PRODUCT DATA SHEET

# FREEDOMTUFF™ FT-6021

## PRODUCT DESCRIPTION

**FT-6021** is a high solids epoxy primer formulated for long term corrosion resistance. Meets requirements for potable water applications. Designed for applications on various steel and concrete substrates.

## USES

- Interior and Exterior Steel Tanks, NSF 61 and 600
- Interior and Exterior Concrete Tanks, NSF 61 and 600
- Various Steel and Concrete Substrates

## COLOR

White

## CURING TIME

| Temperature | To Handle | To Topcoat |
|---|---|---|
| 90°F (32°C) | 2 Hours | 4 Hours |
| 75°F (24°C) | 3 Hours | 5 Hours |
| 65°F (18°C) | 5 Hours | 9 Hours |
| 55°F (13°C) | 12 Hours | 18 Hours |
| 45°F (7°C) | 20 Hours | 24 Hours |

Curing time varies with surface temperature, air movement, humidity, and film thickness.

## POT LIFE & SPRAY LIFE

| Temperature | Pot Life Time | Spray Life Time |
|---|---|---|
| 90°F (32°C) | 1 Hour | 30 Minutes |
| 77°F (25°C) | 2 Hours | 1 Hour |

## TYPICAL PROPERTIES

| Property | Test Method | Value |
|---|---|---|
| Mix Ratio by Volume | - | 2A:1B |
| Recoat Window | Internal | 48 hours |
| Volume Solids | - | 82% ± 2% (mixed) |
| VOC | - | 175 g/L |
| Net Weight per Gallon | - | 13.08 ± 0.25 lbs (5.93 ± 0.11 kg) |

## COVERAGE RATES

**Metal:**

| | Dry Mils (mm) | Wet Mils (mm) | ft²/gal (m²/gal) |
|---|---|---|---|
| Minimum | 4 (0.100) | 5 (0.125) | 329 (30.5 ) |
| Maximum | 20 (0.510) | 24 (0.610) | 66 (6.1) |

Maximum of 20.0 mils DFT in one coat. Allow for overspray and surface irregularities. Wet film thickness is rounded to the nearest 0.5 mil or 5 microns. Under certain environmental conditions, two coats may be required to achieve 20.0 mil thickness. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

## SHELF LIFE & STORAGE

Shelf life is one (1) year from the date of manufacture in original, unopened, factory-sealed containers under specified storage conditions.

Shipping and storage temperatures is 65°F (18°C) to 90°F (32°C) at (or below) 50% Relative Humidity. Avoid freezing temperatures. Do not store containers directly on ground. Always store on pallets or otherwise elevated.

Do not open containers until ready to use. Partially filled containers should be purged of air using nitrogen blanketing and sealed tightly when not in use.

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## APPLICATION EQUIPMENT

### Air Spray

| Item | Recommendation |
|---|---|
| Gun | DeVilbiss JGA |
| Fluid Tip | E |
| Air Cap | 765 or 704 |
| Air Hose ID | 5/16" (7.9 mm) or 3/8" (9.5 mm) |
| Material Hose ID | 3/8" (9.5 mm) or 1/2" (12.7 mm) |
| Atomizing Pressure | 75 - 100 psi (5.2 - 6.9 bar) |
| Pot Pressure | 10 - 20 psi (0.7 - 1.4 bar) |

Low temperatures or longer hoses require higher pot pressure.

### Airless Spray

| Item | Recommendation |
|---|---|
| Tip Orfice | 0.015" - 0.019" (0.38 - 0.48 mm) |
| Atomizing Pressure | 3,000 - 4,500 psi (207 - 310 bar) |
| Material Hose ID | 1/4" (6.4 mm) or 3/8" (9.5 mm) |
| Manifold Filter | 60 mesh (250 µm) |

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions. Roller: Roller application optional when environmental restrictions do not allow spraying. Use 3/8” or 1/2” (9.5 mm to 12.7 mm) synthetic woven nap covers. Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes

## CLEAN UP

User is responsible for reading, understanding, and following all recommendations on SDS. Dispose of all packaging and containers in accordance with local, state, and federal laws and regulations. Excess liquid materials should be mixed and allowed to cure. Once cured, dispose of cured material in accordance with local, state, and federal laws and regulations.

Flush and clean all equipment immediately after use with MEK.

## MIXING

Two Parts of "A" and 1 Part of "B". Power mix contents of each container separately, ensuring no pigment remains on the bottom. Pour a measured amount of Part "B" into a clean container large enough to hold both components. Add Part "A" to Part "B" while under agitation. Continue mixing until the two components are thoroughly mixed. **Note:** Both components must be above 50°F (10°C) prior to mixing. For optimal mixing and application properties, the material should be above 60°F (16°C).

## SURFACE PREPARATION

Steel-
Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 2.0 mils. Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 2.0 mils. Note: Abrasive blast cleaning generally produces the best coating performance. If conditions will not permit this, FT-6021 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces.

Concrete-
Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 “Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride” (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 “Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes” (relative humidity should not exceed 80%), or D 4263 “Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method” (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 3 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

## SURFACE TEMPERATURE

Minimum 35°F (2°C) Maximum 135°F (57°C)
The surface should be dry and at least 5°F (3°C) above the dew point