

## 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

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (888) 512-7339 or (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)  
Product Identifier : **ARDEX GCS™ Grout Colorant and Sealant**  
Product ID No. : 2435010  
Trade Name/Synonyms : GCS  
Material Use : Grout Colorant and Sealant  
Uses Advised Against : No information available.

### SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

Acute toxicity, oral; Category 4  
Skin corrosion/irritation; Category 2  
Serious eye damage/eye irritation; Category 2B  
Specific target organ toxicity, single exposure; Narcotic effects; Category 3  
Specific target organ toxicity, single exposure; Category 1  
Specific target organ toxicity, repeated exposure; Category 2

GHS Pictograms



Signal Word

Danger

Hazard Statements

Harmful if swallowed.  
Causes skin and eye irritation.  
May cause drowsiness or dizziness.  
Causes damage to organs <Kidneys, Liver>.  
May cause damage to organs <Central Nervous System, Kidneys, Liver>  
through prolonged or repeated exposure.

Precautionary Statements

Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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 Classified**

None

**% With Unknown Acute Toxicity** : 15% by weight of this product consists of ingredients with unknown acute toxicity.

**SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS**

| Ingredients      | CAS #      | % (by weight) |
|------------------|------------|---------------|
| Titanium dioxide | 13463-67-7 | 10 – 20       |
| Ethylene glycol  | 107-21-1   | 2 – 2.5       |

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** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate 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. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically. Product contains Ethylene glycol.

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

- Inhalation* : Symptoms may include coughing, shortness of breath, dizziness, nausea, loss of coordination, and other Central Nervous System (CNS) effects.
- Skin* : Symptoms may include redness and itching.
- Eyes* : Direct contact may irritate the eyes.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur. Ingestion of large amounts of this product could cause kidney failure and death.

**Effects of long-term (chronic) exposure**

- : Prolonged inhalation may cause Central Nervous System (CNS) effects. Repeated or prolonged skin exposure may cause CNS effects. Prolonged exposure may damage the liver and kidneys.

**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.
- Unsuitable extinguishing media** : None known.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, and other products of combustion.
- 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** : Do not allow material to enter drains or contaminate ground water system.

**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.

**Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)**

: Not flammable

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal precautions** : 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 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): Ethylene glycol: 5000 lbs. (2273 kg).

**Methods and materials for containment and cleaning up**

: Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Use inert, absorbent material (sand, vermiculite, diatomaceous earth) to contain material, preventing it from entering sewer lines or waterways. Sweep or shovel spilled material into suitable container for later disposal (see Section 13). Notify the appropriate authorities as required.

**Prohibited materials** : None known.

**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** : Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product dust is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering exposed clothing. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from acids and incompatibles. Avoid and control operations which create dust. Wear eye protection and an appropriate particulate respirator (dust mask) if grinding or sanding this product. Mask should be rated at N-95 or higher. Keep containers tightly closed when not in use. Wash thoroughly after handling.

**Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. 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

**Permissible Exposure Limits** : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

| Threshold Limit Values | CAS # | ACGIH TLV | OSHA PEL |
|------------------------|-------|-----------|----------|
|------------------------|-------|-----------|----------|

| for the Ingredients |          | TWA   | STEL       | PEL                  | STEL |
|---------------------|----------|---|------------|----------------------|------|
|                     |          | Titanium dioxide                              | 13463-67-7 | 10 mg/m <sup>3</sup> | N/Av |
| Ethylene glycol     | 107-21-1 | 100 mg/m <sup>3</sup><br>Ceiling<br>(Aerosol) | N/Av       | N/Av                 | 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 vapors or dust generated from the handling of this product.
- Personal Protection Equipment**
- Eye / face protection** : Safety glasses or 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. Glove materials such as nitrile rubber or butyl 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 vapors, or exposures in excess of any PEL, wear a NIOSH-approved respirator with cartridges for organic vapor.
- 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 dust or vapor. 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

- |   |                              |   |                  |
|---|------------------------------|---|------------------|
| <b>Physical state</b>                       | : liquid                     | <b>Appearance</b>                             | : various colors |
| <b>Odor</b>                                 | : Faint odor                 | <b>Odor threshold</b>                         | : N/Av           |
| <b>pH</b>                                   | : N/Av                       | <b>Specific gravity</b>                       | : 1.26           |
| <b>Boiling point</b>                        | : 100°C (212°F)              | <b>Coefficient of water/oil distribution</b>  | : N/Av           |
| <b>Melting/Freezing point</b>               | : N/Av                       | <b>Solubility in water</b>                    | : N/Av           |
| <b>Vapor pressure (mm Hg @ 20°C / 68°F)</b> | : N/Av                       | <b>Evaporation rate (n-Butyl acetate = 1)</b> | : N/Av           |
| <b>Vapor density (Air = 1)</b>              | : > 1.0                      | <b>Volatiles (% by weight)</b>                | : 65 - 70        |
| <b>Volatile organic compounds (VOCs)</b>    | : 110 g/L, per SCAQMD method |   |                  |
| <b>Particle size</b>                        | : N/Av                       | <b>Flammability classification</b>            | : Not flammable  |
| <b>Flash point</b>                          | : >93.3°C (>200°F)           | <b>Lower flammable limit (% by vol)</b>       | : Not available  |
| <b>Flash point method</b>                   | : N/Av                       | <b>Upper flammable limit (% by vol)</b>       | : Not available  |
| <b>Auto-ignition temperature</b>            | : N/Av                       | <b>Decomposition temperature</b>              | : Not available  |
| <b>Viscosity</b>                            | : Not available              | <b>Oxidizing properties</b>                   | : 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** : Not reactive.
- Stability** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous reactions** : Hazardous polymerization does not occur.
- Conditions to avoid** : High temperatures.
- 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*: YES *Skin and Eyes*: Yes *Ingestion*: YES

**Symptoms of exposure** : See Section 4.

**Calculated Acute Toxicity Estimates for the Product**

*Inhalation* : Not Available  
*Oral* : > 20,000 mg/kg  
*Dermal* : > 10,000 mg/kg

**Toxicological data** : See below for individual ingredient acute toxicity data.

| Acute Toxicity Parameters for the Ingredients | CAS #      | LC50, Inhalation mg/L, Rat, 4 hr | LD50, Oral mg/kg, rat | LD50, Dermal mg/kg, rabbit |
|---|------------|----------------------------------|-----------------------|----------------------------|
| Titanium dioxide                              | 13463-67-7 | > 6.82                           | > 24,000              | > 10,000                   |
| Ethylene glycol                               | 107-21-1   | N/Av                             | 4000                  | 10,566                     |

**Skin corrosion or irritation** : Causes skin irritation.

**Serious eye damage / eye irritation** : Causes eye irritation.

**Respiratory or skin sensitization** : None known.

**Germ cell mutagenicity** : None known.

**Carcinogenic status** : This product contains Titanium dioxide. Titanium dioxide (respirable size) is classified by IARC as possibly carcinogenic to humans by inhalation (Group 2B). IARC's summary of TiO2 states: "No significant exposure to titanium dioxide is thought to occur during the use of products which titanium dioxide is bound to other materials, such as paints." OSHA does not regulate Titanium Dioxide as a carcinogen. However, under 29 CFR 1910.1200 the SDS must convey the fact that Titanium Dioxide is a potential carcinogen to rats.

**Reproductive toxicity** : None known.

**Specific Target Organ Toxicity, Single Exposure**

: Inhalation, ingestion, or skin absorption of Ethylene glycol may cause Central Nervous System (CNS) effects, such as inebriation, nausea, and vomiting. Ingestion of large amounts of Ethylene glycol can result in metabolic acidosis, tachycardia, hypertension, hyperventilation, hypoxia, and renal failure, which can cause death.

**Specific Target Organ Toxicity, Repeated Exposure**

: May cause damage to Central Nervous System, Liver, and Kidneys.

**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.

**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**

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

**IATA**

: Not regulated for Air Transport

**IMDG**

: Not regulated for Ocean Transport

**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): Ethylene glycol: 5000 lbs. (2273 kg).

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 subject to SARA notification requirements, since it contains: Ethylene glycol.

**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 harm.

**Other State Right to Know Laws:**

| Ingredient on State RTK Law? | CAS #      | CA | MA  | MN  | NJ  | NY | PA  | RI  |
|------------------------------|------------|----|-----|-----|-----|----|-----|-----|
| Titanium dioxide             | 13463-67-7 | No | Yes | Yes | Yes | No | Yes | Yes |

|                 |          |     |     |    |     |     |     |     |
|-----------------|----------|-----|-----|----|-----|-----|-----|-----|
| Ethylene glycol | 107-21-1 | Yes | Yes | No | Yes | Yes | Yes | Yes |
|-----------------|----------|-----|-----|----|-----|-----|-----|-----|

## 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*

**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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