

MATERIAL SAFETY DATA SHEET

Last Update: October, 2009

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Emergency Contact: CHEMTREC **800-424-9300**

ANSI 2400.1 Format

Product Name: Roof Guardian Technologies - White Elastomeric Coating

Item Number: RG-170

Chemical Name: Calcium Carbonate

Comparable Products: Unicoat Elastomeric Roof Coating

Company Information: STS Coatings, Inc.

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS NO.	EXPOSURE LIMITS		VAPOR PRESSURE	% by Weight
		OSHA PEL	ACGIH TLV	mm Hg @ Temp	
Calcium Carbonate	471-34-1	15mg/m3 total dust 5mg/m3 Respirable Fraction	10mg/m3 as dust		36.0
Titanium Dioxide	13463-67-7	10mg/m3 total dust 5mg/m3 Respirable Fraction	10mg/m3 as dust		7.0

Note: The above components and their percentages are provided for health and safety purposes **ONLY**. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

HMIG
 Health 1
 Flammability 0
 Reactivity 0
 Protective Equipment G

Signs & symptoms of overexposure are headache, dizziness, nausea, and loss of coordination. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

POTENTIAL HEALTH EFFECTS:

Likely routes of exposure: Inhalation, skin contact

EYE CONTACT: Eye contact from vapors can cause irritation.

SKIN CONTACT: Prolonged or repeated contact can cause mild irritation.

INHALATION: Excessive inhalation of vapors can cause nasal & respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness and asphyxiation. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

4. FIRST AID MEASURES

IF IN EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

IF ON SKIN: Thoroughly wash exposed area with soap and water. Remove contaminated clothing.

IF INHALED: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. Keep person warm and quiet and get medical attention.

IF INGESTED: **DO NOT** induce vomiting – aspiration hazard. If spontaneous vomiting occurs, be sure to keep victim's head below hips to avoid aspiration of vomit into lungs, monitor for breathing difficulty. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: N.A.
 FLAMMABLE LIMITS IN AIR BY VOLUME – LOWER: N.A. UPPER: N.A.
 FLAMMABILITY CLASSIFICATION: N.A.
 EXTINGUISHING MEDIA: Carbon Dioxide, Alcohol Foam, Dry Chemical.

SPECIAL FIREFIGHTING PROCEDURES: At higher temperature pressure build up in sealed containers. As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool containers exposed to fire to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Closed containers may explode when exposed to extreme heat.

6. ACCIDENTAL RELEASE MEASURES

If your facility or operation has an “oil or hazardous substance contingency plan”, activate the procedure. Take immediate steps to stop and contain the spill.

Shut off all sources of ignition.

Keep people away.

Recover free product with sorbents, vermiculite or other suitable absorbents.

Minimize skin contact and avoid breathing vapors.

Ventilate confined spaces.

Keep product out of sewers and waterways by diking or impounding.

Advise authorities if product has entered sewers, waterways or extensive land areas.

Assure conformity with all applicable government regulations.

Place in appropriate containers for disposal according to state, local or federal regulations.

7. HANDLING AND STORAGE

HANDLING: CONTENTS ARE FLAMMABLE. Use only in area provided with appropriate ventilation. Keep away from heat, sparks, and open flame during use and until all vapors are gone. Keep area ventilated. Do not smoke. Extinguish all flames, pilot lights, and heaters. Turn off stoves, electric tools and appliances, and any other sources of ignition. Keep out of reach of children. Take precautionary measures against static discharges. Ground and bound containers when transferring material. Consult NFPA Code.

STORAGE CATEGORY: Not applicable.

Keep container tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Use safety glasses with unperforated sideshields.

SKIN PROTECTION: Use apron to avoid contamination of clothing. Wear protective gloves to prevent prolonged contact with skin.

RESPIRATORY PROTECTION: Respiratory protection is not generally required for this product when ventilation is adequate. However, if personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2.

VENTILATION: Use with adequate ventilation. Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

This coating may contain materials classified as nuisance particulates (listed “as dust” in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead.

Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use

of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

When sanding, wirebrushing, abrading, burning or welding the dried film, wear a particular respirator approved by NIOSH/MSHA for protection against non-volatile materials in Section 2.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Note: All pigments, fillers, fibers, and extenders in this product are totally encapsulated and do not pose a respirable dust hazard during installation and use of this product.

Components referred to herein, may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY (H₂O = 1): 1.42 EVAPORATION RATE: Slower than Ether
 BOILING POINT (F): 212 - 213°F 100 - 100°C
 VAPOR DENSITY: Heavier than air
 SOLUBILITY IN WATER: N.A.
 VOLATILE VOLUME: 47%
 PH: 8.5

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical)
 0.19 lb/gal 22 g/l Less Water and Federally Exempt Solvents
 0.10 lb/gal 12 g/l Emitted VOC

NOTE: These physical data are typical values based on material testing, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10. STABILITY AND REACTIVITY

STABILITY: stable
 CONDITIONS TO AVOID: Isolate from heat, electrical equipment, sparks and open flame. Keep containers tightly closed.
 MATERIALS TO AVOID: none known.
 HAZARDOUS DECOMPOSITION PRODUCTS: By fire: Carbon dioxide, carbon monoxide.
 HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS:
 No ingredient in this product is an IARC, NTP, or OSHA listed carcinogen.

Rats exposed to titanium dioxide dust at 250 mg/m³ developed lung cancer, however, such exposure levels are not attainable in the workplace.

TOXICOLOGY DATA

CAS. NO.	INGREDIENT	LC50	RAT	4 HR	N.A.
471-34-1	Calcium Carbonate	LD50	RAT		N.A.
13463-67-7	Titanium Dioxide	LC50	RAT	4 HR	N.A.
		LD50	RAT		N.A.

12. ECOTOXICOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

No data available.

15. REGULATORY INFORMATION

No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.

TSCA CERTIFICATION – All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

CA Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The information and recommendations contained herein are to the best of STS Coatings, Inc. knowledge and belief, accurate and reliable as of the date issued. STS Coatings, Inc. Does not warrant or guarantee their accuracy or reliability, and STS Coatings, Inc. Shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the user's responsibility to make certain that it is relying up on the most recent, updated, information and recommendations available from STS Coatings, Inc.

The Environmental Information included as well as the Hazardous Material Identification System (HMIS) and National Fire Protection Association (NFPA) ratings, have been included by STS Coatings, Inc. in order to provide additional health and hazard classification information. The ratings recommended are based up on the criteria supplied by the developers of these rating systems, together with STS Coatings, Inc.'s interpretation of the available data.

For Other Product Information Contact:

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