

TWO COMPONENT WATER BASED EPOXY PRIMER

- **Description**
VFI-#11 is a two component 9 to 1 ratio, water based epoxy primer. With excellent adhesion and high strength to galvanized metal, steel, wood, copper and concrete surfaces. Designed for application temperatures of 50°F or more. See "Limitations."
- **Usage**
Primary usage on galvanized metal roof panels.
- **Color**
Standard mixed color is salmon.
- **Description**
May also be used as a general purpose primer and for masonry block filler. It adheres well to cured aged tar, most metals, organic polymers, wood and masonry.
- **Usage**
Do not use on silver.

Physical Properties

- **Hardness**
Cures to form a hard, lusterless coating material. However, approximately 7 days at 60° F to 80° F is required to achieve maximum hardness.
- **Adhesion**
Excellent adhesion to most surfaces at recommended application rate. Most coating materials have excellent adhesion to VFI-#11 primer. Too much primer will reduce adhesion strength.

Weather & Environmental Performance

- **Service Temperature**
-40° to 180°F
- **Weatherability QUV Test Data**
Not intended for continuous exterior use by itself
- **Chemical Resistance**
Good solvent, fair acid, excellent alkali resistance
- **Water Vapor Permeability**
Cures to form a solvent and vapor resistant film

Liquid Component Properties

- **Ratio**
Volume 9 to 1
Weight 14 to 1
- **Coverage**
Smooth surface coverage rate is 350 to 400 square feet per gallon. Porous surface coverage is 200 – 300 square feet per gallon. See specific specifications for proper application.
- **Solids**
Weight 60%
Volume 42.5%
- **Consistency**
Part A is a slightly viscous liquid. Part B is a liquid. When combined, the resulting product becomes a thixotropic primer with easy spreadability.
- **Liquid Material Density & Specific Gravity**
"A" Side 12.27 lbs/gal (SG 1.473 g/ml)
"B" Side 7.86 lbs/gal (SG 0.945 g/m)
- **VOC**
The volatile organic solvent content is 80 grams per liter (high flash, aromatic solvent in part B)
- **Toxicity**
Part B contains a polyamide resin which is non-sensitizing. However, care should be taken to thoroughly clean skin that comes into contact with VFI-#11 with soap and water. Undiluted vinegar is very effective in neutralizing coating that contacts skin. See MSDS for complete details.
- **Storage Stability or Shelf Life**
One year. Protect from freezing in shipment and storage.
- **Pot Life**
2 hours at 75° F; can be extended to 3 hours by thinning with water to achieve the original consistency. Pot life at 55° F is doubled, however at 100° F it is reduced to 45 minutes.

- **Recoat Time**
Minimum of 8 hours after application and is re-coatable for up to 7 days. Best adhesion is

achieved in 1 to 3 days cure. Primer cured over 7 days should be cleaned and re-primed prior to top coating.

Application

- **Equipment**
Brush, Roller and almost any single-component Spray Equipment.
- **Material Preparation**
The product must be over 65° F for proper mixing and application.
- **Mixing**
 - The two components are prepackaged in correct proportions (9 parts by volume of part A to 1 part of part B)
 - The mixing ratio by volume is 9 parts of epoxy to 1 part of curing agent. The mixing ratio is 14 to 1 by weight
 - After combining, mix thoroughly
 - Power mixing is recommended for quantities over 1 gallon
- **Substrate Preparation**
All surfaces must solid and free of contaminants and be able to provide mechanical adhesion.
- **Primer Application**
 - **Block Filler**
Use long nap (3/4" to 1") rollers for porous concrete to fill all voids. If blowholes form as the primer dries, make a second pass with a relatively dry roller. Allow 8 to 10 minutes between passes.
 - **Smooth Surfaces**
Add about 5% of water per pail of VFI-#11. Use a 1/4" or 3/8" nap roller or nylon brush. VFI-#11 can be sprayed using conventional equipment, however the applicator must take precautions against inhalation of particulate matter. Use of a proper respirator is necessary. Most coatings can be applied over VFI-#11 primer as soon as it is thoroughly set. This degree of dryness is normally achieved in eight hours. Most

coatings best adhesion is achieved when applied

to VFI-#11 primer that has cured 1 to 3 days. All Volatile Free, Inc. elastomers and most commercial paints will adhere well to cured VFI-#11.

- **Clean Up**
Clean skin with water and soap or small quantity of vinegar. Water and detergent should be used to clean out sprayers. Follow with Methyl Ethyl Ketone to finish cleaning. Drying spray equipment in order to avoid buildup and corrosion. Determine that your hoses can tolerate solvent.
- **Limitations**
Do not apply to surfaces that are above 130° F unless special instructions are secured from Volatile Free, Inc. The temperature must be above 50° F for 24 hours after application for proper curing and adhesion.

Not for continual submersion in liquid, VFI-1003 will be substituted for this application. Contact VFI's Technical Department for appropriateness of this product for your specific application.
- **Precautions**
See Material Safety Data Sheet for complete safety data. When spraying, use a chemical and particulate matter respirator to avoid inhalation of paint.
- **Thinning**
Thin with water as needed up to 10% max.
- **Packaging**
 - 1 gallon kit contains 0.90 gallon of epoxy supplied in a 1 gallon can and 0.1 gallon of polyamide resin in a pint container
 - 5 gallon kit contains 4.5 gallons of epoxy supplied in a 5 gallon can and 0.5 gallons of polyamide resin in a 1/2 gallon can

CORPORATE OFFICE: P.O. BOX 344 – BROOKFIELD, WI 53008 / 800 307-9218 / 262 787-0400/FAX ; 262 787-0500

THIS INFORMATION AND TECHNICAL ADVICE PROVIDED HEREIN ARE BELIEVED TO BE RELIABLE AND ACCURATE TO THE BEST KNOWLEDGE OF VOLATILE FREE, INC., AS BASED ON TESTS AND SHOULD SERVE ONLY AS A RECOMMENDATION. AS THE MANUFACTURER, VOLATILE FREE, INC MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE OR A PARTICULAR PURPOSE FOR THE PRODUCT. VOLATILE FREE, INC MAKES NO REPRESENTATIONS OR WARRANTIES AS TO THE RESULTS OF THE USE OF THE PRODUCT AND ASSUMES NO OBLIGATION OR LIABILITY IN CONNECTION THEREWITH. VOLATILE FREE, INC. IS NOT LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY SORT FROM USE OF THIS PRODUCT. THE INFORMATION PROVIDED HEREIN IS SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE. INFORMATION CHANGES MAY INCLUDE, BUT ARE NOT LIMITED TO, COMMERCIAL AND TECHNICAL CHANGES, CHANGES IN PRICING, PHYSICAL CHARACTERISTICS AND PACKAGING.