

**Elast-O-Coat Resin  
Elast-O-Coat Resin, Pigmented  
SAFETY DATA SHEET**

**1. IDENTIFICATION**

**Product Identifier:** Elast-O-Coat Resin, Elast-O-Coat Resin Pigmented  
**Product Code:**

**Recommended use:** Floor Surfacing

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

**Telephone number:** 860-528-9838

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

**Date of Preparation:** September 8, 2014

**2. HAZARD(S) IDENTIFICATION**

This product is one part of a two part product. Read and understand the hazard information on the SDS for Elast-O-Coat Hardener before using this product.

**Classification:**

Physical	Health
Not Hazardous	Eye Irritation Category 2 Skin Irritation Category 2 Skin Sensitization Category 1 Respiratory Sensitization Category 1 Toxic to Reproduction Category 2

**Labeling:**

**Danger!**



**Hazard statement(s)**

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Suspected of damaging fertility or the unborn

**Precautionary statement(s)**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Avoid breathing mist, vapors or spray.  
Wash thoroughly after handling.  
Contaminated work clothing should not be allowed out of the

child.

workplace.  
 Wear protective gloves, protective clothing and eye protection.  
 In case of inadequate ventilation wear respiratory protection.  
 IF INHALED: remove person to fresh air and keep comfortable for breathing.  
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.  
 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 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 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
Diglycidyl Ether Bisphenol A Epoxy Resin	25068-38-6	40-60%
Alkyl Phenol Blocked Polyisocyanate	Proprietary	20-40%
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	68609-97-2+	1-10%
Polymer of Epichlorohydrin-Polyglycol	Proprietary	1-5%
Epoxy Resin	25085-99-8	1-10%
Titanium Dioxide*	13463-67-7	0-5%
Carbon Black*	1333-86-4	0-5% %
Phenol, nonyl-, branched	84852-15-3	0.1-2

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

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

**4. FIRST-AID MEASURES**

**Inhalation:** 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 15 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. Get medical attention.

**Most important symptoms/effects, acute and delayed:** 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 respiratory sensitization occurs, get immediate medical attention. Symptoms may be delayed for several hours after exposure. Respiratory sensitization may be life threatening.

## 5. FIRE-FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:** Use foam, carbon dioxide and dry chemical. 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. Place into an appropriate container for disposal. Do not allow spilled material or wash waters to enter sewers, surface waters or groundwater systems.

## 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 off gases generated during heat curing.

**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:**

Diglycidyl Ether Bisphenol A Epoxy Resin	None Established
Alkyl Phenol Blocked Polyisocyanate	None Established
Aliphatic Glycidyl Ether Diluent (Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.)	None Established
Polymer of Epichlorohydrin-Polyglycol	None Established
Epoxy Resin	None Established
Titanium Dioxide	15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 10 mg/m <sup>3</sup> TWA ACGIH TLV
Carbon Black	3.5 mg/kg TWA OSHA PEL 3 mg/kg TWA ACGIH TLV (inhalable)
Phenol, nonyl-, branched	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 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 viscous liquid

**Odor:** Mild characteristic odor

<b>Odor threshold:</b> 10 ppm (TDI)	<b>pH:</b> Not applicable
<b>Melting Point/Freezing Point:</b> Not available	<b>Boiling Point:</b> >392°F / >200°C
<b>Flash point:</b> 490°F / 254°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> 1 mmHg @ 356°F	<b>Vapor density:</b> Not available
<b>Relative density:</b> >1	<b>Solubility(is):</b> Insoluble in Water
<b>Partition coefficient: n-Octanol/water:</b> Not available	<b>Auto-ignition temperature:</b> Not available

**Decomposition temperature:** Not available

**Viscosity:** Not available

## 10. STABILITY AND REACTIVITY

**Reactivity:** May react with excessive heat and amines.

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

**Possibility of hazardous reactions:** Contact with water or temperature greater than 400°F may cause polymerization.

**Conditions to avoid:** Temperatures above 248°F may release toluene diisocyanate. Certain amines may cause unblocking at lower temperatures

**Incompatible materials:** Avoid contact with water, alcohols, amines, acids and strong bases. May damage plastics and rubber.

**Hazardous decomposition products:** Thermal decomposition may produce carbon and nitrogen oxides, dense black smoke, hydrogen cyanide, isocyanate, isocyanic acid and other undetermined compounds.

## 11. TOXICOLOGICAL INFORMATION

**Inhalation:** Inhalation of vapors or mists may cause mucous membrane and respiratory irritation. This product contains a blocked polyisocyanate which is considered essentially unreactive at room temperature. Generation of free diisocyanate and blocking agent vapors is expected to occur if the product is heated above the unblocking temperature. Exposure to diisocyanates may 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, 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 irritation with redness, tearing, stinging and swelling.

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

**Reproductive Toxicity:** Phenol, nonyl-, branched has been shown to cause fertility and developmental toxicity in animals.

**Sensitization:** Polymer of epichlorohydrin-polyglycol, diglycidyl ether bisphenol A epoxy resin, alkyl phenol blocked polyisocyanate and aliphatic glycidyl ether diluent have has been shown to cause sensitization in studies with laboratory animals.

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

**Carcinogenicity:** Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen). 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 >0.1 are listed by OSHA, IARC, NTP or ACGIH as a carcinogen.

**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  
 Alkyl Phenol Blocked Polyisocyanate: Oral rat LD50 >5000 mg/kg  
 Aliphatic Glycidyl Ether Diluent: Oral rat LD50 26.8 g/kg  
 Polymer of Epichlorohydrin-Polyglycol: Oral rat LD50 >2000 mg/kg, Dermal rabbit LD50 >2000 mg/kg  
 Epoxy Resin: No toxicity data available  
 Titanium Dioxide: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 6.82 mg/L/4 hr,  
 Carbon Black: Oral rat LD50 > 8000 mg/kg, Inhalation rat LC50 > 4.6 mg/m<sup>3</sup>/4 hr.  
 Phenol, nonyl-, branched: Oral rat LD50 1412 mg/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  
 Alkyl Phenol Blocked Polyisocyanate:  
 Aliphatic Glycidyl Ether Diluent: 96 hr LC50 Oncorhynchus mykiss > 5000 mg/L; 72 hr IC50 Pseudokirchnerella subcapitata 843.75 mg/L  
 Polymer of Epichlorohydrin-Polyglycol: 96 hr LC50 Leuciscus idus 67 mg/L; 48 hr EC50 daphnia magna 90 mg/L  
 Epoxy Resin: No data available  
 Titanium Dioxide: 72 hr EC50 Pseudokirchnerella subcapitata 61 mg/L  
 Carbon Black: 96 hr LC0 Danio rerio 1000 mg/L, 24 hr EC50 daphnia magna > 5600 mg/L, EC50 Desmodesmus subspicatus > 10000 mg/L  
 Phenol, nonyl-, branched: 96 hr LC50 Pimephales promelas 128 µg/L, 48 hr EC50 daphnia magna 218 µg/L, 72 hr EC50 Desmodesmus subspicatus 1.3 mg/L

**Persistence and degradability:** Diglycidyl ether bisphenol A epoxy resin and alkyl phenol blocked polyisocyanate are 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. 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>	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	9	PG III	Yes

		substances, liquid, n.o.s. (Diglycidyl Ether Bisphenol A Epoxy Resin)			
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**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 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, Chronic Health, Reactivity

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

**California Proposition 65**

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

Epichlorhydrin	106-89-8	<0.06%	cancer, male reproductive toxicity
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**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 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 SDS discloses information elements required by the CPR.

**16. OTHER INFORMATION**

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

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

**Date of preparation:** September 8, 2014

**Date of last revision:** New SDS

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, Dur-A-Flex, Inc. MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND USE.