Safety Data Sheet (Complies with OSHA HCS)

PANSEAL

Section 1: Identification

Contact Information: Dynesic Technologies, Inc., 15230 Surveyor Blvd., Addison, TX75001
Phone: 972-692-0962; Fax: 972-692-0963
Emergency Contact:
Recommended Use: Same As Above
Chemical resistant, corrosion preventing epoxy coating to be used in HVAC and Plubing
and other protective coating applications
Chemical Family: Novolac Epoxies

Section 2: Hazard(s) Identification

Hazard Classification: Skin Irritant - Category 2
Signal Word: Warning
Hazard Statement(s): H317 Prolonged exposure may cause an allergic skin reaction

Pictogram:

Precautionary Statements:
P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P280: Wear Protective gloves/protective clothing/eye and face protection
P333+P313: If skin irritation/rash occurs, get medical attention
P501: Dispose of contents/container in accordance with local/regional/national and intl regulations

NFPA Rating:

Health: 1
Flammability: 1
Instability: 0
Specific Hazard: N/A

HIMS Rating:

Health: 1
Flammability: 1
Physical Hazard: 0
Personal Protection Index: C
Section 3: Composition/Information on Ingredients

Chemical Name/Family: Epoxy
Common Names/Synonyms: Epoxy Resin, Epoxy Coating, Novolac Epoxy, Two-part Epoxy
CAS Numbers and other Identifiers:
Resin:
- DGEBA – Epoxy Resin CAS# 25068-38-6 30%-40%
- OSHA/PEL – NE
- ACGIH/TLV - NE
- DGEBF – Epoxy Resin CAS#28064-14-4 10%-20%
- TALC – CAS#14807-96-6 5%-10%
- OSHA/PEL – 2mg/m³
- ACGIH/TLV – 2mg/m³
- Titanium Dioxide – CAS# 13463-67-7 1%-5%
- OSHA/PEL – 5mg/m³
- ACGIH/TLV – 10mg/m³
- Mica – CAS# 12001-26-2 2%-5%
- OSHA/PEL – 20Mppcf
- ACGIH/TLV – 3mg/m³
- Crystalline Silica (ceramic microspheres) CAS# 68402-68-4 20%-40%
- OSHA/PEL – 15mg/m³
- ACGIH/TLV – 10mg/m³
Hardener:
- Modified Polyamidoamine CAS# mixture 20%-30%
- OSHA/PEL NE
- ACGIH/TLV NE
- Polyamide CAS# mixture 60%-80%
- OSHA/PEL NE
- ACGIH/TLV NE

Trade Secret Claim: Please note that the exact concentration of each chemical contained in the product has been withheld as the exact formula needs to remain a trade secret.

Section 4: First Aid Measures

Description of first-aid measures for specific exposure:
For Ingestion:
- Resin - If large amounts are ingested, induce vomiting if conscious.
- Hardener - Call physician immediately. Give generous amounts of water if conscious. Do not induce vomiting.
For Skin Exposure:
- Resin - Promptly wash with mild soap and water.
- Hardener - Promptly wash with mild soap and water.
For Inhalation:
- Resin - Remove to fresh air. Give oxygen if breathing is difficult.
- Hardener - Remove to fresh air. Give oxygen if breathing is difficult.
For Eye Exposure:
- Resin - Immediately flush eyes with water for 15 minutes. Call physician.
- Hardener - Immediately flush eyes with water for 15 minutes. Call physician.

Description of overexposure symptoms and effects:
Overexposure to this material can cause chemical burns to the skin and eyes and inhalation of vapors can cause severe respiratory irritation. Can cause allergic skin and respiratory reactions. Can have effects on the nervous system evidenced by central nervous system depression, tremors, paralysis, diarrhea and vasodilation. May also cause headache, nausea and dizziness.

Medical Conditions Aggravated by Exposure:
- Allergy, eczema or skin conditions.

Additional Information:
- Promptly remove wet contaminated non-imperious clothing, wash before reuse.
- Destroy contaminated leather and absorbent shoes.
Section 5: Fire-Fighting Measures

- **Resin**
  - Flash Point: >300°F (149°C)
  - Flash Point Method Used: Closed cup
  - Fire Fighting Extinguishing Media: Carbon Dioxide, foam, dry chemical
  - Fire Fighting Equipment: Use a self-contained breathing apparatus
  - Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

- **Hardener**
  - Hardener: >200°F (93°C)

Section 6: Accidental Release Measures

- **Resin**
  - Steps to be taken if material is spilled: Shovel into closeable container for disposal.

- **Hardener**
  - Steps to be taken if material is spilled: Absorb into sand or other absorbent material. Shovel into closeable container and dispose of in professional manner.

Section 7: Handling and Storage

- **Handling precautions:** Do not get in eyes, on skin, on clothing. Do not breathe vapor, mist or spray. Use only with adequate ventilation. Individuals should wash thoroughly after handling. For industrial use only.

- **Storage Information:** Keep away from heat, sparks and open flame. Ground and bond metal containers for liquid transfer to avoid static sparks. Store at temperatures between 2°C and 40°C in tightly closed containers in dry area to prevent moisture and carbon dioxide contamination.

Section 8: Exposure Controls/Personal Protection

- **OSHA PELs:** N/A
- **ACGIH TLVs:** N/A
- **Personal Protective Equipment:** Wear protective equipment to prevent exposure and personal contact
  - **Skin Protection:** Impervious gloves
  - **Respiratory Protection:** Organic chemical cartridge respirator if needed in non-vented area
  - **Eye Protection:** Splash-proof chemical goggles
  - **Engineering Controls:** Good general mechanical ventilation and local exhaust

Section 9: Physical and Chemical Properties

- **Resin**
  - Appearance: Grey
  - Odor: None
  - Physical State: Liquid
  - Solubility in Water (% by weight): Negligible
  - Melting Point: <0°F (-18°C)
  - Density: 1.41
  - pH: ca 5

- **Hardener**
  - Appearance: Reddish Brown
  - Odor: Slight sweet odor
  - Physical State: Liquid
  - Solubility in Water (% by weight): Negligible
  - Melting Point: <0°F (-18°C)
  - Density: 0.97
  - pH: ca 10
### Section 10: Stability and Reactivity

<table>
<thead>
<tr>
<th>Reactivity:</th>
<th>Non Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability:</td>
<td>Stable</td>
</tr>
<tr>
<td>Incompatible Materials:</td>
<td>Strong acids, oxidizers and bases</td>
</tr>
<tr>
<td>Hazardous Decomposition Products:</td>
<td></td>
</tr>
<tr>
<td>Resin:</td>
<td>Carbon Monoxide, Carbon Dioxide, Phenolics</td>
</tr>
<tr>
<td>Hardener:</td>
<td>Carbon Monoxide, Carbon Dioxide, Phenolic Nitrogen Oxides and Compounds</td>
</tr>
<tr>
<td>Hazardous Polymerization:</td>
<td></td>
</tr>
<tr>
<td>Resin:</td>
<td>Will not occur</td>
</tr>
<tr>
<td>Hardener:</td>
<td>Do not heat in bulk as dangerous decomposition may occur, liberating toxic fumes</td>
</tr>
</tbody>
</table>

### Section 11: Toxicological Information

<table>
<thead>
<tr>
<th>Acute Oral Effects (Ingestion):</th>
<th>Resin - LD$_{50}$ (rabbits): 4000 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hardener - LD$_{50}$ (rabbits): 3000 mg/kg</td>
</tr>
<tr>
<td>Sensitization:</td>
<td>Can cause skin and respiratory sensitization</td>
</tr>
<tr>
<td>Skin Irritation:</td>
<td>Irritant</td>
</tr>
<tr>
<td>Eye Irritation:</td>
<td>Irritant</td>
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</table>

### Section 12: Ecological Information

| Additional Information:       | Amines, in general, may be toxic to aquatic organisms. Epoxies are only slightly soluble in water. |
| Aquatic Toxicity:             | No further relevant information available |
| Persistence and Degradability: | No further relevant information available |
| Biocumulative Potential:      | No further relevant information available |
| Mobility in Soil:             | No further relevant information available |

### Section 13: Disposal Considerations

| Waste Disposal Method:        | Dispose in accordance with international, federal (US), state (US) and local regulations |
| Recommendations:              | Must not be disposed of together with household garbage. Do not allow product to reach sewage system. |

### Section 14: Transport Information

| DOT, ADR, AND IMDG, IATA:     | Non-hazardous for transport |
| Hazard Class under:           | Non-hazardous for transport |
| DOT, ADR, AND IMDG, IATA:     | Non-hazardous for transport |
| Marine Pollutant:             | No |
| Notes:                        | Not Regulated under DOT, ADR, AND, IMDG, IATA |
Section 15: Regulatory Information

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200(g). This product is considered to be a hazardous chemical under that standard.


Toxic Substances Control Act (TSCA): All ingredients are on the TSCA inventory and are exempt as per 40 CFR 723.50 Low Volume Exemption (LVE) and Low Environmental Release and Low Human Exposure Exemption (LoREX).

SARA Title III: Section 304 - CERCLA: Not listed.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Sec. 313 (40 CFR 372). This information must be included in all MSDS's that are copied and distributed for this material.

Section 16: Other Information

This SDS was prepared in accordance with the new OSHA HCS requirements that will go into effect for manufacturers of chemicals on June 2015. This SDS replaces all preceding versions of MSDS and complies with all current regulations.

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