4.36 mg/L
 1-Methoxy-2-Propanol: 96 hr LC50 Pimephales promelas 20800 mg/L, 48 hr EC50 daphnia magna 21100 mg/L, 7 day EC50 Pseudokirchnerella subcapitata > 1000 mg/L
 Ethylbenzene: 96 hr EC50 Oncorhynchus mykiss 4.2 mg/L, 48 hr EC50 daphnia magna 1.8 mg/L, 72 hr EC50 Skeletonema costatum 4.9 mg/L.
 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

Persistence and degradability: Xylene, ethylbenzene and 1-methoxy-2-propanol are readily biodegradable. Diglycidyl ether bisphenol A epoxy resin is not readily biodegradable.

Bioaccumulative potential: Calculated BCF – Xylene: <25, 1-Methoxy-2-Propanol: 3.2 Ethylbenzene: 15, Diglycidyl ether bisphenol A epoxy resin: 31

Mobility in soil: Xylene has a moderate to high mobility on soil. 1-Methoxy-2-Propanol is expected to be highly mobile in soil. Ethylbenzene is expected to have low mobility in soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1263	Paint Related Material	3	III	None
TDG	UN1263	Paint Related Material	3	III	None
IMDG	UN1263	Paint Related Material	3	III	None
IATA	UN1263	Paint Related Material	3	III	None

*This product qualifies for “Limited Quantity” for any package less than 1.3 gallons.

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 166 lbs. (based on the RQ for Xylene 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, 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):

Xylene	1330-20-7	20-30%
Ethylbenzene	100-41-4	1-5%

California Proposition 65

This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity (birth defects):

1,3-Butadiene	106-99-0	8 ppm	cancer, developmental, male reproductive toxicity, female reproductive toxicity
benzene	71-43-2	2 ppm	cancer, developmental, male reproductive toxicity
epichlorhydrin	106-89-8	<0.05%	cancer, male reproductive toxicity
toluene	108-88-3	2 ppm	developmental
ethylbenzene	100-41-4	2 ppm	cancer

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-2 (Flammable 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 = 3 Instability = 0
HMIS Rating: Health = 2* Flammability = 3 Physical Hazard = 0

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

Date of preparation: March 3, 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.**