



Material Name:
SmartRoof™ Silicone Roof Coating

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
78-10-4	Ethyl silicate
1760-24-3	N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine
1333-86-4	Carbon black
37244-96-5	Nepheline syenite
13463-67-7	Titanium dioxide
112945-52-5	Silica, amorphous, fumed, crystal-free
64742-47-8	Petroleum and distillates, hydrotreated light
70131-67-8	Siloxanes and silicones, dimethyl, hydroxy-terminated
22984-54-9	2-Butanone, O,O',O''-(methylsilylydyne)trioxime
96-29-7	Methyl ethyl ketoxime

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.

Hazardous Combustion Products

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

Extinguishing Media

Oxides of carbon, formaldehyde, silicon dioxide and hydrocarbons.

Fire Fighting Equipment/Instructions

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

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/m³ TWA
OSHA: 3.5 mg/m³ TWA
NIOSH: 3.5 mg/m³ TWA; 0.1 mg/m³ 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/m³ TWA
NIOSH: 10 ppm TWA; 85 mg/m³ TWA
 - Titanium Dioxide (13463-67-7)** ACGIH: 10 mg/m³ TWA
OSHA: 10 mg/m³ TWA (total 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 (H₂O): ND
- Evaporation Rate: ND
- Octanol/H₂O Coeff.: ND
- Flash Point Method: ND
- Odor: None
- pH: ND
- Vapor Density: ND
- Melting Point: ND
- Specific Gravity: ND
- VOC: ND
- 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

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

Section 11 - Toxicological Information

Acute Dose Effects

A: General Product Information	No information available for the product.
B: Component Analysis - LD50/LC50	
Silica, amorphous, fumed, crystal-free (112945-52-5)	Oral LD50 Rat: 3160 mg/kg
Carbon black (1333-86-4)	Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg
Titanium dioxide (9002-89-5)	Oral LD50 Rat: >10000 mg/kg
N-[3-(Trimethoxysilyl)propyl]-1, 2-ethanediamine (1760-24-3)	Oral LD50 Rat: 7460 µL/kg
Petroleum distillates, hydrotreated light (64742-47-8)	Inhalation LC50 Rat: >5.2 mg/L/4H; Oral LD50 Rat: >5000 mg/kg; Dermal LD50 Rabbit: >2000 mg/kg
Ethyl silicate (78-10-4)	Oral LD50 Rat: 6270 mg/kg; Dermal LD50 Rabbit: 6300 µL/kg
Methyl ethyl ketoxime (96-29-7)	Inhalation LC50 Rat: 20 mg/L/4H; Oral LD50 Rat: 930 mg/kg; Dermal LD50 Rabbit: 0.2 mg/kg

Carcinogenicity

A: General Product Information	No information available for the product.
B: Component Carcinogenicity	
Silica, amorphous, fumed, crystal-free (112945-52-5)	IARC: Monograph 68 [1997] (listed under Amorphous silica) (Group 3 (not classifiable)) ACGIH: A4 - Not Classifiable as a Human Carcinogen NIOSH: potential occupational carcinogen
Carbon black (1333-86-4)	IARC: Monograph 93 [in preparation], Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))
Titanium dioxide (13463-67-7)	ACGIH: A4 - Not Classifiable as a Human Carcinogen NIOSH: Potential occupational carcinogen IARC: Monograph 93 [in preparation], Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information	No information available for the product.	
B: Component Analysis - Ecotoxicity - Aquatic Toxicity		
Carbon black (1333-86-4)	Test & Species 24 Hr EC50 Daphnia magna	Conditions >5600 mg/L
Methyl ethyl ketoxime (96-29-7)	Test & Species 96 Hr LC50 Pimephales promelas 96 Hr LC50 Leuciscus idus 96 Hr LC50 Poecilia reticulata 72 Hr EC50 Scenedesmus subspicatus 48 Hr EC50 Daphnia magna	Conditions 843 mg/L [flow-through] 320-1000 mg/L 760 mg/L [static] 83 mg/L 750 mg/L
Petroleum distillates, hydrotreated light (64742-47-8)	Test & Species 96 Hr LC50 Pimephales promelas 96 Hr LC50 Lepomis macrochirus 96 Hr LC50 Den-dronereides heteropoda	Conditions 45 mg/L [flow-through] 1740 mg/L [static] 4720 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
Titanium dioxide	13463-67-7	No	Yes	Yes	Yes	Yes	Yes
Ethyl silicate	78-10-4	Yes	Yes	Yes	Yes	Yes	Yes
Methyl ethyl ketoxime	96-29-7	No	No	Yes	No	No	No

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 #	CAN	EEC
Silica, amorphous, fumed, crystal-free	112945-52-5	DSL	No
Carbon black	1333-86-4	DSL	EINECS
Titanium dioxide	13463-67-7	DSL	EINECS
N-[3-(Trimethoxysilyl)propyl]-1, 2- ethanediamine	1760-24-3	DSL	EINECS
Nepheline syenite	37244-96-5	DSL	No
Petroleum distillates, hydrotreated light	64742-47-8	DSL	No
Siloxanes and silicones, dimethyl, hydroxy-terminated	70131-67-8	DSL	No
Ethyl silicate	78-10-4	DSL	EINECS
2-Butanone, O,O',O''- (methylsilylidyne)trioxime	22984-54-9	DSL	EINECS
Methyl ethyl ketoxime	96-29-7	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