

SECTION 1 PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: Roof Guardian FW-100A

Recommended Use: Roof Coating

Restriction on Use: None

Manufacturer:

STS Coatings, Inc
 347 Highway 289
 Comfort, TX 78013
 (830) 995-5682

SDS Date of Preparation: 08/15/2015

Emergency Contact: (800) 424-9300 CHEMTREC (USA)

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

Physical	Health
Not Hazardous	Not Hazardous

CAUTION - May cause eye and skin irritation on contact.



This product is not classified as hazardous in accordance with the OSHA Hazard Communication Standard (29CFR 1910.1200).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	WT.%
Glass Oxide	65997-17-3	> 25
Calcium Carbonate	1317-65-3	10-20
Titanium Dioxide	13463-67-7	2-10
Zinc Oxide	1314-13-2	2-10
Propylene Glycol	57-55-6	2-5
Crystalline Silica, Quartz	14808-60-7	0.1

Note: The crystalline silica and titanium dioxide in this product are inextricably bound so no exposure will occur and the carcinogen classification does not apply

The exact percentage of composition has been withheld as a trade secret

SECTION 4 FIRST AID MEASURES

Eyes: Immediately flush eyes with water while lifting the upper and lower lids. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.

Inhalation: If symptoms develop, move to fresh air. If symptoms persist, get medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to a person who is unconscious or convulsing. If large amount is swallowed or gastrointestinal effects develop, get medical attention.

Most important symptoms/effects, acute and delayed: Causes mild eye irritation. Prolonged contact may cause skin irritation and dryness. Inhalation of vapors or mists may cause respiratory irritation. Ingestion may cause nausea, vomiting and diarrhea.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not normally required.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use any media appropriate for the surrounding fire. Cool fire exposed containers with water.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses. Cool fire-exposed containers with water.

Specific Hazards Arising from the Chemical: This product is an aqueous mixture that will not burn until all water has evaporated. Residue will burn after the fire has evaporated. Material can splatter above 212°F. Combustion products may include oxides of carbon and zinc.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing to avoid eye and skin contact.

Methods and Materials for Containment and Cleaning Up: Dike the spilled material. Attempt to reclaim the free product, if this is possible. Place in an appropriate container for use or disposal. Collect residue with inert material and place into a closable container for disposal. Wash spill area. Prevent runoff to storm sewers and ditches leading to natural waterways. Report spill as required by local and federal regulations.

SECTION 7 HANDLING and STORAGE

Precautions for Safe Handling: Avoid contact with the eyes. Avoid prolonged contact with skin and clothing. Avoid breathing vapors and mists. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a dry, well-ventilated area. Protect from physical damage. Store in original container; keep tightly closed. Rotate stock, using older materials first. **Do not** reuse container for other purposes. Do not store in freezing areas. Keep above 40 °F, but less than 100 °F. Do not store in

direct sunlight.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	EXPOSURE LIMITS
Calcium Carbonate	5 mg/m3 TWA OSHA PEL (respirable fraction) 15 mg/m3 TWA OSHA PEL (total dust)
Titanium Dioxide	15 mg/m3 TWA OSHA PEL (total dust) 10 mg/m3 TWA ACGIH TLV
Zinc Oxide	5 mg/m3 TWA OSHA PEL (respirable fraction) 15 mg/m3 TWA OSHA PEL (total dust) 2 mg/m3 TWA ACGIH TLV, 10 mg/m3 STEL (respirable)
Crystalline Silica, Quartz	$\frac{10 \text{ mg/m}^3}{\% \text{ Silica} + 2}$ TWA OSHA PEL (respirable fraction) 0.025 mg/m3 TWA ACGIH TLV (respirable fraction)

Appropriate Engineering Controls: No special controls usually required. Use with adequate ventilation to minimize exposures levels.

Respiratory Protection: If the exposure limits are exceeded a NIOSH approved respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Gloves: Rubber or other impervious gloves are recommended to prevent prolonged skin contact.

Eye Protection: Chemical safety goggles should be worn if splashing is possible.

Other Protective Equipment: Impervious clothing as needed to avoid prolonged skin contact.

Pictograms:



SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance And Odor: Liquid Light Blue Fibered Mastic-Bland Odor.

Boiling Point (@ 760 mmHg): 212-400°F (100-204°C)	Freezing Point: Not available
Odor Threshold: Not determined	Viscosity: Not determined
Relative density (H2O=1): 1.353	Vapor Pressure: 25 mmHg
VOC: < 50 g/l	Vapor Density (AIR=1): <1
Evaporation Rate: <1 (BuOAc=1)	Solubility In Water: Soluble
pH: 8.0 +/- 0.5	Partition Coefficient n-Octanol/Water: Not available
Flash Point: >200°F (>93.3°C)	Auto ignition Temperature: Not applicable
Decomposition Temperature: Not determined	Flammability (solid, gas): Not applicable
Flammable Limits: (vol % in air)	LEL – Not applicable UEL – Not applicable

SECTION 10 STABILITY and REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions

Possibility of Hazardous Reactions: None known

Conditions to avoid: None known.

Incompatible materials: Avoid oxidizing agents and acids

Hazardous decomposition products: Thermal decomposition may yield oxides of carbon and zinc.

SECTION 11 TOXICOLOGICAL INFORMATION

Eye: Contact may cause irritation with redness and tearing

Skin: Prolonged skin contact may cause irritation and drying of the skin.

Inhalation: Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sensitization: This product is not expected to cause sensitization.

Chronic Effects: This product contains a very small amount of naturally occurring crystalline silica. Repeated inhalation of large amounts of silica dust over an extended period of time may result in a progressive, disabling disease, silicosis. However, the crystalline silica in this product is in liquid polymer base and dust exposure would not be expected.

Carcinogenicity: Titanium dioxide is listed by IARC as "Possibly Carcinogenic to Humans", Group 2B. Respirable crystalline silica is classified as a Group 1 carcinogen by IARC, and "Known to be a Human Carcinogen" by NTP. However, the crystalline silica and titanium dioxide in this product are bound in the polymer matrix and dust exposure would not be expected. None of the other components present at 0.1% or greater are listed as a carcinogen by NTP, IARC, ACGIH or OSHA.

Numerical Measures of Toxicity:

Calcium Carbonate: Oral rat LD50: 6450

mg/kg Titanium Dioxide: Oral rat LD50:

>5000 mg/kg

Zinc Oxide: Oral rat LD 50 >5 g/kg, Inhalation mouse LC50 >5.7 mg/L/4 hr.

Crystalline Silica: Oral rat LD50: >10,000 mg/kg; Inhalation rat LC50: >0.139 mg/l/4hr; Skin rabbit LD50: >5000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Zinc oxide is classified as very toxic to aquatic organisms. LC50 zebra fish 1.8 mg/L/96 hr; IC50 algae 0.136 mg/L

Persistence and degradability: No data

available **Bioaccumulative potential:** No data

available **Mobility in soil:** No data available

Other adverse effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name: Not Regulated

UN Number: None

Hazard Class/Packing Group:

None **Labels Required:** None

Environmental hazards: None

known

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable

Special precautions: None known

SECTION 15: REGULATORY INFORMATION

SARA Hazard Category (311/312): Not Hazardous

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313: Zinc Oxide (as Zinc Compounds) 1- 5 %

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

NFPA Rating:	Health = 1	Fire = 0	Instability = 0
HMIS Rating:	Health = 1	Fire = 0	Physical Hazard = 0

SDS Date of Preparation: 08/15/2015

Revision Summary: Change in format and content – Hazcom 2012, Changes to all Sections.

NOTICE

This MSDS conforms with the OSHA Hazard Communication Standard 1900.1210 and to SARA Title III, Section 313 for supplier notification.

SECTION 16: OTHER INFORMATION

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product.

The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.