## SAFETY DATA SHEET

## SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements 400 Ardex Park Dr. Aliquippa, PA 15001 USA

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) : ARDEX P 82 ULTRA PRIME - Resin (Part A) **Product Identifier** Chemical Name Chemical Family : Mixture : N/Ap : ARDEX P 82 Resin Chemical Formula` Trade Name/Synonyms : N/Ap Molecular Weight Material Use : Epoxy resin for primer. : N/Ap Uses Advised Against : No information available.

## **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 2B.
 Skin irritant, Category 2.
 Specific Target Organ Toxicity (Single Exposure) Category 3, Respiratory

### **GHS Pictograms**

| Signal Word                       | Warning  |
|-----------------------------------|--|
| Hazard Statements                 | Causes eye irritation.<br>May cause an allergic skin reaction.<br>May cause skin and respiratory irritation.   |
| Precautionary Statements :        | Do not get in eyes, on skin or on clothing. Avoid breathing vapors or dust.<br>Avoid prolonged contact with skin. Use outdoors or in well-ventilated area. If<br>on skin, wash with soap and water. If skin irritation or rash occurs, get medical<br>attention/advice. Wash thoroughly with soap and water after handling.<br>Contaminated work clothes must not be allowed out of the workplace. Wash<br>contaminated clothing before reuse. Keep container tightly closed. Store in a<br>well-ventilated place. Store locked up. Dispose of contents/container<br>according to local/regional/national regulations. Do not pour product down<br>drains. |
| Hazards Not Otherwise Classified: | present. See Section 7 (Handling and Storage) for further details.   |
| % With Unknown Acute Toxicity     |  |
| / with onknown Acute Toxicity .   | acute inhalation toxicity.   |

Supplier's name and address:

Refer to Manufacturer

п

# SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients   | CAS #      | % (by weight) |
|---|------------|---------------|
|   |            |               |
| Limestone   | 1317-65-3  | 10.00 - 30.00 |
| 2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane epoxy resin | 25068-38-6 | 5.00 - 10.00  |
| Aliphatic glycidyl ether  | 2461-15-6  | 1.00 - 5.00   |
| Phenol, polymer with formaldehyde, glycidyl ether                               | 28064-14-4 | 1.00 - 5.00   |
| Crystalline silica  | 14808-60-7 | 0.10 – 1.00   |

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

| SECTION 4 – FIRST AID MEASURES |   |  |  |  |
|--------------------------------|---|--|--|--|
| General                        | : Call a Poison Center or doctor if you feel unwell.  |  |  |  |
| Inhalation                     | <ul> <li>If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medica<br/>personnel only. If not breathing, clear airway and start artificial respiration. Seek<br/>immediate medical attention/advice.</li> </ul>   |  |  |  |
| Skin contact                   | <ul> <li>Remove/Take off immediately all contaminated clothing. Flush affected skin with<br/>gently flowing lukewarm water for at least 20 minutes. Seek immediate medical<br/>attention/advice.</li> </ul>   |  |  |  |
| Eye contact                    | : Immediately flush eyes thoroughly with running water for at least 20 to 30 minutes.<br>Seek immediate medical attention/advice.   |  |  |  |
| Ingestion                      | : Never give anything by mouth to an unconscious person. Rinse mouth with water.<br>Do NOT induce vomiting. Have victim drink one to two glasses of water. Seek<br>immediate medical attention/advice.  |  |  |  |
| Notes for Physician            | : Treat symptomatically.  |  |  |  |
| Signs and symptoms of s        | nort-term (acute) exposure  |  |  |  |
| Inhalation                     | <ul> <li>May cause minor, temporary irritation to respiratory tract. Symptoms may include<br/>coughing and shortness of breath.</li> </ul>  |  |  |  |
| Skin                           | : May cause skin irritation. Symptoms may include redness and itching. Prolonged or repeated overexposure to dusts/vapors may cause skin sensitization.   |  |  |  |
| Eyes                           | : Causes moderate irritation to eyes. Symptoms may include redness, itching, blurred vision or pain.  |  |  |  |
| Ingestion                      | : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.  |  |  |  |
| Effects of long-term (chro     | nic) exposure   |  |  |  |
|                                | <ul> <li>Prolonged inhalation may cause adverse lung effects with symptoms including coughing<br/>and shortness of breath. Some individuals may experience a sensitization reaction of<br/>the skin after an initial exposure. Subsequent exposures may cause a hypersensitive<br/>skin reaction (rash, swelling).</li> </ul> |  |  |  |
| Indication of need for imme    | diate medical attention or special treatment  |  |  |  |
|                                | : Difficulty breathing persists after removing the person to fresh air.   |  |  |  |
|                                | Any exposure to the eye which causes irritation.  |  |  |  |
|                                | Blue color of the skin (cyanotic) after exposure.   |  |  |  |
|                                | Ingestion.  |  |  |  |
|                                | SECTION 5 – FIRE FIGHTING MEASURES  |  |  |  |

| Suitable extinguishing media   | : | Carbon dioxide, dry chemical powder, appropriate foam or water fog.  |
|--------------------------------|---|--|
| Unsuitable extinguishing media | : | water jet  |
| Hazardous combustion products  | : | Carbon monoxide, carbon dioxide, and other toxic vapors and gases that are common to thermal degradation of organic compounds. |

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.

## Environmental precautions

#### Fire hazards/conditions of flammability

: Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

: Do not allow material to enter drains or contaminate ground water system.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)

: Not flammable

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

| Personal precautions Protective equipment | IRRITANT. Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.<br>Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.  | ] |
|---|---|---|
| Emergency Procedures                      | If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002). Outside of the U.S. call the emergency number listed in Section 1.  |   |
|   | US CERCLA Reportable quantity (RQ): None reported.  |   |
| Methods and materials for contain         | nt and cleaning 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 (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required. | р |
| Prohibited materials                      | Avoid strong oxidizing agents   |   |
| Environmental precautions                 | Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.  |   |
| Reference to other sections               | See Section 13 for disposal information.  |   |

## **SECTION 7 – HANDLING AND STORAGE**

| Safe handling procedures    | ot eat, drink or smoke in<br>ct with skin and eyes. Av<br>hing vapors or mists of th<br>ful if inhaled. When remo<br>ation), wear safety gogg<br>ng, chipping, or mechan<br>contact. Promptly remove | iene standards. Use only with adequate ventilation.<br>the work area. Wash thoroughly after handling. Avoid<br>void repeated or prolonged skin contact. Avoid<br>his product. Sanding and grinding dusts may be<br>oving this product from existing flooring (i.e. during a<br>gles and respiratory protection from dust due to<br>ically pulverizing. Wear protective clothing to prevent<br>e any clothing that becomes contaminated. Clean<br>reuse. Keep container tightly closed. |
|-----------------------------|--|--|
| Storage requirements        | storing in direct sunlight   | lated area. Store away from heat and open flame.<br>t. Store in original container. Keep tightly closed when<br>ty container without commercial cleaning or  |
| Incompatible materials      | ection 10.   |  |
| Special packaging materials | s keep in containers ma  | ade of the same materials as the supply container.   |

## **SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Permissible Exposure Limits

:

No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

| Ingredients  | CAS #      | ACGIH T   | LV   | OSHA PE  | L    |
|--|------------|---|------|--|------|
|  |            | TWA   | STEL | PEL  | STEL |
| Limestone  | 1317-65-3  | N/Av  | N/Av | 15 mg/m <sup>3</sup><br>(Total dust);<br>5 mg/m <sup>3</sup><br>(respirable) | N/Av |
| 2,2-bis(4-hydroxyphenyl)propane, polymer with<br>(chloromethyl)oxirane epoxy resin | 25068-38-6 | N/Av  | N/Av | N/Av   | N/Av |
| Aliphatic glycidyl ether   | 2461-15-6  | N/Av  | N/Av | N/Av   | N/Av |
| Phenol, polymer with formaldehyde, glycidyl ether                                  | 28064-14-4 | N/Av  | N/Av | N/Av   | N/Av |
| Crystalline silica   | 14808-60-7 | 0.025 mg/m <sup>3</sup><br>(respirable<br>fraction) | N/Av | 0.05 mg/m <sup>3</sup><br>(respirable)<br>(Final rule limit)                 | N/Av |

| Engineering Controls           | 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. |
|--------------------------------|--|
| Personal Protection Equipment  |  |
| Eye / face protection          | Chemical goggles must be worn when using this product. Additionally, 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 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 considerations | 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**

| Physical state  | : | Liquid             | Appearance                                      | : | Pink liquid   |
|---|---|--------------------|---|---|---------------|
| Odor  | : | slight             | Odor threshold                                  | : | N/Av          |
| рН  | : | N/Av               | Specific gravity                                | : | 1.17 – 1.20   |
| Boiling point   | : | 212°F (100°C)      | Coefficient of water/oil distribution           | : | N/Av          |
| Melting/Freezing point  | : | N/Av               | Solubility in water                             | : | Miscible      |
| Vapor pressure (mm Hg @ 20°C / 68°F)                                | : | N/Av               | Evaporation rate ( <i>n</i> -Butyl acetate = 1) | : | N/Av          |
| Vapor density (Air = 1)   | : | N/Av               | Volatiles (% by weight)                         | : | 35 - 40       |
| Volatile organic compounds (VOCs)                                   | : | 5.5 g/L (A + B) AS | TM D2369  |   |               |
| Particle size   | : | N/Av               | Flammability 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   | : | N/Av               | Decomposition temperature                       | : | Not available |
| Viscosity   | : | Not available      | Oxidizing properties                            | : | Not available |
| Explosion data: Sensitivity to mechanical impact / static discharge |   |                    |   |   |               |

: Not expected to be sensitive to mechanical impact or static discharge.

# **SECTION 10 – REACTIVITY AND STABILITY INFORMATION**

| Reactivity          | : | Reacts with ammonia and amines. Reaction releases heat.  |
|---------------------|---|--|
| Stability           | : | $\label{eq:stable} Stable \ under \ the \ recommended \ storage \ and \ handling \ conditions \ prescribed.$ |
| Hazardous reactions | : | Hazardous polymerization does not occur.   |

Conditions to avoid Materials to avoid and incompatibility

: High temperatures.

: 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 |  |  |  |  |  |
|--|--|---------------------------|--------------------------|----------------|--|--|--|--|--|
| Symptoms of exposure   | : See Section 4.   |                           |                          |                |  |  |  |  |  |
| Calculated Acute Toxicity Estimates for the Product                                  |  |                           |                          |                |  |  |  |  |  |
| Inhalation   | ion : N/Av   |                           |                          |                |  |  |  |  |  |
| Oral   | : > 5000 mg/kg   |                           |                          |                |  |  |  |  |  |
| Dermal : > 6000 mg/kg  |  |                           |                          |                |  |  |  |  |  |
| <b>Toxicological data</b> : See below for individual ingredient acute toxicity data. |  |                           |                          |                |  |  |  |  |  |
|  | LC50 (4 hr)  |                           | LD50                     |                |  |  |  |  |  |
| Ingredients  | Inhalation, rat  | Oral, rat                 | Der                      | mal, rabbit    |  |  |  |  |  |
| Limestone  | N/Av   | 6450 mg/kg                |                          | N/Av           |  |  |  |  |  |
| 2,2-bis(4-<br>hydroxyphenyl)propane,<br>polymer with<br>(chloromethyl)oxirane        | N/Av   | 13600 mg/kg               | > 61                     | 000 mg/kg      |  |  |  |  |  |
| Aliphatic glycidyl ether   | N/Av   | 7800 mg/kg                |                          | N/Av           |  |  |  |  |  |
| Phenol, polymer with<br>formaldehyde, glycidyl ether                                 | N/Av   | > 5000 mg/kg              | 40                       | 00 mg/kg       |  |  |  |  |  |
| Crystalline silica   | N/Av   | N/Av                      |                          | N/Av           |  |  |  |  |  |
| Skin corrosion or irritation<br>Serious eye damage / eye irritat                     | : May cause irritation to<br>: Moderately irritating to  |                           |                          |                |  |  |  |  |  |
| Respiratory or skin sensitizatio   | n : Contains a componen  | t which is known to cause | e skin sensitization rea | ctions.        |  |  |  |  |  |
| Germ cell mutagenicity   | : Contains components tests.   | which have tested positiv | e for mutagenicity in s  | tandard Ames   |  |  |  |  |  |
| Carcinogenic status  | <ul> <li>This product contains Crystalline silica. Crystalline silica (respirable size) is<br/>classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2),<br/>NTP (Group 1) and OSHA (OSHA Select carcinogen). During normal usage of the<br/>product as recommended, airborne dusts will not be present. See Section 7 for<br/>more information. No other components are listed as carcinogens by ACGIH,<br/>IARC, OSHA or NTP.</li> </ul> |                           |                          |                |  |  |  |  |  |
| Reproductive toxicity  | : None known.  |                           |                          |                |  |  |  |  |  |
| Specific Target Organ Toxicity,  | Single Exposure  |                           |                          |                |  |  |  |  |  |
|  | : May cause respiratory  | virritation.              |                          |                |  |  |  |  |  |
| One sitis Tennet Ormen Tenisity  | Demonstral Evenencies  |                           |                          |                |  |  |  |  |  |

Specific Target Organ Toxicity, Repeated Exposure : None known.

| Aspiration hazard      | : | None known. |
|------------------------|---|-------------|
| Additional information | : | N/Av        |

# **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. Information on components is listed below.  |

## 2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane [CAS # 25068-38-6]

| Ecotoxicity               | : No data available.                          |        |
|---------------------------|---|--------|
| Biodegradability          | : Not readily biodegradable.                  |        |
| Bioaccumulative potential | : No data available.                          |        |
| Mobility in soil          | : No data available.                          |        |
| PBT and vPvB assessment   | : No data available.                          |        |
| Other adverse effects     | : Toxic to aquatic life with long lasting eff | iects. |
|                           |   |        |

## Aliphatic glycidyl ether [CAS # 2461-15-6]

| Ecotoxicity               | : | No data available. |
|---------------------------|---|--------------------|
| Biodegradability          | : | No data available. |
| Bioaccumulative potential | : | No data available. |
| Mobility in soil          | : | No data available. |
| PBT and vPvB assessment   | : | No data available. |
| Other adverse effects     | : | No data available. |

## Phenol, polymer with formaldehyde, glycidyl ether [CAS # 28064-14-4]

| arassius auratus (goldfish) – 14 mg/L – 24 hr<br>Ivailable. |
|---|
|   |
|   |
| vailable.   |
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# **SECTION 13 – DISPOSAL CONSIDERATION**

|           | <ul> <li>Handle waste according to recommendations in Section 7.</li> <li>You must test your waste using methods described in 40 CFR Part 261 to<br/>determine if it meets applicable definitions of hazardous wastes. Dispose in<br/>accordance with all applicable federal, state, provincial and local regulations.<br/>Contact your local, state, provincial or federal environmental agency for specific<br/>rules.</li> </ul> |
|-----------|---|
| Packaging | : Handle contaminated packaging in the same manner as the product.  |
| RCRA      | If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.  |

# **SECTION 14 – TRANSPORTATION INFORMATION**

| Regulatory<br>Information               | UN<br>Number | Shipping Name  | Class | Packing<br>Group | Label |
|---|--------------|--|-------|------------------|-------|
| TDG                                     | None         | This product is not regulated according to Canadian TDG regulations. | None  | None             | None  |
| TDG<br>Additional<br>Information        | None         |  |       |                  |       |
| 49 CFR/DOT                              | None         | This product is not regulated according to US DOT regulations.       | None  | None             | None  |
| 49 CFR/DOT<br>Additional<br>Information | None         |  |       | •                |       |

# **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 of the 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: Warning! This product contains a chemical known to the State of California to cause cancer and/or reproductive/developmental effects.

Other State Right to Know Laws: Limestone [CAS# 1317-65-3] (MA, MN, NJ, PA, RI); Crystalline silica [CAS# 14808-60-7] (MA, MN, NJ, PA, RI).

## **SECTION 16 – OTHER INFORMATION**

HMIS Rating

: <u>\* - Chronic Hazard</u> 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe Health: \*2 Flammability 0 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 makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX Engineered Cements 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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### End of Document