SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Identifier: ARDEX WA™ RESIN (Part A) Epoxy Grout and Adhesive
Product ID Number: 70046441
Chemical Family: Mixture
Trade Name/Synonyms: ARDEX WA Resin
Material Use: High Performance, 100% Solids epoxy grout and adhesive.
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
Supplier’s name and address: Refer to Manufacturer

Information Telephone No.: (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: Avoid breathing vapors or dust. Wash hands and exposed skin thoroughly after handling. Wear protective gloves and eye protection. Keep container tightly closed. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of contents/container in accordance with federal, state, and local laws. Do not allow product to enter drains.

During normal usage of the product as recommended, airborne dusts and mists will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Identified: None
Unknown Acute Toxicity Content: 100% of the ingredients of this product have unknown acute toxicity by inhalation.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS
## Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>% (by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>14808-60-7</td>
<td>30 – 60</td>
</tr>
<tr>
<td>Polymer: Bisphenol A + epichlorohydrin epoxy resin</td>
<td>25068-38-6</td>
<td>10 – 30</td>
</tr>
<tr>
<td>Alkyl (C12-14) glycidyl ether</td>
<td>68609-97-2</td>
<td>10 – 30</td>
</tr>
<tr>
<td>Polymer: Bisphenol F + epichlorohydrin</td>
<td>28064-14-4</td>
<td>5 – 10</td>
</tr>
<tr>
<td>Hydrophobic silica</td>
<td>67762-90-7</td>
<td>1 – 5</td>
</tr>
</tbody>
</table>

Note: the Asparagus color of ARDEX WA RESIN grout also contains the following pigment:

- Chromium (III) oxide: 1308-38-9 5 - 10

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

### 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 water. If irritation or rash 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 irritation.
- **Skin**: Causes irritation. Symptoms may include redness and itching.
- **Eyes**: Causes irritation. Symptoms may include redness, itching, tearing 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 continues after removing the affected person to fresh air. Any contact with the eyes that causes irritation. Ingestion.

### SECTION 5 – FIRE FIGHTING MEASURES

#### Suitable extinguishing media
- Water fog/mist, dry chemical, carbon dioxide, foam. Fight larger fires with water spray or alcohol resistant foam.

#### Unsuitable extinguishing media
- High pressure water jet may spread the fire.

#### Hazardous combustion products
- Carbon monoxide carbon dioxide, and other vapors and toxic gases.

#### Fire hazards/conditions of flammability
- Not classified for flammability per GHS. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

#### 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 fog 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.

#### Environmental Precautions
- Do not allow product to enter drains or contaminate ground water systems.
: Not flammable

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 that must be reported to the EPA in the event of a spill or release. For advice on chemical spills with this product, call the emergency number listed in Section 1.

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 dust or vapors of this product. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep in adequate ventilation. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing installations (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing.

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 : See Section 10.

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>ACGIH TLV STEL</th>
<th>OSHA PEL TWA (respirable fraction)</th>
<th>OSHA PEL STEL</th>
<th>NIOSH PEL TWA (respirable)</th>
<th>NIOSH PEL STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>14808-60-7</td>
<td>0.025 mg/m³</td>
<td>N/Av</td>
<td>0.05 mg/m³ (respirable)</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Polymer: Bisphenol A + epichlorohydrin epoxy resin</td>
<td>25068-38-6</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Alkyl (C12-14) glycidyl ether</td>
<td>68609-97-2</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Polymer: Bisphenol F + epichlorohydrin</td>
<td>28064-14-4</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Hydrophobic silica</td>
<td>67762-90-7</td>
<td>10 mg/m³ (total dust); 3 mg/m³ (respirable)</td>
<td>N/Av</td>
<td>N/Av</td>
<td>6 mg/m³ (NIOSH)</td>
<td>N/Av</td>
<td></td>
</tr>
</tbody>
</table>
**Note:** the Asparagus color of ARDEX WA grout RESIN also contains the following pigment:

<table>
<thead>
<tr>
<th>Chromium (III) oxide</th>
<th>1308-38-9</th>
<th>0.5 mg/m³ (measured as Cr)</th>
<th>N/Av</th>
<th>0.5 mg/m³ (measured as Cr)</th>
<th>N/Av</th>
</tr>
</thead>
</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 generated from the handling of this product.

**Eye / face protection**: Safety glasses must be worn when using this product.

**Hand protection**: Wear impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended. Refer to glove manufacturer for breakthrough time for the chemicals in this product. (See Section 3.)

**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 in excess of 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/dust. 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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Paste</th>
<th>Appearance</th>
<th>White Paste*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td>Odor threshold</td>
<td>N/Av</td>
</tr>
<tr>
<td>pH</td>
<td>8 (diluted)</td>
<td>Specific gravity</td>
<td>1.52</td>
</tr>
<tr>
<td>Boiling point</td>
<td>N/Av</td>
<td>Coefficient of water/oil distribution</td>
<td>N/Av</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>N/Av</td>
<td>Solubility in water</td>
<td>slight</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg @ 20°C / 68°F)</td>
<td>N/Av</td>
<td>Evaporation rate (n-Butyl acetate = 1)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>N/Av</td>
<td>Volatiles (% by weight)</td>
<td>N/Av</td>
</tr>
<tr>
<td>Volatile organic compounds (VOCs)</td>
<td>2.67 g/l A+B, ASTM D2369</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Decomposition temperature | N/Av | Flammable Classification | Not Flammable |
| Flash point | >390°F (>199°C) | Lower flammable limit (% by vol) | Not available |
| Flash point method | Setaflash closed | Upper flammable limit (% by vol) | Not available |
| Auto-ignition temperature | Not available | Oxidizing properties | None |
| Flame projection length | Not available | Flashback observed | Not available |

**Explosion data**: Sensitivity to mechanical impact / static discharge

<table>
<thead>
<tr>
<th>Viscosity</th>
<th>Not expected to be sensitive to mechanical impact or static discharge.</th>
</tr>
</thead>
</table>

*Note: Appearance for Asparagus color of ARDEX WA RESIN is Green Paste.*

### 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 exposure:

- See Section 4.

Calculated Acute Toxicity Estimates for the Product:

- **Inhalation:** Not Available
- **Oral:** > 10,000 mg/kg
- **Dermal:** > 8,000 mg/kg

Toxicological data:

- See below for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Cas No.</th>
<th>LC50 (4 hr) Inhalation, rat</th>
<th>LD50, mg/kg Oral, rat</th>
<th>LD50, mg/kg Dermal, rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>14808-60-7</td>
<td>N/Av</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Polymer: Bisphenol A + epichlorohydrin epoxy resin</td>
<td>25068-38-6</td>
<td>N/Av</td>
<td>11400</td>
<td>&gt; 23500</td>
</tr>
<tr>
<td>Alkyl (C12-14) glycidyl ether</td>
<td>68609-97-2</td>
<td>N/Av</td>
<td>17100</td>
<td>N/Av</td>
</tr>
<tr>
<td>Polymer: Bisphenol F + epichlorohydrin</td>
<td>28064-14-4</td>
<td>N/Av</td>
<td>&gt;5 000</td>
<td>&gt; 2 000</td>
</tr>
<tr>
<td>Hydrophobic silica</td>
<td>67762-90-7</td>
<td>N/Av</td>
<td>&gt; 1000 (Max dose in study)</td>
<td>&gt; 2000</td>
</tr>
<tr>
<td>For the Asparagus color only:</td>
<td>1308-38-9</td>
<td>&gt; 5.41 mg/L</td>
<td>&gt;5000 mg/kg</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation:

- Causes skin irritation.

Serious eye damage/eye irritation:

- Causes serious eye irritation.

Respiratory or skin sensitization:

- Contains a component which is known to cause skin sensitization reactions. Does not contain known respiratory sensitizers.

Germ cell mutagenicity:

- None known.

Carcinogenic status:

- Contains crystalline silica, or quartz, which is listed as a carcinogen via inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). The crystalline silica is inextricably bound into the paste and cannot become airborne under normal conditions of use. See Section 7 for more information.

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.

Important environmental characteristics:

- N/Av

Ecotoxicological:

- No data is available on the product itself.

Persistence and degradability:

- Not Available.

Bioaccumulative potential:

- Not Available.

Mobility in the soil:

- Not Available.

PBT and vPvB assessment:

- Not Available.

Other adverse effects:

- Not 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.
Containers: Treat contaminated containers 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>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>UN 3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (Contains: Bisphenol A-Epichlorohydrin polymer; Bisphenol F-Epichlorohydrin polymer)</td>
<td>9</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>TDG Additional Information</td>
<td></td>
<td>This product ships as a Limited Quantity per TDGR 1.17.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 CFR/DOT</td>
<td>UN 3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s. (Contains: Bisphenol A-Epichlorohydrin polymer; Bisphenol F-Epichlorohydrin polymer)</td>
<td>9</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>49 CFR/DOT Additional Information</td>
<td></td>
<td>This product ships as a Limited Quantity per 49 CFR 173.155 (b).</td>
<td></td>
<td></td>
<td></td>
</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: The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>NY</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>14808-60-7</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Chromium (III) oxide (Only in the Asparagus color)</td>
<td>1308-38-9</td>
<td>No</td>
<td>YES</td>
<td>No</td>
<td>YES</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**SECTION 16 – OTHER INFORMATION**

HMIS Rating: * - Chronic Hazard   0 - Minimal   1 – Slight   2 – Moderate   3 – Serious   4 – Severe

Health: *2 Flammability  1 Physical Hazard  0 PPE: Gloves, safety glasses

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.

Prepared By:
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Aliquippa, PA, U.S.A.
15001

(724) 203-5000
Visit our Website: http://www.ardexamericas.com

Revision date: 18-Apr-2020
End of Document