SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Identifier: ARDEX EP 2000™ Resin (Part A)
Product ID Number: 50011570
Chemical Family: Mixture
Trade Name/Synonyms: ARDEX EP 2000 Resin
Material Use: Epoxy resin of two-part system for substrate preparation
Uses Advised Against: Use only as recommended in the product’s Technical Data Sheet.

Manufacturer’s name and address: ARDEX L.P.
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Information Telephone No.: 1-888-512-7339 or 1-724-203-5000
Website Address: http://www.ardexamericas.com
24 Hr Emergency Telephone #: CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)
Skin Sensitizer Category 1
Eye Irritant Category 2A
Skin Irritant Category 2

GHS Pictograms

Signal Word: Warning

Hazard Statements
Causes serious eye irritation.
May cause an allergic skin reaction.
Causes skin irritation.

Precautionary Statements
Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or dust. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves and eye protection. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Identified: None
Unknown Acute Toxicity Content: < 5% of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>60.00 – 100.00</td>
</tr>
</tbody>
</table>
SECTION 4 – FIRST AID MEASURES

General
 : Get medical attention if you feel unwell.

Inhalation
 : Remove person to fresh air and keep at rest in a position comfortable for breathing.
   Get medical attention.

Skin contact
 : Remove contaminated clothing. Flush affected skin with soap and water. If irritation persists: seek medical attention/advice.

Eye contact
 : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

Ingestion
 : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

Notes for Physician
 : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure
 - Inhalation
   : Inhalation of vapors may cause mild irritation of the respiratory system. Symptoms may include coughing and shortness of breath.
 - Skin
   : Causes irritation. Symptoms may include redness and itching.
 - Eyes
   : Causes irritation. Symptoms may include redness, itching or pain.
 - Ingestion
   : May cause stomach pain with nausea and vomiting.

Effects of long-term (chronic) exposure
 : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Some individuals may experience a sensitization reaction of the skin after an initial exposure. Subsequent exposures may cause a hypersensitive skin reaction (rash, swelling).

Indication of need for immediate medical attention or special treatment
 : Difficulty breathing persists after removing the person to fresh air.
   Any exposure to the eye which causes irritation.
   Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing media
 : Carbon dioxide, dry chemical powder, foam, water mist/fog.

Unsuitable extinguishing media
 : Water jet may spread the flames.

Hazardous combustion products
 : Carbon oxides and/or low molecular weight hydrocarbons.

Special fire-fighting procedures/equipment
 : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

 : Not flammable. Other Flammability properties are found in Section 9.

NFPA Rating
 : 0 - Minimal  1 – Slight  2 – Moderate  3 – Serious  4 – Severe
   Health: 2  Flammability 1  Reactivity 0  Special Hazards 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions
 : Wear chemically resistant personal protective equipment during cleanup. Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
Protective equipment: Refer to Section 8 for additional information on acceptable personal protective equipment.

Emergency procedures: This product does not contain any chemicals which require reporting spills or releases to the U.S. EPA. In case of a spill or release, call the emergency number listed in Section 1 for advice.

US CERCLA Reportable quantity (RQ): None reported.

Spill response / clean-up: Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal. Notify the appropriate authorities as required.

Environmental precautions: Do not allow product to enter waterways. Do not allow material to contaminate ground water system.

Disposal of spilled material: See Section 13.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures: Observe good hygiene standards. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid repeated or prolonged skin contact. Avoid breathing vapors. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation.

Storage requirements: Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials: Strong oxidizing agents.

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits: No exposure limits have been established for the product. Below are exposure limits for the ingredients in the product.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>ACGIH TLV TWA</th>
<th>STEL</th>
<th>OSHA PEL PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>25068-38-6</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Phenol-formaldehyde polymer</td>
<td>28064-14-4</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>2-Ethylhexyl glycidyl ether</td>
<td>2461-15-6</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Engineering measures: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

Eye / face protection: Chemical goggles or safety glasses must be worn when using this product. A face shield is recommended if splashing is possible.

Skin protection: Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection: Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection: If work process generates excessive quantities of vapor or dust, or exposures exceeding any PEL, wear an appropriate organic vapor respirator.

Site safety equipment: An eyewash station and safety shower should be made available in the immediate working area.

General hygiene precautions: Avoid contact with eyes, skin and clothing. Do not breathe vapors. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES
Physical state: Liquid
Appearance: Colorless liquid
Odor: Characteristic
Odor threshold: N/Av
pH: N/Av
Specific gravity: 1.1 – 1.2
Boiling point: N/Av
Coefficient of water/oil distribution: N/Av
Melting/Freezing point: N/Av
Solubility in water: Insoluble
Vapor pressure (mm Hg @ 20°C / 68°F): N/Av
Evaporation rate (n-Butyl acetate = 1): N/Av
Vapor density (Air = 1): N/Av
Volatiles (% by weight): N/Av
Volatile organic compounds (VOCs): 12.4 g/L, A+B, per ASTM D2369
Decomposition temperature: N/Av
Flammable Classification: Not Flammable
Flash point: >212°F (>100°C)
Lower flammable limit (% by vol): Not available
Flash point method: Setaflash closed
Upper flammable limit (% by vol): Not available
Auto-ignition temperature: > 840°F (450°C)
Oxidizing properties: None
Flame projection length: Not available
Flashback observed: Not available
Explosion data: Sensitivity to mechanical impact / static discharge: Not expected to be sensitive to mechanical impact or static discharge.
Viscosity: Not available

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity: Product reacts with amines to form polymers. Heat is evolved by this reaction.
Stability and reactivity: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization: Hazardous polymerization does not occur.
Conditions to avoid: Avoid prolonged exposure to heat.
Materials to avoid and incompatibility: Oxidizing agents.
Hazardous decomposition products: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure: Inhalation: YES  Skin Absorption: NO  Skin and Eyes: Yes  Ingestion: YES
Signs and symptoms of short-term (acute) exposure: See Section 4.
Signs and symptoms of long-term (chronic) exposure: See Section 4.
Calculated Acute Toxicity Estimates for the Product

<table>
<thead>
<tr>
<th>Inhalation, rat</th>
<th>Oral, rat</th>
<th>Dermal, rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A / epichlorohydrin resin</td>
<td>N/Av</td>
<td>11,400 mg/kg</td>
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<tr>
<td>Phenol-formaldehyde polymer</td>
<td>N/Av</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>2-Ethylhexyl glycidyl ether</td>
<td>N/Av</td>
<td>7800 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Causes serious eye irritation.
Respiratory or skin sensitization: Contains components which are known to cause skin sensitization reactions. Does not contain known respiratory sensitizers.
Germ cell mutagenicity : None known.
Carcinogenic status : No components present in concentration greater than 0.1% are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive toxicity : None known.
Specific Target Organ Toxicity, Single Exposure : None known.
Specific Target Organ Toxicity, Repeated Exposure : None known.
Aspiration hazard : None known.
Other important hazards : See Section 2 for additional information.

SECTION 12 – ECOLOGICAL INFORMATION

Environmental effects : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Ecotoxicological : No data is available on the product itself.
Persistence and degradability : No data available.
Bioaccumulative potential : No data available.
Mobility in the soil : No data available.
PBT and vPvB assessment : No data available.
Other adverse effects : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.
Methods of disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Packaging : Handle contaminated packaging in the same manner as the product.
RCRA : For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>Shipping Name</th>
<th>Class</th>
<th>Packing Group</th>
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</thead>
<tbody>
<tr>
<td>TDG</td>
<td>UN 3082</td>
<td>Environmentally hazardous substances, liquid, n.o.s. (Contains: Bisphenol A / epichlorohydrin resin)</td>
<td>9</td>
<td>III</td>
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<tr>
<td>Additional Information</td>
<td>None</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>49 CFR/DOT</td>
<td>UN 3082</td>
<td>Environmentally hazardous substances, liquid, n.o.s. (Contains: Bisphenol A / epichlorohydrin resin)</td>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>Additional Information</td>
<td>None</td>
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<td></td>
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</tr>
</tbody>
</table>

Marine Pollutant : Yes

SECTION 15 – REGULATORY INFORMATION

Canadian Information:
This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

**US Federal Information:**
TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
- Immediate (Acute) Health Hazard
- Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

U.S. State Right To Know Laws
California Proposition 65: See product label for information regarding Proposition 65.

Other State Right to Know Laws: No chemicals listed in other state RTK Laws.

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**SECTION 16 – OTHER INFORMATION**

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>Health: *2  Flammability 1  Physical Hazard 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PPE: Gloves, safety glasses</td>
</tr>
</tbody>
</table>

**Legend**
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EPA: Environmental Protection Agency
- GHS: Globally Harmonized System
- HPR: Hazardous Products Regulations
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- N/Av: Not Available
- N/Ap: Not Applicable
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System

**Disclaimer of Liability**
The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user determines the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX L.P. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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