

# **TUFF STUFF**<sup>™</sup> *Item #1284 & #1285* Technical Data Sheet

Revision date: April 2019

### **Superior Blister Prevention & Repair**

- Highest Build Epoxy Primer
- Extremely Durable
- Easy Application, Longer Windows
- Fewer Coats Needed

## High Build Epoxy Primer

Microsheet Silicate Technology



## **PRODUCT DESCRIPTION**

Tuff Stuff is an extremely high-build two-part epoxy primer that dries fast, enabling application of a complete barrier system and bottom paint in just two days. Using microsheet silicate technology, millions of microscopic sheets overlap and build a 100% water barrier that protects the surface from moisture and water penetration.

Tuff Stuff is effective for blister prevention on fiberglass, or as a bilge coating, because it is resistant to oil and water. As a universal primer, it can be used for corrosion protection on most metals below the waterline, and for priming any metal. Tuff Stuff creates an overlapping barrier to eliminate any direct path for water migration.



## **PRODUCT INFORMATION**

Colors: Light Gray-1284, White- 1285

Finish/Sheen: Matte

**Volume Solids:** 52% +\- 2%

Available Sizes: 1/2-Gallon Kit (2 quarts), 2-Gallon Kit (2 gallons)

Shipping Weight: 22 Lbs./2 Gallon Kit

Mix Ratio: 1:1 Side A, Side C

Induction Time: 20-30 minutes

Flash Point: 80° F

VOC: 444 Grams/Liter

**Typical Film Thickness:** 6-7.5 mils dry film thickness (DFT) per coat, (11.5-14.5 mils wet film thickness (WFT))

Recommended Coats: 2-4 depending on intended service

Theoretical Coverage: 140 Sq.Ft./Gal. @ 6.0 mils DFT

## **FEATURES & BENEFITS**

- Use over blistered fiberglass as a repair coat, and over unblistered fiberglass as a barrier coat.
- Protects metals from corrosion, including: aluminum, bronze, stainless steel, cast iron and lead – above and below the waterline.
- Excellent for priming props, shafts, keels, trim tabs, thru hulls and lower units
- Highest build epoxy Fewer coats needed
- Longer window between coats makes Tuff Stuff easy to use
- Reduced labor and less haul out time

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## **APPLICATION CONTROLS**

**Method:** This product may be applied by airless and conventional spray, solvent resistant rollers and brushes.

#### **Dry Times and Overcoating Intervals:**

Substrate Temp.	Touch Dry	Recoating With Tuff Stuff		Overcoating With Bottom Paint
Temp F° (C°)	Min	Min	Max	Max
73°F (23°C)	2 hrs	3 hrs	6 days	24 hrs

When overcoating Tuff Stuff Epoxy Primer with a solvent-based coating it is important to meet the required over coating times in order to achieve the best adhesion because temperature and humidity control dry times. (Exception: Overcoating with a water-based coating: see Tech Bulletin TSWB-1284) An easy rule in epoxies is when the coating is dry to the touch, yet still has some tack, it is ready to be over coated. (Thumb print without lifting any epoxy.) However, if the coating is completely cured (or after 24 hours) it needs to be thoroughly sanded with 80 grit sand paper to remove shine, or you must apply another coat of Tuff Stuff within 6 days, no longer. Then you have an additional 24 hour maximum to overcoat with antifouling paint. Tuff Stuff immersion should minimum of 24 Hours after application.

#### SURFACE PREPARATION

*Paint only clean, dry surfaces. Remove all grease, oil, wax, or other foreign material by solvent or detergent washing. (SSPC-SPI)* 

**Fiberglass:** Soda Blast, Sand with 60-80 grit sandpaper, or equivalent. Once desired profile is achieved, wipe down with rags saturated with Sea Hawk Thinner 2044 to re-move all the sanding dust. This procedure should be followed by at least 2-3 coats of Tuff Stuff for general purpose applications or use at least three coats for osmotic blistering prevention. For repair of osmotic gel coat blistering please contact your local Sea Hawk representative for procedures and paint system specification.

**Steel Vessels:** Sea Hawk Tuff Stuff Epoxy Primer is normally used as part of paint systems for both above and below the waterline on hull systems on bare metal surfaces. Tuff Stuff Epoxy must be applied over properly cleaned metal or fiberglass surfaces, free of all surface contamination. Some areas may need to be cleaned in accordance with SSPC-SP-1 Solvent Cleaning to ensure all oils, grease and other contaminants are removed. Please refer to additional data below. <u>See Technical Bulletin STL45</u>

Additional Data For Painting Metal Hulls: Prior to application to any metal surface, we recommend the area first be grit blasted to SSPC-SP-10 'near white metal to a blast profile of no less than 1.5 mil, then cleaned free of dust and blast media and painted in accordance with the paint system specifications. Follow the paint system specifications for dry film thickness and over coating times. If the system requires more than two coat of Tuff Stuff Epoxy, make sure the second coat is applied within the over coating times listed above. Additionally, regardless of the topcoat to be applied over the Tuff Stuff Epoxy make sure the over coating windows are followed. <u>See Technical Bulletin AL1284</u>

Recommended Paint Systems for Metal Surfaces Not Blasted: In many cases, some boatyards or shipyards cannot blast the metal surface and must clean by power tool such as power grinders we strongly recommend the metal surface be primed with one or two coats of Sea Hawk Strontium Chromate Epoxy before the Tuff Stuff Epoxy High Build is applied. If this system is used make sure the grinding dust is removed by blown air, brooms, brushes or similar. Do not use rags with or without thinner should be used as this may leave fabric fibers on the cleaned surface which when over coated can produce moisture 'wicking to the substrate and cause blistering or delamination problems.

**Blasted Surfaces:** For steel surfaces use angular grit for blasting. Do not use metal 'shot' as this does not leave a proper surface for painting. For aluminum, do not use any metal blast media. There are specific blast media available like select minerals, sand or other non-metallic media provide an acceptable profile is provided.

**Note:** Blasted steel and aluminum must be painted as soon as possible after blasting to avoid any rust 'bloom' or oxidation from high humidity. Should the surface 'turn' before the first coat of Sea Hawk Tuff

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Stuff or Strontium Chromate Epoxy primers can be applied, we strongly recommend the surface be 'grit swept' in accordance with SSPC-SP-7 Brush Off Blast to remove the 'rust bloom' or aluminum oxide and then continue with the application of the paint system.

#### **APPLICATION DATA**

**Mixing:** Sea Hawk Tuff Stuff is a high viscosity epoxy primer and contains a moderate to high concentration of pigments and may have settled in transit, Each component must be thoroughly mixed with power mixer/shaker until uniform before use. Mix equal parts (1:1) of Side A and Side C.

Induction Time: 20-30 Minutes

**Thinning:** If necessary, maximum 10% with Sea Hawk Tuff Stuff Reducer 2084

Cleaning: Sea Hawk Tuff Stuff Reducer 2084 or 2044

Pot Life: 3 hours

**Brush/Rolling:** Solvent Resistant Roller Cover 3/8"-3/16" pile (nap), smooth to medium. Prewash roller cover to remove loose fibers prior to use.

**Airless Spray:** Use a 30:1 ratio pump or greater, a 17- 27 thou fluid tip and apply with about 3000 psi pressure.

**Conventional Spray:** Please contact your Sea Hawk representative for more specific information.

**Safety:** Prior to use, obtain and consult the "Material Safety Data Sheet" of this product for health and safety information. Read and observe all precautionary notices on container labels.

#### LIMITATIONS

Apply in good weather when air and surface temperatures are above 50°F (10°C). Surface temperature must be a least 5°F (1°C) above dew point. For optimum application properties, bring material to 70-80°F (21-27°C) temperature range prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage between 40° and 100°F (4-38°C). Prolonged atmospheric exposure of this product may detract from performance. Technical and application data herein is for the purpose of establishing a general guideline of the coating and proper coating application procedures. As application, environmental and design factors can vary significantly due care should be exercised in the selection, verification of performance, and use of the coating.

#### **TECHNICAL BULLETIN**

Before putting a water-based antifouling paint over Tuff Stuff read the Technical Bulletin, TSWB-1284, regarding this subject on the Sea Hawk Paints website at this url:

www.seahawkpaints.com/technical-bulletins/

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