

# EcoSmart ECT-1470

## For Hardscapes

EcoSmart Surface & Coating Technologies



**ECT-1470**

RESTORE

BEAUTIFY

PROTECT

# ECT-1470

## The Ultimate Protective Sealer

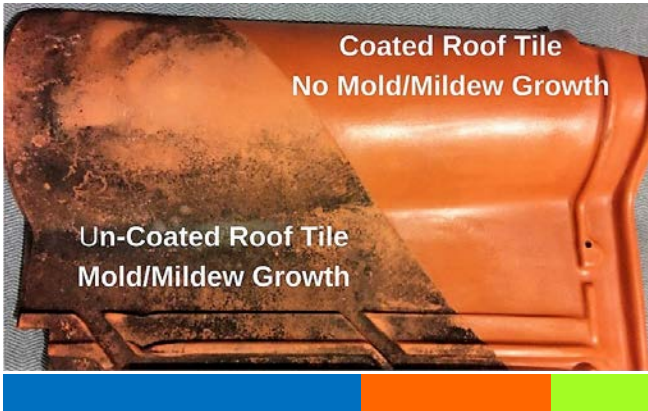
EcoSmart Surface & Coating Technologies is the most technologically advanced hardscape coating on the market with longer duration between recoating saving money in the long run, environmentally friendly, and beautifies as well as protects – including restoring color to old, oxidized and worn surfaces.



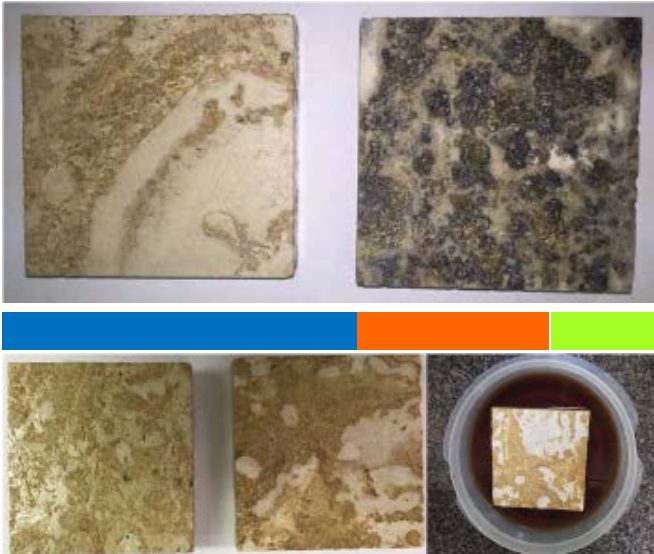
Concrete and paver streets and roadways, driveways, sidewalks, exterior entryways, paver decks and walk ways, stone columns, brick walls, decorative stones and stone walkways, patios, pool decks, exterior window treatments

What is an EcoSmart coating, why is it so special, what is a ceramic coating, does it really grow on a surface, and why is it any different than spraying any other type of paint or coating?

To put it simply traditional coatings or organic coatings (polyurethanes, latex coatings, oil based coatings, enamels, varnishes, lacquers, and powder coatings) are composed of carbon based molecules which are the same basic building blocks of all living things. Just as all living things die and decay, carbon based coatings experience breakdowns in their structure, as well as, breakdowns in the bond they share with the substrates or surfaces they are applied to. Inorganic coatings (EcoSmart's Surface Technologies glass/ceramic coatings) are composed of silicon based molecules which are the same basic building blocks of the rocks and minerals that comprise our very world itself, and just like our world that is billions of years old, silicon based coatings are almost impossible to breakdown except by physical force and almost impossible to remove from the substrate or surface they are applied to.



ECT-1470 is a three-part silicon-ceramic coating designed to provide maximum protection against staining, microbial growth & fading due to UV exposure.



Soaked/submerged coral in red wine for 1 hour. **Results:** The coated tile rinsed off with tap water with no evident staining as shown in the photo left, but the uncoated tile had the wine soak completely through the tile and over the 24 hours that followed, it dried to a dark gray/almost black color as seen in the photo on the right.

Florida Keystone and Coral Tile from the Dominican Republic (above)



A white concrete paver that was sealed with ECT-1470 is shown on the left. Then it was covered with used, dirty motor oil much like stains from leaky vehicles. After being soaked in oil for several hours, the oil wiped right off. To see these results, watch our [YouTube](#) video – “EcoSmart ECT-1470 - oil test on white paver.”

**Traditional coatings:**

- have a limited ability to bond to the substrate or surface they are applied to, and
- are uniformly susceptible to the very process of oxidation that they are trying to prevent.

**EcoSmart's glass/ceramic coatings:**

- contain twice the bonding capability on a substrate or surface,
- are pre-oxidized, and
- eliminate traditional oxidation issues and the factors associated with it.

**Concrete Pavers**

ECT-1470 can be used on concrete pavers, whether on a sidewalk, road way, patio deck or a simple driveway. It restores the surfaces to near original color and sheen and brings out the color in the concrete pavers.

**Chicago Brick**

ECT-1470 on Chicago Brick protects both the brick itself and the mortar in between the bricks.

**Natural Stone**

ECT-1470 on natural stones such as Dominican coral, travertine, or Jerusalem stone, brings out the true natural color of the stone and enhances it.

**Slate/Non-Polished Granite**

ECT-1470 on slate/non-polished granite beautifies, protects, and enhances the surface. Mold, mildew and stains will wash over with a simple garden hose and water. (Before on left, After on right)



1313 South Killian Drive  
Lake Park, Florida 33403  
844.300.1554  
[www.EcoSmartSurfaces.com](http://www.EcoSmartSurfaces.com)

 **EcoSmart**  
SURFACE & COATING TECHNOLOGIES

# ECT-1470™ TECHNICAL DATA SHEET

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
Phone: 561.328.6488 Fax: 561.328.6739



## Product Description: Exterior Concrete and Stone Coating (Gloss)

ECT-1470 is a silicon-ceramic treatment designed to provide maximum protection to pavers, stone, brick, cement and other masonry products against staining, microbial growth, fading due to UV exposure, acid rain, and other airborne pollutants associated with the environment. It restores the surfaces to near original color and gloss and brings out the color in stone and masonry. Its extreme hydrophobic nature exhibits an increased coefficient of friction on the substrate it is applied to, making the coated surface not slippery when wet.

## Suggested Uses:

Concrete and paver streets and roadways, driveways, sidewalks, exterior entryways, paver decks and walk ways, stone columns, brick walls, decorative stones and stone walkways, patios, pool decks, exterior window treatments.

## Surface Preparation:

The surface to be coated must be clean, dry and free from dirt, oily residue, grime, loose oxidation, spores (mildew) or any other surface contaminate that could affect product performance. It is imperative to fully and completely clean the surface, as ECT-1470 adheres by covalent and mechanical bonding and must gain intimate contact with the surface. Clean the surface by liberally applying a good cleaner, making sure to remove all residue of the cleaner by flushing vigorously with water. Masonry, pavers, and stone may be cleaned with a high-pressure power washer. Allow the surface to dry for a period of at least 24 hours before applying ECT-1470.

## Mixing and Catalyzing of ECT-1470:

ECT-1470 is a three component material and must be properly mixed for curing to occur. This product is packaged, in kit form, with separate containers for the (A), (B) & (C) components. To mix gallon, quart and smaller kits:

1. Pour Part (B) into the bottle labeled Part (A). Shake lightly for 10 seconds and set the bottle down.
2. Notice an exothermic heat reaction begins. This is normal and the bottle will reach about 135 degrees. Periodically remove the cap to release reaction vapors (alcohol). Shake lightly after 30 minutes. After 90 minutes, continue to step 3.
3. Next, add the (C) component liquid into the admixture of the (A) & (B) components. Shake for 15 seconds and let sweat for 5 additional minutes before using. Pot life of mixed material is 6 days. Keep container closed when not in use.

## Application of ECT-1470:

**Roller:** Use a short nap adhesive or mohair roller cover with a solvent resistant core. Pick up a small amount of material into the cover and gently apply using a series of one directional roller strokes. Avoid over rolling the material and avoid working back into partially set material. Maintain a functional working wet line during application and roll to natural breaks. Always mask, and protect surfaces not to be coated.

**Brush:** Small surface areas or cut in edges can be blended in using a natural hair bristle brush or disposable foam applicator provided the initial application is still freshly wet. This may only be within several minutes in outdoor applications.

**Spray:** Follow spray equipment instructions and use a small tip capable of laying down approximately 1 to 1.5 mils wet on a non-porous surface. On porous surfaces ensure reasonable penetration. **Do Not Apply:** if rain, fog or heavy dew is imminent within 12 hours of product installation. **Do Not Mix or Apply:** if the temperature will drop below 50°F at any time during application or within 12 hours of product installation.

This coating **CANNOT** be over coated, so if the desired effect is not reached then wash the coating off with denatured alcohol before dry and recoat.

## Safety Requirements:

**Warning:** Alcohol vapors are flammable. No smoking or hot work within 50 feet. Methanol vapors are hazardous. Assure sufficient ventilation and wear PPE 9 respirator. Protective eye wear, with side shields and protective gloves are also required when using ECT-1470. See SDS.

## Clean Up:

Application tools and spray equipment should be cleaned with 100% pure denatured alcohol. Flush the pump, hose, pressure pot and gun thoroughly until all product has been cleaned from the spray system. Remove the tip and nozzle and clean thoroughly before replacing onto the gun. Clean up drips, spills or over spray with 100% pure denatured alcohol before the product dries. Always dispose of alcohol-saturated cloths in a safe and proper manner. During clean up/containment, wear protective clothing. Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide dikes or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as, clean water hosing, high-pressure power washing or steam cleaning.

## Product Yield:

The yield of product varies with substrate condition and application method. The yield can be as high as 1,000 sq. ft. per gallon on non-porous surfaces and as low as 400 sq. ft. per gallon on porous surfaces. Actual field conditions will dictate product yield.

# ECT-1470™ TECHNICAL DATA SHEET

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 [ecosmartsurfaces.com](http://ecosmartsurfaces.com)  
Phone: 561.328.6488 Fax: 561.328.6739



## **HANDLEABILITY, MIXING AND APPLICATION:**

**Pot Life:** When all materials mixed, 6 days.

**Film Thickness:** 1-1.5 mils wet.

**Curing Conditions:** @ 73°F (23°C) and 50% R.H.

**Dry Time: Touch:** 2 hours at 70°F, 50% RH (8 hours on average to drive on), **Full Cure:** 7 days.

## **SYSTEM PERFORMANCE (Typical Data):**

**VOC Content:** 3.52 lbs./gal, 428 g/liter (Components A, B & C mixed).

**Abrasion Resistance:** 364 kg load 1000 cycles (ASTM C501), 1500 revolutions, class 3 rating (ASTM C1027).

**Salt Spray:** 4000 hours (face corrosion, face blistering) NONE. (ASTM B117).

**Resistance to Microbial Fungi:** Rating 0 (ASTM G2109).

**Resistance to Staining:** Class A (ANSI A137.1-2008) (ASTM C1378).

**Coefficient of Friction:** Dry: 0.79, Wet: 0.79 (ASTM C1028).

ECT-1470™

SDS

Part (A)

EcoSmart Surface & Coating Technologies, Inc.  
 1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
 Phone: 561.328.6488 Fax: 561.328.6739



### 1. Product Identifier

**Product name:** ECT-1470 Exterior Concrete and Stone Coating (Gloss)

**Details of the Manufacturer/Supplier:**

**EcoSmart Surface & Coating Technologies**

1313 South Killian Dr.

Lake Park, Florida 33403 Phone: 561-328-6488 Fax: 561-328-6739 CHEMTREC: 800-424-9300 www.ecosmartsurfaces.com

**Product Description: Exterior Concrete and Stone Coating (Gloss)**

ECT-1470 is a silicon-ceramic treatment designed to provide maximum protection to pavers, stone, brick, cement and other masonry products against staining, microbial growth, fading due to UV exposure, acid rain, and other airborne pollutants associated with the environment. It restores the surfaces to near original color and gloss and brings out the color in stone and masonry. Its extreme hydrophobic nature exhibits an increased co-efficient of friction on the substrate it is applied to, making the coated surface not slippery when wet.

**Suggested Uses:**

Concrete and paver streets and roadways, driveways, sidewalks, exterior entryways, paver decks and walk ways, stone columns, brick walls, decorative stones and stone walkways, patios, pool decks, exterior window treatments.

### 2. Hazard(s) Identification

**HMIS RATING:**

**Health:** 1.

**Flammability:** 3.

**Reactivity:** 0.

**Classification of the Substance/Mixture:** FLAMMABLE LIQUID, n.o.s.

**Signal Word:** WARNING!

**Hazard Statement:** May cause skin irritation. Harmful if inhaled. May cause respiratory irritation. Will emit vapors of methanol if seal is broken and mixture is exposed to moisture.

**Hazard Pictograms:**



**Precautionary Statements:** Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

**Hazards Not Otherwise Classified:** None known.

### 3. Composition/Information on Ingredients

**Substance/Mixture:** Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
67-56-1	<1%	Methyl Alcohol	OSHA TWA 200 ppm, 260 mg/m <sup>3</sup> ; ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm
Proprietary Mixture	>98	Alkoxysilanes	None established; guide TWA 50 ppm

#### 4. First-Aid Measures

**Inhalation:** Remove to fresh air. Get medical attention if ill effects persist.

**Skin Contact:** No first aid should be needed. Wash with soap and water.

**Eye Contact:** Immediately flush with water for 15 minutes.

**Ingestion:** Get medical attention. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light.

**Comments:** Treat same as Methyl Alcohol poisoning.

#### 5. Fire-Fighting Measures

**Flash Point:** 46.9°F (8.3°C).

**Extinguishing Medium:** Carbon Dioxide (CO<sub>2</sub>), Water Fog, Dry Chemical, Foam.

**Unsuitable Extinguishing Medium:** Water, (closed containers may be cooled).

**Fire Hazards:** Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding, grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources.

**Unusual Fire Hazards:** Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Silicon Dioxide, Carbon Dioxide and traces of incompletely burned carbon compounds, Formaldehyde.

**Fire Fighting Procedures:** Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Heat exposure pressurizes closed containers. Evacuate the area in cases of overheating or fire. Runoff to sewer may create fire or explosion hazard. In case of fire, the following can be released: Carbon Dioxide, Carbon Monoxide (CO), Metal Oxides.

**Special Protective Actions for Fire-Fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special Protective Equipment for Fire-Fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

#### 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

**Methods and Materials for Containment and Clean Up:** Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions; or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

#### 7. Handling and Storage

**Precautions for Safe Handling:** No special precautions provided as long as containers are undamaged. Product evolves flammable Methyl Alcohol when exposed to moisture or humid air. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally. No eating, drinking, smoking, or hot work in work area.

**Precautions for Safe Storage:** Keep container closed and stored away from heat, sparks and open flame. Keep container closed and store away from water or moisture.



## 8. Exposure Controls/Personal Protection

### Exposure Limits:

Components	Exposure Limits
Methyl Alcohol	OSHA TWA 200 ppm, 260 mg/m <sup>3</sup> ; ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm
Alkoxysilanes	None established; guide TWA 50 ppm

**Engineering Controls:** Local ventilation recommended.

### Individual Protection Measures:

**Eye Protection:** OSHA approved safety glasses with side shields at a minimum.

**Skin Protection:** Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for preventing skin irritation.

**Respiratory Protection:** Respiratory protection is not required provided adequate local exhaust ventilation is provided per recommended exposure guidelines. Avoid enclosed spaces for mixing or applying. When needed, use respiratory protection NIOSH ½ face, black cartridge, at a minimum.

**Personal Protective Measures:** Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

## 9. Physical and Chemical Properties

**Physical State:** Liquid.

**Appearance:** Clear.

**Odor:** Strong Odor (Methanol).

**pH:** Not Applicable (non-aqueous).

**Solubility in Water:** None.

**Boiling Point:** >950°F (>350°C).

**Specific Gravity: @ 77°F (25°C):** 0.95.

**VOC Content:** 3.52 lbs./gal, 428 g/liter (Components A, B & C mixed).

## 10. Stability and Reactivity

**Reactivity:** NA.

**Chemical Stability:** Stable.

**Other:**

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** None.

**Materials to Avoid:** Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, halogens and halogen compounds.

## 11. Toxicology Information

### Acute Health Effects:

**Inhalation:** Vapor may irritate nose and throat. Overexposure may cause drowsiness.

**Ingestion:** Product contains small amounts of Methyl Alcohol which may cause nausea, vomiting, abdominal pain, flushing of the face, hypotension, weakness and loss of consciousness if large amount of product is swallowed.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

**Prolonged/Repeated Exposure Effects:**

**Inhalation:** Product generates Methyl Alcohol when exposed to moisture, which may cause blindness and damage to nervous system.

**Ingestion:** Product generates Methyl Alcohol, which may cause blindness and possibly death, if swallowed.

**Skin Contact:** May cause irritation, dermatitis.

**Eye Contact:** May cause irritation; blindness.

**Signs and Symptoms of Exposure:**

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

**Special Hazards:**

**Carcinogens:** None known.

**Mutagens:** None known.

**Teratogens:** None known.

**Reproductive Toxins:** None known.

**Sensitizers:** When heated to temperatures above 302°F (150°C.), in the presence of air, product can form formaldehyde vapors (formaldehyde is a potential cancer hazard; a known skin and respiratory sensitizer and an irritant to the eyes, nose, throat, skin).

**12. Ecological Information**

**Persistence and Degradability:** Readily degradable. Main organic decomposition product (n-Butanol) is readily biodegradable; No persistence potential (OECD Guideline 111).

**Bio Accumulative Potential:** No potential for bioaccumulation (OECD Guideline 111).

**Mobility in Soil:** High mobility in soil based on high water solubility and estimated Koc 3.471 L/kg of degradation product n-Butanol.

**Results of PBT and vPvB Assessment:**

**PBT:** The substance is not PBT.

**vPvB:** The substance is not vPvB.

**13. Disposal Considerations**

**Disposal Methods:** Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

**RCRA Hazard Class (40 CFR 261):**

**When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes.**

**Characteristic Waste:**

**Ignitable:** D001.

Observe all State or Local Laws pertaining to this class. Local laws may impose additional requirements.

**Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned Packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.**

ECT-1470™

SDS

Part (A)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
Phone: 561.328.6488 Fax: 561.328.6739



**14. Transport Information**

**UN Number:** UN1993.  
**UN Proper Shipping Name:** METHOXYSILANE/METHANOL.  
**Transport Hazard Class:** 3.  
**Packing Group:** II.  
**Environmental Hazard Name:** FLAMMABLE LIQUID, n.o.s.  
**DOT Information:** (49 CFR 172.1 01)

**15. Regulatory Information**

**EPA SARA Title III Chemical Listings:**  
**Section 304 CERCLA Extremely Hazardous Substance:** None

**Section 304 CERCLA Hazardous Substances:**

<b>CAS Number</b>	<b>Wt%</b>	<b>Component Name</b>
67-56-1	<1%	Methyl Alcohol

**Section 312 Hazard Class:**  
**Fire:** Yes.  
**Sudden Release of Pressure:** No.  
**Reactive:** No.  
**Acute Health:** Yes.  
**Chronic Health:** Yes.

**Section 313 Toxic Chemicals:**

<b>CAS Number</b>	<b>Wt%</b>	<b>Component Name</b>
67-56-1	<1%	Methyl Alcohol

ECT-1470™

SDS

Part (B)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 [ecosmartsurfaces.com](http://ecosmartsurfaces.com)  
Phone: 561.328.6488 Fax: 561.328.6739



### 1. Product Identifier

**Product name: ECT-1470 Exterior Concrete and Stone Coating (Gloss)**

**Details of the Manufacturer/Supplier:**

**EcoSmart Surface & Coating Technologies**

**1313 South Killian Dr.**

**Lake Park, Florida 33403 Phone: 561-328-6488 Fax: 561-328-6739 CHEMTREC: 800-424-9300 [www.ecosmartsurfaces.com](http://www.ecosmartsurfaces.com)**

**Product Description: Exterior Concrete and Stone Coating (Gloss)**

ECT-1470 is a silicon-ceramic treatment designed to provide maximum protection to pavers, stone, brick, cement and other masonry products against staining, microbial growth, fading due to UV exposure, acid rain, and other airborne pollutants associated with the environment. It restores the surfaces to near original color and gloss and brings out the color in stone and masonry. Its extreme hydrophobic nature exhibits an increased co-efficient of friction on the substrate it is applied to, making the coated surface not slippery when wet.

**Suggested Uses:**

Concrete and paver streets and roadways, driveways, sidewalks, exterior entryways, paver decks and walk ways, stone columns, brick walls, decorative stones and stone walkways, patios, pool decks, exterior window treatments.

### 2. Hazard(s) Identification

**HMIS RATING:**

**Health: 0.**

**Flammability: 0.**

**Reactivity: 0.**

**Classification of the Substance/Mixture: NON-FLAMMABLE LIQUID.**

**Signal Word: WARNING!**

**Hazard Statement:** Product is non-hazardous. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

**Hazard Pictograms:**



**Precautionary Statements:** Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

**Hazards Not Otherwise Classified:** None known.

### 3. Composition/Information on Ingredients

**Substance/Mixture:** Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
64-19-7	<5%	Proprietary Acetic Mixture	TWA 10 ppm, (25 mg/m <sup>3</sup> ) ST 15 ppm

#### 4. First-Aid Measures

**Inhalation:** Remove to fresh air.

**Skin Contact:** No first aid should be needed. Wash with soap and water.

**Eye Contact:** Immediately flush with water for 15 minutes.

**Ingestion:** N/A.

#### 5. Fire-Fighting Measures

**Flash Point:** Not flammable.

**Extinguishing Medium:** Use medium suitable for the surrounding area.

**Unsuitable Extinguishing Medium:** None.

**Unusual Fire Hazards:** None.

#### 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

**Methods and Materials for Containment and Clean Up:** Not applicable; product is non-hazardous. Check local regulations for proper disposal of dilute organic acids.

#### 7. Handling and Storage

**Precautions for Safe Handling:** No special precautions.

**Precautions for Safe Storage:** Do not freeze.

#### 8. Exposure Controls/Personal Protection

**Exposure Limits:**

Components	Exposure Limits
Proprietary Acetic Mixture	TWA 10 ppm, (25 mg/m <sup>3</sup> ) ST 15 ppm

**Engineering Controls:** Local ventilation recommended.

**Individual Protection Measures:**

**Eye Protection:** OSHA approved safety glasses with side shields at a minimum.

**Skin Protection:** Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for preventing skin irritation.

**Respiratory Protection:** Respiratory protection is not required.

**Personal Protective Measures:** Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

ECT-1470™

SDS

Part (B)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 [ecosmartsurfaces.com](http://ecosmartsurfaces.com)  
Phone: 561.328.6488 Fax: 561.328.6739



## 9. Physical and Chemical Properties

**Physical State:** Liquid.

**Appearance:** Clear.

**Odor:** Mild odor of vinegar.

**pH:** 4-6.

**Solubility in water:** Complete.

**Boiling Point:** Not determined.

**Specific Gravity: @ 77°F (25°C):** Not determined.

**VOC Content:** 3.52 lbs./gal, 428 g/liter (Components A, B & C mixed).

## 10. Stability and Reactivity

**Reactivity:** NA.

**Chemical Stability:** Stable.

**Other:**

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** None.

**Materials to Avoid:** None.

## 11. Toxicological Information

**Acute Health Effects:**

**Inhalation:** Vapor may irritate nose and throat.

**Ingestion:** None.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

**Signs and Symptoms of Exposure:**

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

**Special Hazards:**

**Carcinogens:** None known.

**Mutagens:** None known.

**Teratogens:** None known.

**Reproductive Toxins:** None known.

## 12. Ecological Information

Not Applicable.

## 13. Disposal Considerations

**Disposal Methods:** Not applicable; product is non-hazardous. Check local regulations for proper disposal of dilute organic acids.

**RCRA Hazard Class (40 CFR 261):** N/A (not regulated).

State or local laws may impose additional regulatory requirements regarding disposal.

**AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.**

ECT-1470™

SDS

Part (B)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 [ecosmartsurfaces.com](http://ecosmartsurfaces.com)  
Phone: 561.328.6488 Fax: 561.328.6739



#### 14. Transport Information

**UN Number:** N/A (not regulated).  
**UN Proper Shipping Name:** N/A (not regulated).  
**Transport Hazard Class:** N/A (not regulated).  
**Packing Group:** N/A (not regulated).  
**Environmental Hazard Name:** N/A (not regulated).  
**DOT Information:** (49 CFR 172.101).

#### 15. Regulatory Information

**EPA SARA Title III Chemical Listings:**  
**Section 304 CERCLA Extremely Hazardous Substance:** None.

**Section 304 CERCLA Hazardous Substances:** None.

**SECTION 312 Hazard Class:**  
**Fire:** No.  
**Sudden Release of Pressure:** No.  
**Reactive:** No.  
**Acute Health:** No.  
**Chronic Health:** No.

**Section 313 Toxic Chemicals:** None.

ECT-1470™

SDS

Part (C)

EcoSmart Surface &amp; Coating Technologies, Inc.

1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com

Phone: 561.328.6488

Fax: 561.328.6739



### 1. Product Identifier

**Product name:** ECT-1470 Exterior Concrete and Stone Coating (Gloss)

**Details of the Manufacturer/Supplier:**

**EcoSmart Surface & Coating Technologies**

1313 South Killian Dr.

Lake Park, Florida 33403 Phone: 561-328-6488 Fax: 561-328-6739 CHEMTREC: 800-424-9300 www.ecosmartsurfaces.com

**Product Description: Exterior Concrete and Stone Coating (Gloss)**

ECT-1470 is a silicon-ceramic treatment designed to provide maximum protection to pavers, stone, brick, cement and other masonry products against staining, microbial growth, fading due to UV exposure, acid rain, and other airborne pollutants associated with the environment. It restores the surfaces to near original color and gloss and brings out the color in stone and masonry. Its extreme hydrophobic nature exhibits an increased co-efficient of friction on the substrate it is applied to, making the coated surface not slippery when wet.

**Suggested Uses:**

Concrete and paver streets and roadways, driveways, sidewalks, exterior entryways, paver decks and walk ways, stone columns, brick walls, decorative stones and stone walkways, patios, pool decks, exterior window treatments.

### 2. Hazard(s) Identification

**HMIS RATING:**

**Health:** 1.

**Flammability:** 3.

**Reactivity:** 0.

**Classification of the Substance/Mixture:** FLAMMABLE LIQUID, n.o.s.

**Signal Word:** WARNING!

**Hazard Statement:** May cause skin irritation. Harmful if inhaled. May cause respiratory irritation. Will emit vapors of Methanol if seal is broken and mixture is exposed to moisture.

**Hazard Pictograms:**



**Precautionary Statements:** Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

**Hazards Not Otherwise Classified:** None known.

### 3. Composition/Information on Ingredients

**Substance/Mixture:** Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
67-56-1	<33%	Dimethyl Carbinol	TWA 400 ppm, STEL 500 ppm
001569-01-3	<66%	Propylene glycol n-propyl ether	None established; guide TWA 50 ppm
Proprietary Mixture	<5%	Alkoxysilanes	None established; guide TWA 50 ppm



ECT-1470™

SDS

Part (C)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
Phone: 561.328.6488 Fax: 561.328.6739



#### 4. First-Aid Measures

**Inhalation:** Remove to fresh air. Get medical attention if ill effects persist.

**Skin Contact:** No first aid should be needed. Wash with soap and water.

**Eye Contact:** Immediately flush with water for 15 minutes.

**Ingestion:** Get medical attention. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light.

**Comments:** Treat same as Methyl Alcohol poisoning.

#### 5. Fire-Fighting Measures

**Flash Point:** 53.0°F (12.0°C).

**Extinguishing Medium:** Carbon Dioxide (CO<sub>2</sub>), Water Fog, Dry Chemical.

**Unsuitable Extinguishing Medium:** Water, (closed containers may be cooled).

**Fire Hazards:** Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding and grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources.

**Unusual Fire Hazards:** None.

**Fire Fighting Procedures:** Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Evacuate the area in cases of overheating or fire.

**Flammable Limits in Air:** LEL: 2.0% UEL (200°F): 12.7% Volume percent.

**Incompatibility:** (Materials to avoid): heat, sparks, open flame.

#### 6. Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

**Methods and Materials for Containment and Clean Up:** Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions; or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

#### 7. Handling and Storage

**Precautions for Safe Handling:** No special precautions as long as containers are undamaged. Product evolves flammable Methyl Alcohol when exposed to moisture or humid air. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally. No eating, drinking, smoking, or hot work in area.

**Precautions for Safe Storage:** Keep container closed and stored away from heat, sparks and open flame. Keep container closed and stored away from moisture or water.

## 8. Exposure Controls/Personal Protection

### Exposure Limits:

Components	Exposure Limits
Dimethyl Carbinol	TWA 400 ppm, STEL 500 ppm
Propylene glycol n-propyl ether	None established; guide TWA 50 ppm
Alkoxysilanes	None established; guide TWA 50 ppm

**Engineering Controls:** Local ventilation recommended.

### Individual Protection Measures:

**Eye Protection:** OSHA approved safety glasses with side shields at a minimum.

**Skin Protection:** Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for preventing skin irritation.

**Respiratory Protection:** Respiratory protection is not required provided adequate local exhaust ventilation is provided per recommended exposure guidelines. Avoid enclosed spaces for mixing or applying. When needed, use respiratory protection NIOSH ½ face, black cartridge, at a minimum.

**Personal Protective Measures:** Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

## 9. Physical and Chemical Properties

**Physical State:** Liquid.

**Appearance:** Clear.

**Odor:** Strong Odor (rubbing alcohol).

**pH:** Not Applicable (non-aqueous).

**Solubility in Water:** Complete.

**Boiling Point:** Miscible blend, approximately 1810°F (830°C).

**Specific Gravity: @ 77°F (25°C):** 0.85.

**VOC Content:** 3.52 lbs./gal, 428 g/liter (Components A, B & C mixed).

## 10. Stability and Reactivity

**Reactivity:** NA.

**Chemical Stability:** Stable.

### Other:

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** None.

**Materials to Avoid:** Oxidizing material can cause a reaction; acetaldehyde, chlorine, ethylene oxide, acids, isocyanates.

## 11. Toxicological Information

### Acute Health Effects:

**Inhalation:** Vapor may irritate nose and throat. Overexposure may cause drowsiness.

**Ingestion:** Product contains small amounts of Methyl Alcohol which may cause nausea, vomiting, abdominal pain, flushing of the face, hypotension, weakness and loss of consciousness if large amount of product is swallowed.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

### Prolonged/Repeated Exposure Effects:

**Inhalation:** Product generates Methyl Alcohol when exposed to moisture, which may cause blindness and damage to nervous system.

ECT-1470™

SDS

Part (C)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
Phone: 561.328.6488 Fax: 561.328.6739



**Ingestion:** Product generates Methyl Alcohol, which may cause blindness and possibly death, if swallowed.

**Skin Contact:** May cause irritation, dermatitis.

**Eye Contact:** May cause irritation; blindness.

**Signs and Symptoms of Exposure:**

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

**Special Hazards:**

**Carcinogens:** None known.

**Mutagens:** None known.

**Teratogens:** None known.

**Reproductive Toxins:** None known.

**Sensitizers:** None known.

**12. Ecological Information**

Not Applicable.

**13. Disposal Considerations**

**Disposal Methods:** Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

**RCRA Hazard Class (40 CFR 261):**

**When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes.**

**Characteristic Waste:**

**Ignitable:** D001.

Observe all State or Local Laws pertaining to this class. Local laws may impose additional requirements.

**Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**Uncleaned Packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.**

**14. Transport Information**

**UN Number:** UN 1993.

**UN Proper Shipping Name:** Methoxy-Silane/Alcohol.

**Transport Hazard Class:** 3.

**Packing Group:** II.

**Environmental Hazard Name:** FLAMMABLE LIQUID, n.o.s.

**DOT Information:** (49 CFR 172.101).

ECT-1470™

SDS

Part (C)

EcoSmart Surface & Coating Technologies, Inc.  
1313 South Killian Dr, Lake Park, Florida 33403 ecosmartsurfaces.com  
Phone: 561.328.6488 Fax: 561.328.6739



**15. Regulatory Information**

**EPA SARA Title III Chemical Listings:**

**Section 304 CERCLA Extremely Hazardous Substance:** None

**Section 304 CERCLA Hazardous Substances:**

<b>CAS Number</b>	<b>Wt%</b>	<b>Component Name</b>	
67-56-1	2%	Methyl Alcohol	5000.00 lb. rq.

**Section 312 Hazard Class:**

**Fire:** Yes.

**Sudden Release of Pressure:** No.

**Reactive:** No.

**Acute Health:** Yes.

**Chronic Health:** Yes.

**Section 313 Toxic Chemicals:**

<b>CAS Number</b>	<b>Wt%</b>	<b>Component Name</b>
67-56-1	2%	Methyl Alcohol