



# Cerami-Tech FG

## Data Sheet and Application Guide

### Product Description

Thortex Cerami-Tech FG has been specifically developed as a ceramic enhanced epoxy repair coating for resurfacing and reforming metal machinery and equipment, such as pumps, impellers, fans, valves and pipe elbows.

### Product Features

- Designed for application by stiff brush or squeegee.
- Provides outstanding resistance to impingement, entrainment and erosion/corrosion.
- Primarily designed for resurfacing metal components used in fluid flow environments.

### Surface Preparation

All dust and loose material should be scraped away. Oil and grease should be removed with solvent-based cleaner.

Surfaces should then be abrasive blast cleaned to NACE No 2/SSPC-SPC10 near white metal, ISO 8501:1, Grade Sa2½ or equivalent with a blast profile of 75 microns (3 mil) corresponding to 'Medium'. All loose abrasive dust and debris must be blown clear or vacuum cleaned away.

Equipment which has become salt impregnated due to service conditions should first be wet blasted then dry abrasive blasted and checked for presence of salts. This process should be repeated until the salts are removed.

On sections of repair which are not required to bond to the Thortex Cerami-Tech FG, these surfaces should be treated with Thortex Release Agent.

### Product Mixing

Thortex Cerami-Tech FG is a two component material comprising Base and Activator components which must be mixed together before use. Mix the entire contents of the Base and Activator containers. Alternatively measure three volumes of base component and one volume of activator into a clean container.

The two components should be thoroughly mixed until completely streak free.

The mixed material should be used within 25 minutes of mixing at 20°C (68°F). This time will be reduced at higher temperatures and extended at lower temperatures.

### Application Procedures

Application should not be carried out at temperatures below 5°C (40°F) nor when relative humidity exceeds 85% or when the surface to be coated is less than 3°C (5°F) above the dew point.

The mixed material should be applied to the prepared area using a clean brush or squeegee, application should be carried out as soon as possible after surface preparation is complete and certainly the same day, otherwise brush blasting may be necessary before application. Where necessary Thortex Reinforcement Tape should be stippled into the mixed product and further material applied over the tape. For large areas the tape should be overlapped.

In areas where a second coat is required, this application must be carried out within the initial set time for the first coat, otherwise the surface must be lightly abraded or flash blasted.

Machining of Thortex Cerami-Tech FG will cause excessive tool wear so care should be taken to finish the repair to the required size or dimensions. Forms treated with Thortex Release Agent can be used to minimize machining.

All equipment must be cleaned IMMEDIATELY after use with solvent-based cleaner.

### Properties

Property	Value
Color	Grey, Blue, Red
Ratio	3:1 By volume 8:1 By weight
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Useable life	25 mins
Initial Set	3 hours
Machining Time	6 hours
Full Mechanical Cure	5 days
Volume Solids	100%
Film Thickness	250 microns (10 mils).
Coverage Rate	1.77 m <sup>2</sup> /kilo at 250 microns (19 ft <sup>2</sup> /kilo at 10 mils)
Tensile Shear Adhesion	20 Mpa (2825 psi)
Compressive Strength	91 Mpa (13000 psi)
Flexural Strength	63 Mpa (9000 psi)
Heat Distortion	60°C (175°F) Distortion
Tensile Shear Adhesion	19.30 Mpa (2800 psi)
Abrasion Resistance (ASTM D4060)	0.08 mg loss per 1000 cycles, 1 kg load, CS17 wheel

## Packaging and Storage

Supplied in 1 kilo units.

Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

## Handling and Safety Precautions

Read all Health Hazard, Precautionary and First Aid, Material Safety Data Sheet, and/or product label prior to handling or use.

## Ordering Information/Customer Service

For ordering technical or product information, or a copy of the Material Safety Data Sheet, please contact us:

Phone: 610-831-0222

Fax: 610-831-1910

Email: [info@thortex.com](mailto:info@thortex.com)

## Important Notice

All statements, technical information, and recommendations related to Thortex's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in Thortex's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of Thortex.

## Warranty; Limited Remedy; Limited Liability.

Because conditions of product use are outside of our control and vary widely, the following is made in lieu of all express or implied warranties: this product will conform to Thortex's published product specifications and be free from defects in material and manufacture on the date of your purchase. **THORTEX MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective upon your receipt, your exclusive remedy shall be, at Thortex's option, to replace the Thortex product or refund the purchase price of the Thortex product. **Except where prohibited by law, Thortex will not be liable for any indirect, special, incidental or consequential loss or damage arising from this Thortex product, regardless of the legal theory asserted.**



Thortex America, Inc.  
12 Iron Bridge Drive • Collegeville, PA 19426  
Telephone: 610-831-0222  
Website: [www.thortex.com](http://www.thortex.com)