

X-Shield PolyTough GF

Glass filled polyester based anti corrosive steel coating

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Product Description

X-Shield PolyTough GF is a polyester based resin coating incorporating extra corrosion resistant glass flake to provide a tough, abrasion resistant coating for use on steel structures in atmospheric and immersed conditions.

Advantages

- Primerless
- Fast cure
- Abrasion resistant
- Corrosion resistant
- Suitable for immersion

Typical Uses

- Steelwork
- Pipelines
- Storage tanks

Laboratory Test Data

Property	Typical Results
Barcol Hardness	>40
Taber Abrasion (H181 kg)	<225 mg/1000 cycles
Specific Gravity	1.2
Convertible Vol. Solids	99% at 20C 85% at 25C

Application Properties

Pot Life	50min at 20C
Mix Ratio	98.5B:2.5H
Wet Film Thickness	500 to 1000 microns per coat
Min Recoat Time	7h at 20C
Max Recoat Time	72h at 20C
Tack Free	5h at 20C
Full Cure	7d at 20C
Non Chemical Immersion	8h at 20C

Note: For application at below 10C a special hardener is available and the mix ratio changes to 97.5B:2.5H DFT is normally 99% of WFT but this can vary depending on the prevailing polymerization conditions.

Volatile Organic Content

VOC = 35g/L

Color

Off white, red yellow, green and black.

Packaging

20L kits.

Shelf Life

6 months when stored between 5 to 20C in constant temperature conditions under shade. Invert drums every 3 months.

Installation Guidelines

X-Shield PolyTough GF should be applied by experienced coating crews. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Surface Preparation

Surfaces should be thoroughly cleaned and degreased to SSPC-SP1 prior to blasting. All sharp edges, protuberances, welds, etc should be ground down to remove any sharp edges. The degreased surface should now be grit blasted to a minimum SA 2½ in accordance with BS7079 Part A1 or equivalent. This means very thorough blast cleaning using chilled steel grit to provide near white metal 85% clean. The surface shall be free from all foreign matter. A surface profile of 45 microns is the recommended finish. All dust and abrasive residue must be removed from the surface prior to application of the coating.

Priming

If the coating is applied immediately after surface preparation is completed no priming is required. If a holding primer is required most non zinc based holding primers can be used. X-Shield EpoxyLock HS is recommended as a primer to be applied at the fabrication shop if the steel work is to be top coated at the job site.

Application

Add half the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500 rpm) with an X-Shield Coating Mixer Paddle for 1 minute then add the remaining hardener and mix for a further 2 minutes.

Ensure both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Apply using a 45:1 ratio or higher airless spray or plural component spray fitted with leather seals, 10mm hoses and a large bore spray gun (0.6 to 1.5mm). Typical tip size is 0.75 to 0.85 with a 45 to 60 degree fan pattern.

If thinning is required thin with up to 5% by volume of styrene. Do NOT use other solvents.

For application at temperatures over 21C a set retarder can be supplied if required.

Limitations

Material is flammable, Flash point is 26C.

Do not use un immersed condition if liquid temperature is greater than 60C.

Not suitable for use in contact with polar solvents or demineralised water.

Do not apply if surface temperature is 3C or below of the dewpoint.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us.

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Chemistry Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.