

3M™ Scotchkote™ Encapsulation Coating Polynox 136

Updated
Supersedes

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Data Sheet and Application Guide

Product Description

3M™ Scotchkote™ Encapsulation Coating Polynox 136 is a water based acrylic anti corrosive coating specifically developed to help long term protection and encapsulation for metallic surfaces, cementitious and previously coated structures.

Product Features

- Combines good application characteristics with fast drying capabilities.
- Has excellent corrosion resistant properties with a high level of UV resistance, adhesion and durability.
- Can be applied to steel, aluminium and concrete structures.
- Provides up to 10 years maintenance free protection.

General Application Steps

1. Remove loosely adhering deposits and heavy corrosion and prepare the surface accordingly.
2. Apply Scotchkote encapsulation coating polynox 136 to the prepared surfaces.
3. Visually inspect coated surface for defects.
4. Repair all defects.

Properties

Property	Value
Colour	Available in a limited range of colours
Drying & Cure times at 20°C (68°F)	
Touch Dry*	Approx 1 hour
Hard Dry	24 hours
Minimum Overcoating*	Approx 1 hour
Maximum Overcoating	Indefinite provided surface is clean
Full Cure	14 days

* Touch dry and minimum overcoating times are for open areas with good air movement, drying times will be extended in enclosed areas with limited air movement

Volume Solids	60%
V.O.C (As Supplied)	4g/ltr
Film Thickness (Typical) (To be agreed between specifier and 3M Technical Dept)	585 microns wet, 350 microns dry.
Theoretical Coverage Rate	1.7m ² / litre at 350 microns dft.

Performance Data

Tensile Strength	2.9N/mm ² (ASTM D412)
Tensile Elongation	250% (ASTM D412)
Salt Spray Resistance at 350 microns on grit blasted steel	1000 hours, no blistering, no corrosion at scribe, no loss of adhesion (ASTM B117)
UV Resistance	1000hrs (ASTM G53)
Humidity Resistance applied at 350 microns onto grit blasted steel	1000hrs, no blistering, no corrosion, no loss of adhesion (ASTM D2247)
Water Vapour Permeability	20gm.mm/m ² /24hr (ASTM E96)
Impact Resistance	13.55 Joules (120 ins.lbs) (ASTM D2444)
Cold Weather Flexibility	Pass ½ inch mandrel @ -25°C/-15°F (ASTM D522)
Abrasion Resistance	15mgm weight loss, CS16 wheel 500gm load, 1000 cycles (ASTM D4060)
Accelerated Weathering	No cracking, checking after 1000 hours exposure (ASTM D4798)



Application Procedures for Scotchkote Encapsulation Coating Polynox 136

Surface Preparation

All surfaces should be clean, dry and free from oils, grease, loose material, standing water and any other contaminants.

Concrete Surfaces: All concrete to be coated should either be lightly abrasive blast cleaned using wet or dry abrasive techniques or alternatively high pressure water jetting. Care must be taken not to expose the aggregate in the concrete.

All dust and abrasive material shall be removed from the surface prior to coating.

Metal Surfaces: For optimum corrosion protection performance the surface should be abrasive blast cleaned to NACE No. 2/SSPC-SP10 near white metal, ISO 8501:1, Sa2½ BS 7079 Part A1 1989/ISO 8501-1:1998 - with a medium profile - 50 microns. If abrasive blasting is not possible surfaces should be prepared by mechanical wire brushing, grinding or high pressure water jetting (typically 3500psi) to achieve Swedish Standard St3 or equivalent, taking particular care when cleaning badly pitted surfaces.

Previously Coated Surfaces: Any loose/flaking material must be removed. Surfaces should then be thoroughly cleaned and abraded.

Application Procedures

Application should not be carried out at temperatures below 7°C nor when relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.

Scotchkote encapsulation coating polynox 136 can be applied by brush, roller or spray. For brush application good quality stiff bristled brushes should be used. For roller application medium to long pile rollers should be used.

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.

For application by spray typical spray settings are:-

Minimum: 32:1 pump

15-19 Thou Tip

3000-3500 Tip Pressure

Spray equipment should be fitted with a 100 mesh inline filter.

Scotchkote encapsulation coating polynox 136 should be applied to achieve a minimum dry film thickness of 300 microns (12 mils) either as a single coat by spray or two coats by brush. For brush application the first coat should be allowed to dry to the touch (approximately 60 minutes depending on substrate and weather conditions) prior to the second coat being applied.

All equipment should be cleaned IMMEDIATELY after use with clean water, any stubborn deposits can be removed with 3M™ Scotchkote™ Cleaner 020

Packaging and Storage

Supplied in 5 and 20 litre units.

Use within 24 months of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C.

ALWAYS PROTECT FROM FROST DURING STORAGE AND USE.

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

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

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Important Notice

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3M warrants that the 3M™ Scotchkote™ Product will conform to 3M published specifications upon shipment. If the product is proven not to have met the specifications your exclusive remedy within 12 months of sale by 3M of the product and 3M's sole obligation will be, at 3M's option, to replace the Product or to refund the purchase price of the Product. Except where prohibited by law, this warranty is made in lieu of all other warranties, express or implied, including, but not limited to, any implied warranty of suitability or fitness for a particular purpose, or those arising from a course of dealing, custom or usage or trade.

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