

3M™ Scotchkote™ Epoxy Coating 175UC Paste

Data Sheet and Application Guide

Product Description

Scotchkote Epoxy Coating 175UC Paste has been specifically developed as a 100% solids paste designed for use on grouting, bonding of tiles and repairs where exceptional resistance to chemical attack is required.

Product Features

- Combines good application characteristics with excellent corrosion protection and ultimate chemical resistance.
- Designed for application by hand using a trowel or spatula.
- Is primarily intended for use on steel.
- **Adhesion** - Excellent to currently prepared surfaces.
- **Abrasion Resistance** - Excellent resistance to abrasion and mechanical damage.
- **Chemical Resistance** - Suitable for immersion in industrial chemicals.

General Application Steps

1. Remove oil, grease and loosely adhering deposits.
2. Abrasive blast clean steel surfaces to NACE No. 2/SSPC-SP10 Near White Metal, ISO 8501:1, Grade SA2½ .
3. Apply Scotchkote Epoxy Coating 175UC Paste at the required thickness.
4. Allow to cure.
5. Visually or electrically inspect the coating for defects.
6. Repair all defects.

Properties

Property	Value
Colour	Light and Dark Grey
Ratio	2:1 By volume
Drying & Cure times at 20°C (68°F)	
Usable Life	30 mins
Touch Dry	4½ hours
Minimum Overcoating	4½ hours
Maximum Overcoating	16 hours
Full Cure	7 days
Volume Solids	100%
Specific Gravity (Average Mixed)	1.15
Volume Capacity	892cc (60 cu.ins) per kilo
Performance Data	
Abrasion Resistance	80mgm weight loss per 1000 cycles - 1kg load - CS17 wheel (ASTM D4060)
Maximum Distortion Temperature (Water)	177°C (350°F) Dry 130°C (265°F) Wet (ASTM D2485)
Flexural Strength	70MPa (10,000 psi) (ASTM D790)
Heat Distortion Temperature	49
Direct Pull Adhesion	> 30 MPa (4350 psi) - Carbon Steel (ASTM D4541)
Hardness (Shore D)	83-7 days @ 20°C (ASTM D2240)
Tensile Sheer Adhesion (Grit Blasted Steel)	11.5 MPa (1667 psi) (ASTM D1002)



Application Procedures for 3M™ Scotchkote™ Epoxy Coating 175UC Paste

Surface Preparation

Steel Surfaces - Steel surfaces should be abrasive blasted in accordance with NACE No 2/SSPC-SP10 Near White Metal, ISO 8501-1 grade Sa2½ or equivalent. The blast profile is generally specified by the client, a typical profile is 75-100 microns (3-4 mil). All loose abrasive dust and debris must be blown clear or vacuum cleaned away. Steel surfaces do not require priming.

Product Mixing

Scotchkote Epoxy Coating 175UC Paste is a two component material comprising Part A (Base) and Part B (Activator) components which must be mixed together prior to use.

Measure 2 volumes of the Part A (base) component and 1 volume Part B (Activator) component onto a clean mixing board or other suitable surface.

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

The mixed materials should be used within 30 minutes of mixing at 20°C. 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 nor when relative humidity exceeds 85% or when the surface to be coated is less than 3°C below the dew point. Best application results are obtained at a minimum substrate and product temperature of 20°C.

Handling and Safety Precautions

Read all health hazard, precautionary and first aid statements found in the Material Safety Data Sheet, and/or product label prior to handling or use.

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For optimum chemical resistance, the system must be applied and cured at a minimum temperature of 20°C for at least 7 days prior to return to service.

Scotchkote Epoxy Coating 175UC Paste is designed for application by trowel or spatula. The mixed material should be pressed firmly onto the prepared area, care should be taken to avoid air entrapment on deeply pitted surfaces.

Application should be carried out as soon as possible after the surface preparation is complete and certainly the same day otherwise flash blasting will be necessary before application.

Where necessary 3M™ Scotchkote™ Reinforcement Tape 040 can be stippled into the mixed product and further material applied over the tape.

For large areas the tape should be overlapped. Clean all equipment immediately after use with 3M™ Scotchkote™ 020 Cleaner.

Packaging and Storage

Supplied in 2 kilo packs

Use within 5 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C. Short term exposure to temperatures outside this range will not be deleterious to product quality.

Ordering Information/Customer Service

For ordering, technical and product information or to request a copy of the Material Safety Data Sheet, call +44 (0)1609 780170 or fax +44 (0)1609 783762 (Sales) or 788718 (Technical).

For emergencies, please contact +44 (0)1344 858000.



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175UC Paste-0313