

### SHEET

#### Section 1. Chemical Product and Company Identification

<b>Product Name</b> <b>HPL-1110 Base</b>	<b>Trade Name:</b> Epoxy Resin
<b>Manufactured By:</b> DUROMAR, Inc. 706 Washington Street Pembroke, MA 02359 Tel 1-781-826-2525 FAX 1-781-826-2150	<b>IN CASE OF EMERGENCY:</b> CHEM-TEL TEL: 1-800-255-3924  INTERNATIONAL CHEM-TEL Tel: 001-813-248-0585
<b>Date of Preparation:</b> 01/02/09	<b>Replaces:</b> 0-00-00
<b>Preparers Name</b> R. Giudici	

#### Section 2. Composition, Information on Ingredients

Component Information		Exposure Limits	
Chemical Name	CAS #	OSHA PEL, TWA	ACGIH TLV, TWA
Bisphenol A Diglycidyl ether resin	25068-38-6	N/E	N/E
p-tert Butyl Phenyl Glycidyl Ether	3101-60-8	N/E	N/E
Titanium Dioxide	13463-67-7	TWA 15 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>
Aluminum Hydroxide	21645-51-2	TWA 15 mg/m <sup>3</sup> (total) TWA 5 mg/m <sup>3</sup> (resp)	TWA 10 mg/m <sup>3</sup>
Silica, amorphous	112926-00-8	TWA 15 mg/m <sup>3</sup> (total) TWA 5 mg/m <sup>3</sup> (resp)	TWA 10 mg/m <sup>3</sup>
Iron Oxide Red	1309-37-1	TWA 10 mg/m <sup>3</sup> (fume)	TWA 5 mg/m <sup>3</sup> (fume)
Silica	14808-60-7	TWA 10 mg/m <sup>3</sup> /(%SiO <sub>2</sub> + 2)	0.1 mg/m <sup>3</sup> (respirable dust)
Silicon Dioxide, synthetic PNOR	67762-90-7	TWA 15 mg/m <sup>3</sup> (total) TWA 5 mg/m <sup>3</sup> (resp)	TWA 10 mg/m <sup>3</sup>
Isopropylidenebisphenol, bis[(2-glycidyoxy-3-n butoxy)-1-propylether]	71033-08-4	N/E	N/E

#### Section 3. Hazards Identification

**WARNING!** Causes eye and skin irritation. May cause skin sensitization and dermatitis. Harmful if swallowed.

**WARNING!** Eye and Skin Irritant. Potential Skin Sensitizer. Wash hands thoroughly before eating food.

##### Potential Health Effects

##### Primary Routes of Exposure:

Skin contact    Skin Absorption    Eye Contact    Inhalation    Ingestion

##### Symptoms of Acute Overexposure

###### Eyes:

Contact with undiluted product can cause irritation, pain, conjunctivitis and corneal edema.

###### Skin:

Contact with undiluted product can cause irritation, redness and discomfort.

Product is absorbed through the skin and may cause nausea, headache and vomiting.

###### Inhalation:

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Inhalation of vapor or mists may cause irritation to the respiratory tract with coughing and chest pain.		
<b>Ingestion:</b> Swallowing this material can cause gastrointestinal irritation, nausea and vomiting.		
<b>Effects of Chronic Overexposure:</b> Prolonged or repeated exposure can cause adverse respiratory effects such as (cough, tightness of chest, shortness of breath), adverse eye effects (such as conjunctivitis or corneal damage), and adverse skin effects (such as rash, irritation or corrosion). Prolonged or repeated exposure can cause sensitization resulting in itching, swelling, or rashes on subsequent exposures.		
<b>Medical Conditions Aggravated by Exposure:</b> Pre-existing eye and skin conditions (e.g. eczema). Chronic respiratory disease e.g. bronchitis, emphysema.		
<b>Carcinogenicity</b> Listed Component: None		
OSHA Listed	International Agency Research Cancer	National Toxicology Program
N/L	Group 1	Known Human Carcinogen
Grinding, cutting, and drilling of hardened epoxy resin containing silica produces an aerosol mixture of organic particles which have an OSHA PEL of 5 mg/m <sup>3</sup> and respirable crystalline silica dust regulated by OSHA as noted above and is a known human carcinogen.		

#### Section 4. First Aid Measures

<b>First for Eyes:</b> Immediately wash the eyes with large amounts of water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical.
<b>First Aid for Skin:</b> Immediately wash the contaminated skin with soap and water. If this chemical penetrates the clothing, immediately remove the clothing, wash the skin with soap and water, and get medical attention.
<b>First Aid for Inhalation:</b> Immediately move the exposed person to fresh air. If breathing is difficult, properly trained personnel may administer oxygen. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
<b>First Aid for Ingestion</b> If large quantities have been swallowed, DO NOT INDUCE VOMITING. If victim is conscious and alert, give 2 - 4 cups of lukewarm water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to help prevent aspiration. Get medical attention immediately.

#### Section 5. Fire Fighting Measures

<b>Extinguishing Media:</b> <input type="checkbox"/> Water <input checked="" type="checkbox"/> Carbon Dioxide <input checked="" type="checkbox"/> Dry Chemical <input checked="" type="checkbox"/> Foam <input type="checkbox"/> Alcohol Foam	
<b>Flash Point</b> >390°F / >200°C Pensky-Martens Closed Cup LEL: UEL: N/A	
<b>Flammability Classification OSHA/NFPA</b> Class N/A Liquid	
<b>Unusual Fire and Explosions Hazards</b>	Isolate fire area and deny unnecessary entry. Fire fighters should wear positive-pressure self-contained breathing apparatus (SCBA) and protective clothing. Cool container with WATER SPRAY to prevent rupture.

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Heat from fire can generate flammable vapor and decomposition products that may cause a health hazard.
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#### Section 6. Accidental Release Measures

##### Small Spills

ISOLATE AREA OF THE SPILL! Eliminate all ignition sources. Soak up small spills with inert solids such as vermiculite or other absorbent materials. Shovel into suitable disposal container.

##### Large Spills

Eliminate all ignition sources. Stop spill at source. Prevent spill from entering drains, sewers, streams or other bodies of water. Pump or vacuum spilled material and transfer to clean containers for recovery. Apply absorbent to any remaining material. Transfer contaminated absorbent to proper containers for disposal. Persons not wearing protective equipment should be excluded from the area of spill until cleanup has been completed.

#### Section 7. Handling & Storage

Store material in a clean, cool, ventilated area away from all sources of ignition. Clean up spills at once. Keep container tightly closed when not in use. Always wear protective equipment. This material adheres readily to human skin (e.g. hands) and may be inadvertently ingested while eating. Wash hands and other exposed areas thoroughly after handling. Launder all clothes after each use.

#### Section 8. Exposure Controls/Personal Exposure

##### Eye Protection

Avoid splashing. Wear chemical-resistant safety goggles or face shield.

##### Skin Protection

Wear gloves recommended by manufacturers for protection against materials in Section 2. To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

##### Respiratory Protection

If personal exposure cannot be controlled below applicable limits by area ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in section 2.

##### Ventilation

General area ventilation is acceptable if the exposure is maintained below applicable exposure limits. (See Section 2)

##### Other Precautions

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Section 9. Physical and Chemical Properties

Percent Volatile Content by Weight (PBW)	0	Specific Gravity (gm/cc)	1.37
VOC Content g/L	0	Weight per Gallon	11.43
Boiling Point (°F)	425°F /218°C	Evaporation Rate	N/A
Melting Point (°F)	N/A	(butyl acetate = 1)	
Vapor Pressure (mm Hg)	Unknown	Solubility in Water	Nil

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<b>Vapor Density (Air=1)</b>		<b>Appearance and Odor</b>	Grey or Red Loose Paste, Epoxy Odor
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#### Section 10. Stability and Reactivity

<b>Stability</b> Stable
<b>Conditions to Avoid</b> Protect from heat, sparks, flame and possible sources of ignition.
<b>Incompatibility</b> Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases(especially primary and secondary amines)
<b>Hazardous Decomposition Products</b> Carbon dioxide and carbon monoxide. Aldehydes, acids and other organic substances may be formed during combustion or elevated temperature (>500°F). These gases and other volatiles may be generated under normal processing conditions.
<b>Conditions For Hazardous Polymerization</b> Heat is generated when hardener and resin are combined. Uncontrolled cure conditions may cause the resin to char, decompose and generate unidentified toxic fumes.

#### Section 11. Toxicological Information (see Section 3. for Exposure Symptoms)

Acute Toxicity			
Component	Oral LD 50	Dermal LD 50	Inhalation LC 50
Bisphenol A Diglycidyl ether resin	>5000 mg/kg	>6000 mg/kg	>3466 mg/m <sup>3</sup>

#### Section 12. Ecological Information

Biodegradability: (modified Sturm method): ~12%
Fish toxicity: LC50 (96h): 1.5 mg/L species: Rainbow trout LC50 (96h): 2.4 mg/L species: Zebra fish
Invertebrate toxicity: EC50 (24h): 3.6 mg/L species: Daphnia

#### Section 13 Disposal Considerations

RCRA: Mix appropriate amounts of Base and Hardener to form an inert mass. Dispose of in accordance with all applicable federal, state and local regulations.
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#### Section 14 Transportation Information

This product, if offered for shipment, is not regulated by USDOT 49 CFR Parts 171 - 180: Regulation of Hazardous Materials Transportation in Commerce.	
<b>Shipping Information</b>	Not Regulated as HAZMAT
<b>Classification</b>	N/A
<b>Identification</b>	N/A

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<b>Packing Group</b>	NA/
<b>Label</b>	N/A

### Section 15. Regulatory Information

<i>Regulations Governing Product:</i>			
Inventory Status: United States (TSCA) - All ingredients are on the inventory or exempt from listing.			
EPCRA 302 EHS Extremely Hazardous Substance Reporting TPQ:			
SARA TITLE III			
EPCRA 311/312 Tier II Chemical Inventory Reporting Hazard Category:			Immediate (acute)
<i>Chemical Name</i>	<i>CAS #/ Category</i>	<i>CERCLA RQ</i>	<i>EPCRA 313RQ</i>
NONE			

### Section 16 Other Information

<u>HMIS Rating</u>	
Health	: 2
Flammability	: 1
Reactivity	: 0
<u>REFERENCES</u>	
CRC Press: Handbook of Chemical and Physical Constants by David R. Lide Merck & Company: The Merck Index Sigma-Aldrich Company: Aldrich Handbook of Fine Chemicals Dictionary of Toxicology by Robert Lewis National Fire Protection Association (NFPA): Fire Protection Guide on Hazardous Materials US Department of Transportation, Research and Special Programs Administration: Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements	

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information above.