

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:

Supplier's name and address:



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

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)

: Acute toxicity, inhalation; Category 3
Serious eye damage/eye irritation; Category 2A
Skin corrosion/irritation; Category 2
Specific target organ toxicity, single exposure; Narcotic effects; Category 3
Aspiration hazard; Category 1

GHS Pictograms :



Signal Word : Danger

Hazard Statements : Toxic if inhaled or absorbed through the skin.
Causes serious eye irritation.
Causes skin irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.

Precautionary Statements : Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Take off contaminated clothing and wash before reuse. 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.

Hazards 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

Ingredients	CAS #	% (by weight)
Titanium dioxide	13463-67-7	5 - 10
2-Butoxyethanol	111-76-2	3 - 7
Diethylene glycol monomethyl ether	111-77-3	1 - 5
Diethylene glycol monoethyl ether	111-90-0	1 - 5

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. 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. 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* : Toxic if inhaled. Inhalation of high concentrations may cause CNS effects such as nausea, headache, dizziness, fatigue, unconsciousness, and coma. May cause motor incoordination and speech abnormalities.
- Skin* : May cause moderate skin irritation. Product may be harmful if absorbed through the skin, producing effects similar to inhalation or ingestion.
- Eyes* : Direct contact will cause moderate to severe irritation to the eyes. Symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
- Ingestion* : May cause irritation to the mouth, throat, and stomach. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea. This material can get into the lungs (aspiration) during swallowing or vomiting. Small amounts in the lungs can cause chemical pneumonitis, possibly leading to chronic lung dysfunction or death.

Effects of long-term (chronic) exposure

- : Long-term inhalation exposure may produce toxicity to the blood system and/or may cause damage to the liver, kidneys, testes, and bladder. May also be absorbed through the skin in toxic amounts.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Use extinguishing media appropriate for surrounding materials.

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.

Flammability classification (OSHA 29 CFR 1910.1200 and WHMIS 2015)

- : Nonflammable.

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** : Toxic. Irritant. See Section 7 for safe handling procedures. 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).
US CERCLA Reportable quantity (RQ): None to report.

SECTION 7 – HANDLING AND STORAGE

- Safe handling procedures** : TOXIC. IRRITANT. Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product vapor, dust or fume is important. Do not breathe vapours/dust. 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 dust, 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** : Chemical goggles must be worn when using this product. A face shield is recommended if splashing is possible.
- 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/dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift

Permissible exposure levels :

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TLV	STEL	PEL	STEL
Titanium dioxide	13463-67-7	15 mg/m ³	N/Av	10 mg/m ³ (vacated)	N/Av
2-Butoxyethanol	111-76-2	20 ppm	N/Av	25 ppm	N/Av
Diethylene glycol monomethyl ether	111-77-3	N/Av	N/Av	N/Av	N/Av
Diethylene glycol monoethyl ether	111-90-0	N/Av	N/Av	N/Av	N/Av

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid	Appearance	: gray
Odor	: Slight odor	Odor threshold	: N/Av
pH	: 8.5 – 8.8	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	: Dispersible
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	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : YES <i>Skin and Eyes</i> : YES <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: Not Available
<i>Oral</i>	: Not Available
<i>Dermal</i>	: Not Available
Toxicological data	: See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr) Inhalation, rat	LD50	
		Oral, rat	Dermal, rabbit
Titanium dioxide	N/Av	10000 mg/kg	N/Av
Diethylene glycol monoethyl ether	N/Av	5,540 mg/kg	N/Av
2-Butoxyethanol	450 ppm	470 mg/kg	220 mg/kg
Diethylene glycol monomethyl ether	N/Av	4140 mg/kg	N/Av

- Repeated Dose Effects** : Contains components which may be absorbed through the skin in harmful amounts, especially after repeated or prolonged exposure.
- Carcinogenic status** : Titanium dioxide has been classified by IARC as Class 2B, possibly carcinogenic to humans via inhalation of respirable size particles. Since this product is a liquid, and contains a polymer matrix that will bind the TiO₂ when dry, exposure to airborne Titanium dioxide is very unlikely under normal conditions for use. Avoid operations or conditions that will release airborne particles. Use appropriate respiratory protection when sanding or grinding surfaces containing this product. ACGIH has classified 2-Butoxyethanol as carcinogenic in animal studies, with unknown relevance to humans. No other components are listed as carcinogens by ACGIH, IARC, OSHA, NIOSH or NTP.
- 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.
- Sensitization to material** : None known.
- Synergistic materials** : N/Av
- Irritancy/Corrosivity** : Severely irritating 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

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				

49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional 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

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 one or more chemicals known to the State of California to cause cancer and/or reproductive effects.

Other State Right to Know Laws:

Component	CAS	CA	MA	MN	NJ	NY	PA	RI
Titanium dioxide	13463-67-7	No	YES	YES	YES	No	YES	YES
2-Butoxyethanol	111-76-2	YES	YES	YES	YES	No	YES	YES
Diethylene glycol monomethyl ether	111-77-3	No	YES	No	YES	No	YES	YES
Diethylene glycol monoethyl ether	111-90-0	No	No	No	YES	No	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*
 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
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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