

## Technical Data Sheet



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### AUSTRALIA/NZ



3.5 kg Kit

Not all styles/sizes/colors available in all areas.

## AMAZING GOOP TUFF-SHIELD

### WATERPROOF EPOXY SEALER and PROTECTOR

#### PRODUCT DESCRIPTION

TUFF-SHIELD is a gray epoxy sealer and coating that contains ceramic beads which provide extreme abrasion resistance. It also contains Kevlar® for toughness and graphite for lubricity. TUFF-SHIELD provides an armor type high-build coating that is sandable, paintable and waterproof! TUFF-SHIELD also works well as a sealer that fills and seals hard-to-find leaks and cracks in aluminum, wood, fiberglass, steel and Ferrocement.

#### WHERE TO USE / APPLICATIONS

Great for boat bottoms, decks/steps/ramps, RV roofs, hatches and hulls.

#### FEATURES AND BENEFITS

**ABRASION RESISTANCE** – Very High.

**LUBRICITY** – Exhibits high lubricity in marine application and will slide over rocky or abrasive surfaces.

**EASE OF APPLICATION** – Easy. Mixes directly in can. Just mix together and apply.

**WATERPROOF** – Yes. Unique epoxy sealer.

**ADHESION** – Excellent. Flake-resistant.

**SUBSTRATES** – Aluminum, Wood, Fiberglass, Steel, Ferrocement.

#### TECHNICAL INFORMATION

##### PHYSICAL PROPERTIES

Heat deflection temperature:	46.7 °C (ASTM D648-264 psi)
Bond strength:	2,020 psi (mild steel to mild steel)
Flexural strength:	8,460 psi
Flexural modulus:	319,000 psi
Tensile strength:	6,180 psi
Tensile modulus:	457,000 psi
Elongation:	1.35%
Barcol hardness (GYZI-935):	79

##### WORKING PROPERTIES

Color:	Gray
Packaging:	3.5 kg kit
Flash point:	93 °C
Mixing ratio:	7:1 by weight
Pot life:	35 minutes
Cure time:	10-12 hours @ 21 °C
Application Temperature:	21 °C
Service Temperature:	-12 to 82 °C
Storage Temperature:	-7 to 38 °C
Shelf life:	1 year

##### CHEMICAL RESISTANCE (after 30 days immersion in chemicals at 77 °F / 25 °C)

	Weight Change, %
Sulfuric Acid, 3%:	<1.0%
Sodium Chloride, 10%:	<0.1%
Distilled Water:	<0.1%
Nitric Acid, 10%:	<0.1%
Hydrochloric Acid, 10%:	<0.1%
Acetic Acid, 5%:	<0.1%
Hydrogen Peroxide, 3%:	<0.1%

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#### DIRECTIONS and APPLICATION NOTES

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Read Directions and always test a small area before full use.

##### SURFACE PREPARATION

- Step 1 Use protective gloves to avoid getting TUFF-SHIELD on skin. In case of contact with skin, use plenty of soap and water to remove epoxy.
- Step 2 For small quantities, mix 7 parts of Part A and 1 part of Part B - **by weight** (not by volume).
- Step 3 A clean, freshly sanded surface is essential to creating a good bond. Remove all contaminants such as oil, grease, dirt and old coatings. Sand until there is a clean surface. Steel and/or aluminum boats should be sanded or cleaned with steel wool and treated with a marine phosphoric acid wash, such as Naval Jelly or Aluminum Bright, to remove any rust oxidation. Tape off boat sides if necessary.
- Step 4 Gouges and deep holes should be filled with an epoxy or fairing compound before applying TUFF-SHIELD.
- Step 5 May be applied to dry or porous surfaces.

##### MIXING

- Step 1 Stir Part A container of TUFF-SHIELD until a uniform consistency occurs. Pour Part B into Part A container.
- Step 2 Sufficient stirring and mixing is the most important step for satisfactory results with TUFF-SHIELD. Mix with fold-into-center motion. Mix entire contents thoroughly for 6-7 minutes. Occasionally scrape bottom and sides of mixing container as well as mixing stick. Mixed material should be used within 30 minutes.
- Step 3 After mixing thoroughly, immediately pour material onto working surface. Do not leave mixed material in original container.

##### APPLICATION

- Step 1 Application can be readily completed with a toothed trowel, squeegee, short bristle throw-away brush or foam roller.
- Step 2 Working time is approximately 30 minutes.
- Step 3 Adequate cure time is approximately 10-12 hours at 70 °F / 21 °C. Minimum application temperature 65 °F / 18 °C. Application surface temperature range is 50 °F / 10 °C to 90 °F / 32 °C. Cure time decreases with higher temperatures. Thicker coats cure faster than thin coats. A second coat of Coat-It may be applied after the initial 10-12 hour cure period.
- Step 4 Clean tools with acetone or lacquer thinner. For maximum ultraviolet protection, allow TUFF-SHIELD to cure thoroughly, sand lightly and apply a good grade of marine paint.  
For deep repairs: allow 1<sup>st</sup> layer to dry before applying subsequent layers.

##### COVERAGE

3.5 kg    Approximately 7.4 m<sup>2</sup>\*

\*depending upon the porosity of the surface and thickness applied

TUFF-SHIELD **is not** recommended for repairing blister pox in fiberglass hulls.  
For technical assistance, call 800.767.4667.

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#### HEALTH and SAFETY

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This product contains epoxy resin and amine hardener. Before working with this product, read and become familiar with information concerning hazards, proper use and handling.

To request a hard copy of the SDS, please send an e-mail to [sds@eclecticproducts.com](mailto:sds@eclecticproducts.com).

## **AMAZING GOOP TUFF-SHIELD**

### **WATERPROOF EPOXY SEALER and PROTECTOR**

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#### **LIMITED WARRANTY**

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The product is warranted against any defect in materials or workmanship under normal use for a period of 180 days after the date of purchase. The product is also warranted under any implied warranties provided under applicable law, including, without limitation, the implied warranty of merchantability and the implied warranty of fitness for a particular purpose, for a period of 180 days after the date of purchase. The manufacturer will not accept liability for more than product replacement. This warranty covers only the original buyer of the product. For warranty service, the buyer should contact the store where the product was purchased, or write Eclectic Products LLC, P.O. Box 4450, Pineville LA 71361 or call 800.767.4667. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. This warranty gives you specific legal rights, and you also have other rights, which vary from province to province.