

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations  
Date of Issue: 10/11/2019

Version: 1.0

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** EdgGard Protection Sealant (EPS)

**Synonyms:** EPS

### 1.2. Intended Use of the Product

**Use of the Substance/Mixture:** Edge Protection of Window Films. For Professional Use Only.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Saint-Gobain Solar Gard LLC

4540 Viewridge Ave

San Diego, CA 92123

1-858-576-0200

[www.solargard.com](http://www.solargard.com)

### 1.4. Emergency Telephone Number

**Emergency Number** : CHEMTREC, 1-800-424-9300 (Within USA and Canada); 1-703-527-3887 (Outside USA and Canada)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

Flam. Liq. 4 H227

Repr. 2 H361

Full text of hazard classes and H-statements : see Section 16.

### 2.2. Label Elements

#### GHS-US Labeling

**Hazard Pictograms (GHS-US)** :



GHS08

**Signal Word (GHS-US)** :

Warning

**Hazard Statements (GHS-US)** :

H227 - Combustible liquid.

H361 - Suspected of damaging fertility or the unborn child.

**Precautionary Statements (GHS-US)** :

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 - Wear protective gloves, protective clothing, and eye protection.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media (see Section 5) to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Synonyms	Product Identifier	%	GHS US classification
------	----------	--------------------	---	-----------------------

# EdgGard Protection Sealant (EPS)

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Titanium, bis(ethyl 3-oxobutanoato-O1',O3)bis(2-propanolato)-	Bis(ethyl acetoacetato-O1',O3)bis(propan-2-olato)titanium / Titanium, bis[ethyl 3-(oxo-.kappa.O)butanoato-.kappa.O']bis(2-propanolato)- / Diisopropoxy di(ethoxyacetoacetyl) titanate / Titanium, bis(ethyl acetoacetate / Titanium(IV) bis(ethylacetoacetato) diisopropoxide / Diisopropoxy bis(ethyl acetoacetato) titanate / Bis(1-ethoxy-1,3-dioxobutan-2-ido-.kappa.(2)O)dipropan-2-olatotitanium(IV) / Diisopropoxybis(ethylacetoacetate)titanium	(CAS-No.) 27858-32-8	1 - 5	Flam. Liq. 3, H226 Eye Irrit. 2A, H319 STOT SE 3, H336
Octamethylcyclotetrasiloxane	Cyclotetrasiloxane, octamethyl- / Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl- / CYCLOMETHICONE / D4 / 2,2,4,4,6,6,8,8-Octamethylcyclotetrasiloxane / Cyclotetrasiloxane	(CAS-No.) 556-67-2	0.1 - 1	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 4, H413

Full text of H-phrases: see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First-aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Immediately remove contaminated clothing. Drench affected area with water for at least 5 minutes. If exposed or concerned: Get medical advice/attention.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**Symptoms/Injuries:** Suspected of damaging fertility or the unborn child.

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** Suspected of damaging fertility or the unborn child.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, water spray, carbon dioxide (CO<sub>2</sub>). Water may be ineffective but water should be used to keep fire-exposed container cool.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Combustible liquid.

**Explosion Hazard:** May form flammable or explosive vapor-air mixture.

**Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Hazardous Combustion Products:** Carbon oxides. Oxides of silicon. Measurements at temperatures above 150 °C (302 °F) in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. Eliminate ignition sources.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Handle empty containers with care because residual vapors are flammable. Generates methanol during application and cure.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

**Incompatible Materials:** Water. Acids. Bases. Oxidizers.

**Storage Temperature:** < 30 °C (< 86 °F).

### 7.3. Specific End Use(s)

Edge Protection of Window Films. For Professional Use Only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in Section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

#### Octamethylcyclotetrasiloxane (556-67-2)

USA AIHA	WEEL TWA (ppm)	10 ppm
----------	----------------	--------

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 8.2. Exposure Controls

### Appropriate Engineering Controls

: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

### Personal Protective Equipment

: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



### Materials for Protective Clothing

: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

### Hand Protection

: Wear protective gloves.

### Eye and Face Protection

: Chemical safety goggles.

### Skin and Body Protection

: Wear suitable protective clothing.

### Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

### Other Information

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Milky White
Odor	: Mild
Odor Threshold	: No data available
pH	: No data
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: 81.5 °C (178.7 °F) Closed Cup
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Density	: 1.03 g/cm <sup>3</sup>
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: 10000 mPa·s @ 40 °C (104 °F)

### 9.2. Other Information

VOC Content	: 24 g/l
-------------	----------

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.
- 10.2. Chemical Stability:** Combustible liquid. May form flammable or explosive vapor-air mixture.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Water. Acids. Bases. Oxidizers.

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**10.6. Hazardous Decomposition Products:** Measurements at temperatures above 150 °C (302 °F) in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

**Acute Toxicity (Inhalation):** Not classified

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg
LC50 Inhalation Rat	36 g/m <sup>3</sup> (Exposure time: 4 h)

**Skin Corrosion/Irritation:** Not classified

**pH:** No data

**Serious Eye Damage/Irritation:** Not classified

**pH:** No data

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

**Chronic Symptoms:** Suspected of damaging fertility or the unborn child.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Not classified.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 Fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

### 12.2. Persistence and Degradability

EdgGard Protection Sealant (EPS)	
Persistence and Degradability	Not established.

### 12.3. Bioaccumulative Potential

EdgGard Protection Sealant (EPS)	
Bioaccumulative Potential	Not established.

Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	12400
Log Pow	5.1

### 12.4. Mobility in Soil

No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste Treatment Methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

**Additional Information:** Handle empty containers with care because residual vapors are flammable.

**Ecology - Waste Materials:** Avoid release to the environment.

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

### 14.1. In Accordance with DOT

**Proper Shipping Name** : COMBUSTIBLE LIQUID, N.O.S. (Decamethylcyclotetrasiloxane, METHYLTRIMETHOXYSILANE, Titanium, Bis(ethyl acetoacetato)-diisopropoxy)

**Identification Number** : NA1993

**Packing Group** : III

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

<b>EdgGard Protection Sealant (EPS)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Health hazard - Reproductive toxicity Physical hazard - Flammable (gases, aerosols, liquids, or solids)
<b>Titanium, bis(ethyl 3-oxobutanoato-O1',O3)bis(2-propanolato)- (27858-32-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Octamethylcyclotetrasiloxane (556-67-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a final TSCA Section 4 test rule.

### 15.2. US State Regulations

<b>Titanium, bis(ethyl 3-oxobutanoato-O1',O3)bis(2-propanolato)- (27858-32-8)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>Octamethylcyclotetrasiloxane (556-67-2)</b>	
U.S. - Maine - Chemicals of Concern	
U.S. - Minnesota - Chemicals of High Concern	
U.S. - Minnesota - Chemicals of High Concern - Persistent Bioaccumulative Toxins	
U.S. - Oregon - Priority Persistent Pollutant - Tier I - Persistent Pollutants	
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 10/11/2019

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

### GHS Full Text Phrases:

Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Repr. 2	Reproductive toxicity Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H227	Combustible liquid
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H413	May cause long lasting harmful effects to aquatic life

HMIS III Rating

# EdgGard Protection Sealant (EPS)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

<b>Health</b>	: 0 Minimal Hazard - No significant risk to health * Chronic - Chronic (long-term) health effects may result from repeated overexposure
<b>Flammability</b>	: 2 Moderate Hazard
<b>Physical</b>	: 1 Slight Hazard

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)