SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Identifier : ARDEX Concrete Guard (CG) Gray
Code No. : 700119630
Trade Name/Synonyms : ARDEX CG Gray
Material Use : Protective topcoat for concrete.
Restrictions on Use : Use only as recommended in the product’s Technical Data Sheet
Details of the Supplier
Manufacturer’s name and address: 
ARDEX Engineered Cements
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) :
Reproductive Toxicity; Category 2
GHS Pictograms :

Signal Word : Warning
Hazard Statements : Suspected of damaging fertility or the unborn child.
Precautionary Statements : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Store locked up. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.
Hazard Not Otherwise Classified : None.
% Composition without available acute toxicity data :
11% 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>Titanium dioxide</td>
<td>13463-67-7</td>
<td>5 - 10</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>3 - 7</td>
</tr>
<tr>
<td>Diethylene glycol monomethyl ether</td>
<td>111-77-3</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

The exact percentages of the ingredients are withheld as trade secrets.
SECTION 4 – FIRST AID MEASURES

General Information : Call a POISON CENTER or doctor/physician if you feel unwell.
Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention.
Skin contact : Remove/Take off immediately all contaminated clothing. Wash/shower affected skin with gently flowing lukewarm water for at least 20 minutes.
Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
Ingestion : Rinse mouth with water. Do NOT induce vomiting. Seek immediate medical attention/advice.
Notes for Physician : Treat symptomatically.

**Signs and symptoms of short-term (acute) exposure**

**Inhalation** : Under normal conditions of use, not expected to cause respiratory symptoms.

**Skin** : Symptoms may include mild redness or itching.

**Eyes** : Symptoms may include redness, itching, or pain.

**Ingestion** : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

: None known.

**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 fog.

**Unsuitable extinguishing media** : Water jet. May cause the fire to spread.

**Fire hazards/conditions of flammability** : Material is nonflammable. 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 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.

**Hazardous combustion products** : Carbon monoxide; carbon dioxide; hydrocarbons; aldehydes; other unidentified organic compounds.

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 must be properly trained and wear the appropriate chemically protective equipment. Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

**Environmental precautions** : Do not allow product to enter waterways. Do not allow material to contaminate ground water system.
**Spill response / clean-up**: Ventilate area of release. Eliminate all ignition sources. 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). Notify the appropriate authorities as required.

**Prohibited materials**: Avoid incompatibles. (See Section 10.)

**Special spill response 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 to report.

**SECTION 7 – HANDLING AND STORAGE**

**Safe handling procedures**: Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Do not breathe vapors. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Keep away from oxidizing materials. Keep containers tightly closed when not in use. Wash thoroughly after handling.

**Storage requirements**: Store in a cool, dry, well-ventilated area. No smoking in the area. Do not store near any incompatible materials (see Section 10). Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Protect against physical damage.

**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**

**Ventilation and 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.

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

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

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

**Other protective equipment**: Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. 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. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

**Permissible exposure levels**:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TLV</td>
<td>STEL</td>
<td>TLV</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>10 mg/m³</td>
<td>N/Av</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>20 ppm</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylene glycol monomethyl ether</td>
<td>111-77-3</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>25 ppm</td>
<td>AIHA WEEL</td>
</tr>
</tbody>
</table>

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state**: Liquid

**Odor**: Slight odor

**pH**: 8.5 – 8.8

**Appearance**: gray

**Odor threshold**: N/Av

**Specific gravity**: 1.02
Boiling point: >212°F (>100°C) Coefficient of water/oil distribution: N/Av
Melting/Freezing point: N/Av Solubility in water: N/Av
Vapor pressure (mm Hg @ 20°C / 68°F): N/Av Evaporation rate (n-Butyl acetate = 1): 0.02
Vapor density (Air = 1): N/Av Volatiles (% by weight, incl. Water): 70 - 75
Volatile organic compounds (VOCs): 249 g/L SCAQMD General information: N/Av
Flash point: >200°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 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.

**SECTION 10 – REACTIVITY AND STABILITY INFORMATION**

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; reducing agents, acids, bases.
Hazardous decomposition products: Refer to hazardous combustion products in Section 5.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

Routes of exposure: Inhalation: YES Skin Absorption: YES Skin and Eyes: YES Ingestion: YES
Symptoms of exposure: See Section 4.
Calculated Acute Toxicity Estimates for the Product

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>LC50 (4 hr)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Inhalation, rat</td>
<td>Oral, rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;6.82</td>
<td>&gt;24,000</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>450 ppm</td>
<td>470</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>N/Av</td>
<td>5540</td>
</tr>
<tr>
<td>Diethylene glycol monomethyl ether</td>
<td>111-77-3</td>
<td>&gt;5.24</td>
<td>5500</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>N/Av</td>
<td></td>
</tr>
</tbody>
</table>

Reproductive effects: None known.
Teratogenicity: Diethylene glycol monomethyl ether may cause teratogenic or embryotoxic effects.
Mutagenicity: None known.
Epidemiology: Not available.
Target Organ Effects: Contains components that cause Central Nervous System (CNS) effects such as headache, nausea, dizziness. Because these components are in low concentration, no CNS effects are expected from this product.

Sensitization to material: None known.

Synergistic materials: N/A

Irritancy/Corrosivity: May cause mild, temporary irritation to eyes.

Other important hazards: See hazards listed in Section 2.

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.

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.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal: Handle waste according to recommendations in Section 7.

Methods of disposal: You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. 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: 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

<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>None</td>
<td>This product is not regulated according to Canadian TDG regulations.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>TDG Additional Information</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 CFR/DOT</td>
<td>None</td>
<td>This product is not regulated according to US DOT regulations.</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>49 CFR/DOT Additional Information</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
- Delayed (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 effects.

Other State Right to Know Laws:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</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>Titanium dioxide</td>
<td>13463-67-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Diethylene glycol monomethyl ether</td>
<td>111-77-3</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</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

Recommended PPE: Gloves, safety glasses with side shields, protective clothing

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
- TGD: 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 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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Revision date: 16-Oct-2017

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