

# 3M™ Scotchkote™ Epoxy Ceramic HD Surfacer HG 519

(formerly Thortex Cerami-Tech HG)

## Data Sheet and Application Guide

### Product Description

3M Scotchkote Epoxy Ceramic HD Surfacer HG 519 has been specifically developed as a 100% solids ceramic repair system for resurfacing equipment subject to severe abrasion.

### Product Features

- Designed for application by trowel or spatula at thicknesses.
- Designed for use to rebuilding worn hoppers, chutes, pipe elbows and other equipment subject to aggressive attack from dry solids and slurries.
- Excellent adhesion to correctly prepared metal surfaces.

### Surface Preparation

All dust and loose material should be scraped away. Oil and grease should be removed with 3M™ Scotchkote™ Cleaner 020.

Surfaces should then be abrasive blast cleaned to a minimum 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 that 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.

Alternatively, surfaces should be warmed with a blow torch or similar to bring salts up to the surface. The surface should once again be blast cleaned. This procedure must be repeated until no further sweating of impregnated salt is evident.

On sections of repair which are not required to bond to the Scotchkote Epoxy Ceramic HD Surfacer HG 519 these surfaces should be treated with 3M™ Scotchkote™ Release Agent 035.

### Product Mixing

Transfer the entire content of the Part A and Part B containers onto a clean mixing board. Alternatively, measure three volumes of the Part A component and one volume of the Part B onto a clean mixing surface. The two components should be thoroughly mixed until streak free. The use of a small trowel is advisable for easy mixing.

The mixed material should be used within 60 minutes of mixing at 20°C (68°F). The 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 (41°F) nor when relative humidity exceeds 90% or when the surface to be repaired is less than 3°C (5°F) above the dew point.

The prepared surface must be dry and free from condensation. The mixed material should be applied to the prepared area, using a trowel or float at thicknesses up to 6mm. Application should be carried out as soon as possible after surface preparation is complete and certainly the same day, otherwise flash blasting will be necessary before application. The mixed material should be applied by spatula or pallet knife to the surface, pressing firmly into the surface to avoid air entrapment. In areas where a second layer of Scotchkote Epoxy Ceramic Surfacer HG 519 is required, this application must be carried out within the initial set time for the first layer, otherwise surfaces must be flash blasted before further application.

Machining of Scotchkote Epoxy Ceramic HD Surfacer HG 519 will cause excessive tool wear so care should be taken to finish the repair to the required size or dimensions.

Formers treated with Scotchkote Release Agent 035 can be used to minimise machining. Once the Scotchkote Epoxy Ceramic HD Surfacer HG 519 has reached initial set the material can be separated from treated surfaces.

All equipment must be cleaned IMMEDIATELY after use with Scotchkote Cleaner 020 or equivalent.

**Volume Capacity:** 542 cc (33 cu ins) per kilo

**Coverage Rate:** .09 sqm (1sq ft) per kilo

### Properties

Property	Value
Color	Grey
Ratio	3:1 By volume 4:1 By weight
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Useable life	60 mins
Initial Set	3 hours
Hard Dry for machining	8 hours
Full Mechanical Cure	5 days
Volume Solids	100%
Film Thickness	Up to 6 mm (0.24 in)
Volume Capacity	542 cc (33 cu ins) per kilo
Flexural Strength	42 Mpa (6000 psi)
Compressive Strength	106 Mpa (15000 psi)
Heat Distortion Temperature	60°C (140°F)
Tensile Shear Adhesion	13.79 Mpa (2000 psi)



## Packaging and Storage

Supplied in 1.5 and 5 kilo packs

Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (41°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, call:

Phone: 800/722-6721 or 512/984-9393

Fax: 877/601-1305 or 512/984-6296

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