



Material Name:  
SmartRoof™ Silicone Roof Sealant

## Section 1 - Chemical Product and Company Identification

### Manufacturer Information

West Development Group  
300 Commerce Drive  
LaGrange, OH 44050  
Phone: 440-355-4682

### Emergency Numbers:

CHEMTREC (USA): 800-424-9300  
CHEMTREC (Intl): 703-527-3887  
National Poison Control: 800-222-1222

## Section 2- Hazards Identification

### Emergency Overview

May cause eye and skin irritation.

### Potential Health Effects: Eyes

May cause irritation.

### Potential Health Effects: Skin

May cause irritation.

### Potential Health Effects: Ingestion

Not a likely route of exposure under normal product use conditions. If swallowed, may cause gastrointestinal irritation.

### Potential Health Effects: Inhalation

Not expected due to low vapor pressure.

### HMIS Ratings:

**Health:** 1 **Fire:** 0 **HMIS Reactivity:** 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## Section 3- Composition/Information on Ingredients

| CAS#          | Component   |
|---------------|---|
| 22984-54-9    | 2-Butanone, O,O',O''-(methylsilyldiyl)trioxime        |
| Proprietary   | Trade Secret  |
| 78-10-4       | Ethyl silicate  |
| 1333-86-4     | Carbon black  |
| 112945-52-5   | Silica, amorphous, fumed, crystal-free                |
| 1760-24-3     | N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine       |
| 63148-62-9    | Poly(dimethylsiloxane)                                |
| Not Available | Propylene Oxide Polymer                               |
| 70131-67-8    | Siloxanes and silicones, dimethyl, hydroxy-terminated |
| 1317-65-3     | Limestone   |
| 96-29-7       | Methyl ethyl ketoxime                                 |
| 34206-40-1    | 2-Butanone, O,O',O'',O'''-silanetetrayltetraoxime     |
| 57-11-4       | Stearic acid  |
| 14808-60-7    | Quartz  |

### Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Pesticides, n.o.s..

## Section 4-First Aid Measures

### First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

### First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

### First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice.

### First Aid: Inhalation

None necessary

## Section 5 - Fire Fighting Measures

### General Fire Hazards

See Section 9 for Flammability Properties.

This material does not present any unusual fire or explosion hazards.

### Hazardous Combustion Products

Oxides of carbon, formaldehyde, silicon dioxide and hydrocarbons.

### Extinguishing Media

Use water mist, carbon dioxide, sand, dry chemical or alcohol-resistant foam.

### Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

### NFPA Ratings:

**Health:** 1 **Fire:** 0 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



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### Section 6 - Accidental Release Measures

- Containment Procedures** Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material. Close leak if possible without risk.
- Clean-Up Procedures** Take up mechanically and dispose of according to local, state, and federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.
- Evacuation Procedures** Isolate area. Keep unnecessary personnel away.
- Special Procedures** Disposal of spilled materials should be in accordance with local, state, and federal regulations.

### Section 7 - Handling and Storage

- Handling Procedures** Avoid contact with skin and eyes. Spilled substance increases risk of slipping.
- Storage Procedures** Keep container tightly closed and in a dry and cool place.

### Section 8 - Exposure Controls / Personal Protection

- A: Component Exposure Limits**
- Carbon black (1333-86-4)** ACGIH: 3.5 mg/m<sup>3</sup> TWA  
OSHA: 3.5 mg/m<sup>3</sup> TWA  
NIOSH: 3.5 mg/m<sup>3</sup> TWA; 0.1 mg/m<sup>3</sup> TWA (as PAH, carbon black in presence of polycyclic aromatic hydrocarbons)
  - Ethyl silicate (78-10-4)** ACGIH: 10 ppm TWA  
OSHA: 10 ppm TWA; 85 mg/m<sup>3</sup> TWA  
NIOSH: 10 ppm TWA; 85 mg/m<sup>3</sup> TWA
  - Limestone (1317-65-3)** OSHA: 15 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction)  
NIOSH: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable dust)
  - Quartz (14808-60-7)** ACGIH: 0.025 mg/m<sup>3</sup> TWA (respirable fraction)  
OSHA: 0.1 mg/m<sup>3</sup> TWA (respirable dust)  
NIOSH: 0.05 mg/m<sup>3</sup> TWA (respirable dust)

**Engineering Controls** Use with adequate ventilation.

#### PERSONAL PROTECTIVE EQUIPMENT

- Personal Protective Equipment: Eyes/Face** Safety glasses with side shields.
- Personal Protective Equipment: Skin** Use appropriate hand protection.
- Personal Protective Equipment: Respiratory** Not normally required.
- Personal Protective Equipment: General** Eye wash fountain is recommended.

### Section 9 - Physical & Chemical Properties

- Appearance:** Clear
- Physical State:** Liquid
- Vapor Pressure:** ND
- Boiling Point:** ND
- Solubility (H<sub>2</sub>O):** ND
- Evaporation Rate:** ND
- Octanol/H<sub>2</sub>O Coeff.:** ND
- Flash Point Method:** ND
- Odor:** None
- pH:** ND
- Vapor Density:** ND
- Melting Point:** ND
- Specific Gravity:** ND
- VOC:**
- Flash Point:** ND
- Lower Flammability Limit (LFL):** ND
- Upper Flammability Limit (UFL):** ND
- Burning Rate:** ND
- Auto Ignition:** ND



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## Section 10 - Chemical Stability & Reactivity Information

|  |                            |
|--|----------------------------|
| <b>Chemical Stability</b>                      | This is a stable material. |
| <b>Chemical Stability: Conditions to Avoid</b> | None known                 |
| <b>Incompatibility</b>                         | None known.                |
| <b>Hazardous Decomposition</b>                 | Not determined.            |
| <b>Possibility of Hazardous Reactions</b>      | Will not occur.            |

## Section 11 - Toxicological Information

### Acute Dose Effects

|   |  |
|---|--|
| <b>A: General Product Information</b>                               | No information available for the product.  |
| <b>B: Component Analysis - LD50/LC50</b>                            |  |
| <b>Carbon black (1333-86-4)</b>                                     | Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg                                 |
| <b>N-[3-(Trimethoxysilyl)propyl]-1, 2-ethanediamine (1760-24-3)</b> | Oral LD50 Rat: 7460 µL/kg  |
| <b>Silica, amorphous, fumed, crystal-free (112945-52-5)</b>         | Oral LD50 Rat: 3160 mg/kg  |
| <b>Poly(dimethylsiloxane) (63148-62-9)</b>                          | Oral LD50 Rat: >17 g/kg; Dermal LD50 Rabbit: >2 g/kg                                     |
| <b>Ethyl silicate (78-10-4)</b>                                     | Oral LD50 Rat: 6270 mg/kg; Dermal LD50 Rabbit: 6300 µL/kg                                |
| <b>Methyl ethyl ketoxime (96-29-7)</b>                              | Inhalation LC50 Rat: 20 mg/L/4H; Oral LD50 Rat: 930 mg/kg; Dermal LD50 Rabbit: 0.2 mg/kg |
| <b>Stearic acid (57-11-4)</b>                                       | Dermal LD50 Rabbit: >5 g/kg  |
| <b>Quartz (14808-60-7)</b>  | Oral LD50 Rat: 500 mg/kg   |

### Carcinogenicity

|   |   |
|---|---|
| <b>A: General Product Information</b>                       | No information available for the product.   |
| <b>B: Component Carcinogenicity</b>                         |   |
| <b>Carbon black (1333-86-4)</b>                             | ACGIH: A4 - Not Classifiable as a Human Carcinogen<br>NIOSH: potential occupational carcinogen<br>IARC: Monograph 93 [in preparation], Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))   |
| <b>Silica, amorphous, fumed, crystal-free (112945-52-5)</b> | IARC: Monograph 68 [1997] (listed under Amorphous silica) (Group 3 (not classifiable))  |
| <b>Quartz (14808-60-7)</b>                                  | ACGIH: A2 - Suspected Human Carcinogen<br>NIOSH: Potential occupational carcinogen<br>NTP: Known Human Carcinogen (Select Carcinogen)<br>IARC: Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 (carcinogenic to humans)) |

## Section 12 - Ecological Information

### Ecotoxicity

|  |  |   |
|--|--|---|
| <b>A: General Product Information</b>      | No information available for the product.  |   |
| <b>B: Component Analysis - Ecotoxicity</b> |  |   |
| - Aquatic Toxicity                         |  |   |
| <b>Carbon black (1333-86-4)</b>            | <b>Test &amp; Species</b><br>24 Hr EC50 Daphnia magna  | <b>Conditions</b><br>>5600 mg/L   |
| <b>Methyl ethyl ketoxime (96-29-7)</b>     | <b>Test &amp; Species</b><br>96 Hr LC50 Pimephales promelas<br>96 Hr LC50 Leuciscus idus<br>96 Hr LC50 Poecilia reticulata<br>72 Hr EC50 Scenedesmus subspicatus<br>48 Hr EC50 Daphnia magna | <b>Conditions</b><br>843 mg/L [flow-through]<br>320-1000 mg/L<br>760 mg/L [static]<br>83 mg/L<br>750 mg/L |



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### Section 13 - Disposal Considerations

**US EPA Waste Number & Descriptions**

**Component Waste Numbers**

**Disposal Instructions**

No EPA Waste Numbers are applicable for this product's components.  
All wastes must be handled in accordance with local, state and federal regulations.  
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### Section 14 - Transportation Information

**US DOT Information**

Shipping Name: Not Regulated

### Section 15 - Regulatory Information

**US Federal Regulations**

**Component Analysis**

None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

**State Regulations**

**Component Analysis - State**

The following components appear on one or more of the following state hazardous substances lists:

| Component             | CAS#       | CA  | MA  | MN  | NJ  | PA  | RI  |
|-----------------------|------------|-----|-----|-----|-----|-----|-----|
| Carbon black          | 1333-86-4  | Yes | Yes | Yes | Yes | Yes | Yes |
| Ethyl silicate        | 78-10-4    | Yes | Yes | Yes | Yes | Yes | Yes |
| Limestone             | 1317-65-3  | No  | Yes | Yes | Yes | Yes | Yes |
| Methyl ethyl ketoxime | 96-29-7    | No  | No  | Yes | No  | No  | No  |
| Quartz                | 14808-60-7 | No  | Yes | Yes | Yes | Yes | Yes |

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

**Component Analysis - WHMIS IDL**

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

| Component      | CAS#      | Minimum Concentration |
|----------------|-----------|-----------------------|
| Carbon black   | 1333-86-4 | 1 %                   |
| Ethyl silicate | 78-10-4   | 1 %                   |

**Additional Regulatory Information**

**Component Analysis - Inventory**

| Component   | CAS #       | TSCA | CAN  | EEC    |
|---|-------------|------|------|--------|
| 2-Butanone, O,O',O"- (methylsilylydyne)trioxime       | 22984-54-9  | Yes  | DSL  | EINECS |
| Carbon black  | 1333-86-4   | Yes  | DSL  | EINECS |
| N-[3-(Trimethoxysilyl)propyl]-1, 2- ethanediamine     | 1760-24-3   | Yes  | DSL  | EINECS |
| Silica, amorphous, fumed, crystal-free                | 112945-52-5 | No   | DSL  | No     |
| Poly(dimethylsiloxane)                                | 63148-62-9  | Yes  | DSL  | No     |
| Siloxanes and silicones, dimethyl, hydroxy-terminated | 70131-67-8  | Yes  | DSL  | No     |
| Ethyl silicate  | 78-10-4     | Yes  | DSL  | EINECS |
| Limestone   | 1317-65-3   | Yes  | NDSL | EINECS |
| Methyl ethyl ketoxime                                 | 96-29-7     | Yes  | DSL  | EINECS |
| 2-Butanone, O,O',O",O"- silanetetrayltetraoxime       | 34206-40-1  | Yes  | DSL  | EINECS |
| Stearic acid  | 57-11-4     | Yes  | DSL  | EINECS |
| Quartz  | 14808-60-7  | Yes  | DSL  | EINECS |

### Section 16 - Other Information

**Other Information**

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

**Key/Legend**

- EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act
- ACGIH = American Conference of Governmental Industrial Hygienists
- IARC = International Agency for Research on Cancer
- NIOSH = National Institute for Occupational Safety and Health
- NTP = National Toxicology Program
- OSHA = Occupational Safety and Health Administration
- NJTSR = New Jersey Trade Secret Registry