

VFI-1074

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 1: PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: VFI-1074 Rust Inhibitor

Recommended Use: Roofing and other construction applications.

Restriction on Use: None

Manufacturer:

Volatile Free, Inc.
19500 Janacek Ct
Brookfield, WI 53045 - USA
T (800) 307-9218

SDS Date of Preparation: 06/12/14

Emergency Telephone: (outside the U.S.) : 1-703-527-3887 / (U.S. and Canada) 1-800-424-9300
Association/Organization: CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

Physical	Health
Non Hazardous	Eye Damage Category 1



Label Elements:

DANGER!

Causes serious eye damage.

Prevention

Wear eye protection

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS</u>	<u>CAS#</u>	<u>WT.%</u>
Calcium Carbonate	1317-65-3	10-20
Amorphous Silicon Dioxide	7631-86-9	1-10
Calcium Hydroxide	1305-62-0	1-10
Zinc Oxide	1314-13-2	1-5
Titanium Dioxide	13463-67-7	1-5
Crystalline Silica, Quartz	14808-60-7	0.1-1

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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 (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Eyes: Immediately flush eyes with water for at least 15 minutes 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 rash or irritation develops, get medical attention. Launder clothing before re-use. (Discard contaminated shoes).

Inhalation: If symptoms develop, remove victim to fresh air. If symptoms develop, get medical attention.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to a person who is unconscious or convulsing.

Most important symptoms/effects, acute and delayed: May cause severe eye irritation and possible damage. May cause skin irritation. Mists may cause mucous membrane and upper respiratory tract irritation.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention if needed for eye contact.

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

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. 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 prevent 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.

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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 locked up in a dry, well-ventilated area.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	EXPOSURE LIMITS
Calcium Carbonate	5 mg/m ³ TWA OSHA PEL (respirable fraction) 15 mg/m ³ TWA OSHA PEL (total dust)
Amorphous Silicon Dioxide	5 mg/m ³ TWA OSHA PEL (respirable fraction) 15 mg/m ³ TWA OSHA PEL (total dust)
Calcium Hydroxide	5 mg/m ³ TWA OSHA PEL (respirable fraction) 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA ACGIH TLV
Titanium Dioxide	15 mg/m ³ TWA OSHA PEL (total dust) 10 mg/m ³ TWA ACGIH TLV
Zinc Oxide	5 mg/m ³ TWA OSHA PEL (respirable fraction) 15 mg/m ³ TWA OSHA PEL (total dust) 2 mg/m ³ TWA ACGIH TLV, 10 mg/m ³ STEL (respirable)
Crystalline Silica, Quartz	10 mg/m ³ TWA OSHA PEL (respirable fraction) % Silica + 2 0.025 mg/m ³ TWA ACGIH TLV (respirable fraction)

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

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 skin contact.

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

Other Protective Equipment: Impervious clothing as needed to prevent contact.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance And Odor: Light blue liquid with a paint-like odor.

Boiling Point (@ 760 mmHg): 212°F (100°C)	Freezing Point: Not available
Odor Threshold: Not available	Viscosity: Not Available
Relative density (H₂O=1): 1.32	Vapor Pressure: 760 mmHg @ 212 °F
VOC: <50g/L (0.42 lbs./gal)	Vapor Density (AIR=1): >1
Evaporation Rate: Not available	Solubility In Water: Dispersible
pH: Not available	Partition Coefficient n-Octanol/Water: Not determined
Flash Point: >212°F (>100°C) Setflash	Autoignition Temperature: Not available
Decomposition Temperature: Not available	Flammability (solid, gas): Not applicable
Flammable Limits: (vol % in air)	LEL – Not applicable UEL – Not applicable

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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 serious irritation with redness and tearing. Permanent eye damage is possible.

Skin: Contact may cause irritation, drying and dermatitis.

Inhalation: Inhalation of mists may cause mucous membrane and respiratory irritation **Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. **Sensitization:** This product is not expected to cause sensitization.

Chronic Effects: 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 bound in the matrix 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.

Reproductive effects: None of the components have been shown to cause reproductive or developmental toxicity.

Numerical Measures of Toxicity:

Calcium Carbonate: LD50 Mouse oral 6450 mg/kg

Titanium Dioxide: Oral rat LD50: >5000 mg/kg Calcium

Hydroxide: Oral rat LC50 7,340 mg/kg Amorphous

Silicon Dioxide: No toxicity data available

Zinc Oxide: Oral rat LC50>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/4h; 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

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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): Acute Health

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): 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.

SECTION 16: OTHER INFORMATION

NFPA Rating:	Health = 3	Fire = 0	Instability = 0
HMIS Rating:	Health = 3	Fire = 0	Physical Hazard = 0

SDS Date of Preparation: 06/13/2014

Revision Summary:

06/13/2014: Change in format and content – Hazcom 2012, Changes to all Sections.

06/26/15: Section 2 Classification, Label Elements, Section 3 Composition, Section 4 Most important symptoms/effects, acute and delayed, Section 8 Exposure Limits, Section 11 Reproductive Effects, Section 15 SARA 311/312, WHMIS Classification and statement, Section 16: NFPA, HMIS

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