

### **CCI Tile Armor™ Tile & Grout Sealer**

MATERIAL SAFETY DATA SHEET

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Effective: March 28, 2011

#### **SECTION 1 - PRODUCT IDENTIFICATION**

**Common Name:** CCI Tile Armor™

**Description:** Water based fluorinated sealer

Manufacturer/Supplier: Concrete Coatings, Inc.

PO Box 150071 Ogden, UT 84415 1-800-443-2871

**Emergency: Chemtrec** 1-800-424-9300

Hazard Rat	ing	Scale
Health Flammability Physical	2 2 0	4 = Extreme 3 = High 2 = Moderate 1 = Slight 0 = Insignificant

#### **SECTION 2 - COMPOSITION/INFORMATION ON COMPONENTS**

Hazardous Components Chemical & Common Names	CAS No.	Percent By Weight	OSHA PEL	OSHA STEL	ACGIH STEL	ACGIH TLV
Water	77032-18-5	85-95	N.E N/A	N.E N/A	N.E N/A	N.E N/A
Fluorinated Polymers	Mixture	1-5	N.E N/A	N.E N/A	N.E N/A	N.E N/A
Isopropanol	67-63-0	2-4	N.E N/A	N.E N/A	N.E N/A	N.E N/A
2-butoxyethanol	111-76-2	2-4	N.E N/A	N.E N/A	N.E N/A	N.E N/A
Dipropylene Glycol Methyl Ether	34590-94-8	1-3	N.E N/A	N.E N/A	N.E N/A	N.E N/A

Refer to Section 8 for Exposure Guidelines

#### **SECTION 3 - HAZARDS IDENTIFICATION**

#### **EMERGENCY OVERVIEW**

Appearance: Clear, pale yellow liquid with alcohol odor

COMBUSTIBLE LIQUID. Vapors from this product may form an explosive mixture with air. Vapors can travel long distance to ignition source such as a spark or flame and cause a flash fire.

**CAUSES EYE IRRITATION** 

MAY BE HARMFUL IF INHALED, SWALLOWED, OR ABSORBED THROUGH THE

SKIN

**IMMEDIATE HEALTH EFFECTS** 

**Eyes**: Direct contact may cause irritation, including stinging, tearing, redness, and swelling Skin: Prolonged or repeated contact may cause irritation or de-fatting, leading to dryness.



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#### **HAZARDS IDENTIFICATION CONT'D**

May be absorbed through the skin and cause effects similar to inhalation exposure.

**Inhalation**: Organic solvent vapor or mist inhalation may cause irritation of the nose, mouth, throat and lungs. Breathing large amounts of organic solvent vapors or mists may affect the central nervous system, causing headache, dizziness, nausea, confusion, loss of coordination, impaired judgment, or similar effects.

**Ingestion:** Swallowing large amounts of organic solvents may affect the central nervous system, causing effects similar to inhalation exposure.

**PRIMARY ROUTES OF ENTRY:** Eye or skin contact, vapor and mist inhalation, and ingestion.

**TARGET ORGAN EFFECTS:** Prolonged, repeated, or large exposures may cause liver, kidney, lung, or red blood cell damage.

**REPRODUCTIVE/DEVELOPMENTAL INFORMATION:** Repeated over exposure to organic solvents can cause an increased risk of birth defects.

**CARCINOGENIC INFORMATION**: None of the ingredients of this material are listed as carcinogens by IARC, NTP, or OSHA.

**LONG TERM EFFECTS:** Repeated over exposure to organic solvents can cause permanent damage to the central nervous system.

#### **SECTION 4 FIRST AID MEASURES**

**EYE CONTACT:** Immediately flush eyes with water for at least 15 minutes. If irritation persists, consult a physician.

**SKIN CONTACT:** Remove contaminated clothing. Flush skin with water for at least 15 minutes. If irritation persists, or other symptoms develop, consult a physician.

**INHALATION:** Remove to fresh air. If respiratory irritation or breathing difficulty develops, give oxygen if available, and get immediate medical assistance. If breathing stops, give artificial respiration.

**INGESTION**: Do not induce vomiting. Aspiration hazard. Give 8 to 16 ounces of water or milk to dilute substance. Consult a physician or local Poison Control Center immediately. Never give anything by mouth to an unconscious person.

#### **SECTION 5 FIRE FIGHTING MEASURES**

FLASHPOINT (° Fahrenheit): 132°F by Tag CC.

**FLAMMABLE LIMITS**: LEL: 1.1% (v) 2-butoxyethanol



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UEL: 12% (v) isopropanol

**AUTOIGNITION TEMPERATURE:** Not known.

**HAZARDOUS PRODUCTS OF DECOMPOSITION:** In case of fire or extreme heat, the following may be produced: oxides of carbon and toxic products such as hydrogen fluoride and other perfluorinated organic compounds.

#### FIRE FIGHTING MEASURES CONT'D

**EXTINGUISHING MEDIA:** Water spray, foam, dry chemical powder, or carbon dioxide. Avoid direct water streams that may spread spilled liquids.

**FIRE FIGHTING INSTRUCTIONS:** Evacuate and keep any non-responders away. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move non-burning containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool. Containers may rupture in extreme heat.

NFPA RATINGS: Health: 2, Flammability: 2, Reactivity: 0

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

See section 8 for personal protective equipment.

**SMALL SPILL:** Eliminate any ignition sources and soak up material with an absorbent such as clay, sand, or other suitable material and dispose of properly. Use non-metallic or non-sparking tools.

LARGE SPILL: Eliminate any ignition sources and shut off source of leak if it is safe to do so. Evacuate and keep out any personnel not wearing proper protective equipment. Prevent liquid from entering sewers or waterways. Dike and contain spilled material. Remove with explosion proof vacuum equipment or pump to storage/salvage containers. Soak up residue with an absorbent such as clay, sand, or other suitable material. Use non-metallic or non-sparking tools. Be aware of potential fire and explosion hazards due to vapor build-up in low-lying or enclosed areas.

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

**HANDLING:** Handle open containers with care and with adequate ventilation. Ground and/or bond containers and vessels when transferring product. Use non-sparking tools and explosion proof equipment. Do not handle near an open flame, heat, sparks, or other source of ignition. Wear appropriate personal protection gear (see Section 8).

**STORAGE**: Store containers closed in a cool, well ventilated place away from incompatible materials. Do not store near an open flame, heat, or other source of ignition. Protect material from direct sunlight.



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### SECTION 8 PERSONAL PROTECTION & EXPOSURE CONTROLS

**EXPOSURE GUIDELINES:** 

Component	List	Type	Value
Isopropanol	OSHA table Z-1	PEL (8 hr)	980 mg.m3 / 400 ppm
	ACGIH	TWA (8 hr)	200 ppm
	ACGIH	STEL (15 min)	400 ppm
2-butoxyethanol	OSHA table Z-1	PEL (8 hr)	240 mg/m3 / 50 ppm
	OSHA table Z-1	Notation	SKIN
	ACGIH	TWA (8 hr)	97 mg/m3 / 20 ppm
	ACGIH	Notation	SKIN
Dipropylene glycol	OSHA table Z-1	PEL (8 hr)	600 mg/m3 / 100 ppm
methyl ether			
	OSHA table Z-1	Notation	SKIN
	ACGIH	TWA (8 hr)	100 ppm
	ACGIH	Notation	SKIN
	ACGIH	STEL (15 min)	150 ppm

**EYE/FACE PROTECTION:** Wear safety glasses with side shields or goggles. A splash shield is recommended when splashing is possible.

**SKIN PROTECTION:** Prevent skin contact. Wear protective gloves. Wear impervious clothing and boots as necessary to protect from splashes.

**RESPIRATORY PROTECTION:** If workplace exposure limits of product or any component are exceeded, a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (consult your safety representative). Engineering controls or administrative controls should be implemented to reduce exposure. For spray applications, use a coarse spray device such as a trigger sprayer with particle size production greater than 15 microns. Use only low pressure (less than 60 psi) sprayer. DO NOT aerosolize or atomize. Suitable ventilation must be used during application.

**ENGINEERING CONTROLS:** Provide sufficient mechanical ventilation (general and local exhaust) to maintain exposure below the level of overexposure from known, suspected or apparent adverse effects.



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### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, pale yellow liquid

**pH:** 8.0 +/- 1.5

VAPOR PRESSURE: 2-butoxyethanol: 0.4 mm Hg @ 68F / 20C

Isopropanol: 33 mm Hg @ 68F / 20C

**VAPOR DENSITY:** Heavier than air

**BOILING POINT:** approx 2120 F (100 °C)

**SOLUBILITY IN WATER:** Disperses

**EVAPORATION RATE:** (water = 1) approximately 1

**DENSITY:** 1.01 +/-0.03 g/mL

#### **SECTION 10 STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable.

**CONDITIONS TO AVOID:** Avoid contact with heat.

MATERIALS TO AVOID: Strongly alkaline materials, Lewis Acids, or magnesium, aluminum and their alloys above 212° F (100°C).

HAZARDOUS PRODUCTS OF DECOMPOSITION: In case of fire or extreme heat, the following may be produced: oxides of carbon and toxic products such as hydrogen fluoride and other perfluorinated organic compounds.

HAZARDOUS POLYMERIZATION: Will not occur.

#### **SECTION 11 TOXICOLOGICAL INFORMATION**

Acute Eye Toxicity: Mixture has not been tested. 2-butoxyethanol: moderate irritant (rabbit)

Acute Skin Toxicity: Mixture has not been tested. 2-butoxyethanol: moderate irritant (rabbit); dermal LD50 (rabbit) 435 mg/kg. Dipropylene glycol methyl ether LD50 (rabbit) 9500 mg/kg.

Acute Inhalation Toxicity: Mixture has not been tested. 2-butoxyethanol: inhalation LC50 (rat) 450 ppm / 4 hr. Isopropanol: inhalation LC50 (rat) 19000 ppm / 8 hr. Dipropylene glycol methyl ether LOAEL (rat) 500 ppm / 7 hr.

Acute Oral Toxicity: Mixture has not been tested. 2-butoxyethanol: oral LD50 (rat) 1.48 g/kg; oral LD50 (mouse) 1.2 g/kg. Isopropanol: oral LD50 (rat) 4700-5800 mg/kg. Approximate human lethal dose, 100 ml. Dipropylene glycol methyl ether: oral LD50 (rat) >5000 mg/kg



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#### TOXICOLOGICAL INFORMATION CONT'D

**Subchronic:** This mixture has not been tested. 2-butoxyethanol: Studies in rats and rabbits suggest hemolytic effects on red blood cells that eventually lead to further effects on the liver and kidneys. Their relevance to human metabolic mechanisms, expected occupational doses, or likely routes of exposure is not clear or confirmed. Isopropanol: Studies in experimental animals suggest effects on the liver and kidneys. Their relevance to human metabolic mechanisms, expected occupational doses, or likely routes of exposure is not clear or confirmed. Dipropylene glycol methyl ether: Long term low doses produce symptoms similar to other organic solvents.

**Sensitization:** This mixture has not been tested. None of the components are known or suspected skin sensitizers.

**CARCINOGENITY:** None of the components of this material are listed as carcinogens by IARC, NTP, or OSHA. ACGIH has listed 2-butoxyethanol as an "A3 – Animal Carcinogen" based on studies on experimental animals. Their relevance to human metabolic mechanisms, expected occupational doses, or likely routes of exposure is not clear or confirmed.

#### TERATOGENICITY, MUTAGENICITY, OR OTHER REPRODUCTIVE EFFECTS:

Occupational exposure to organic solvents during pregnancy is associated with an increased risk of fetal malformations, especially among women who reported symptoms associated with acute over-exposure. In studies on laboratory animals, 2-butoxyethanol was found not to be associated with an increased risk of fetal malformations, even at doses that were toxic to the mother. The effects noted in the study were attributed to stress and general chemical exposure.

**CONDITIONS AGGRAVATED BY EXPOSURE:** No data available.

**SYNERGISTIC MATERIALS:** No data available.

#### **SECTION 12 ECOLOGICAL INFORMATION**

This mixture has not been tested. Isopropanol, dipropylene glycol methyl ether, and 2-butoxyethanol have been shown to be readily biodegradable, have low bioconcentration factors, and have low toxicity to aquatic organisms on an acute basis. Isopropanol, dipropylene glycol methyl ether, and 2-butoxyehtnaol are expected to have high mobility in soils and not adsorb to suspended solids in water.

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL INFORMATION:** Dispose in accordance with all applicable federal, state, and local regulations.

**RCRA INFORMATION:** If this material becomes a waste, it meets the definition of ignitable waste (D001) under 40CFR261.



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#### **SECTION 14 TRANSPORT INFORMATION**

**US** ground:

Proper Shipping Name: Combustible Liquid, NOS (contains isopropanol)

Hazard Class: Combustible Liquid Identification Number: NA 1993

Packing Group: III

TDG, IATA, ICAO, IMDG information:

Proper Shipping Name: Flammable Liquid, NOS (contains isopropanol)

Hazard Class: 3

Identification Number: UN 1993

Packing Group: III

#### **SECTION 15 REGULATORY INFORMATION**

#### **US FEDERAL REGULATIONS**

**TSCA Information:** All components are listed, or otherwise are in compliance with TSCA notification requirements.

Dipropylene glycol methyl ether, CAS# 34590-94-8 is subject to: reporting for some manufacturers and importers under TSCA 8(a); testing by some manufacturers, importers, and processors under TSCA section 4(a); and export notification under TSCA section 12(b).

**CERCLA Reportable Quantities [40CFR302]:** Components with known CAS numbers listed as hazardous substances and subject to reporting: glycol ethers (2-butoxyethanol), RQnone

**SARA 302/304 [40CFR355]:** Components with known CAS numbers listed as hazardous substances and subject to release reporting: None above 0.1%

#### SARA 311/312 [40 CFR370]:

Acute Yes Chronic Yes Fire Yes Pressure No Reactivity No

SARA 313 [40CFR372]: Glycol ether category (2-butoxyethanol); Isopropanol

#### STATE AND LOCAL REGULATIONS

California Hazardous Substance List: 2-butoxyethanol (CAS 111-76-2)

Isopropanol (CAS 67-63-0)

Dipropylene glycol methyl ether (34590-94-8)

Massachusetts Right to Know: 2-butoxyethanol (CAS 111-76-2)

Isopropanol (CAS 67-63-0)

Dipropylene glycol methyl ether (34590-94-8)



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#### **REGULATORY INFORMATION CONT'D**

New Jersey Right to Know: 2-butoxyethanol (CAS 111-76-2)

Isopropanol (CAS 67-63-0)

Dipropylene glycol methyl ether (34590-94-8)

Pennsylvania Right to Know: 2-butoxyethanol (CAS 111-76-2)

Isopropanol (CAS 67-63-0)

Dipropylene glycol methyl ether (34590-94-8)

### **SECTION 16 OTHER INFORMATION**

This information relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

**End of MSDS**