

3M™ Scotchkote™ Epoxy Coating 162PWX

Data Sheet and Application Guide

Product Description

Scotchkote Epoxy Coating 162PWX has been specifically developed as a 100% solids lining for the internals of pipes, tanks, vessels and other equipment in contact with potable water.

Product Features

Scotchkote Epoxy Coating 162PWX combines good application characteristics with excellent corrosion protection and chemical resistance.

Scotchkote Epoxy Coating 162PWX is designed for application in a single high build coat by plural feed hot airless spray and has international approvals for contact with potable water.

To comply with the conditions of approval under Regulation 31(4)(a), this product must be applied in accordance with the approved Instructions For Use Document available from the Northallerton Technical Centre on request.

Scotchkote Epoxy Coating 162PWX is suitable for use on steel surfaces and cement mortar lined pipes.

- **Adhesion**—Excellent to both blast cleaned and mechanically scraped surfaces.
- **Corrosion Resistance**—Excellent even under aggressive immersion conditions.
- **Temperature Resistance**—Suitable for use up to 60°C in immersion service conditions dependent on chemicals involved and up to 120°C in dry service conditions.

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 162PWX at the specified thickness.
4. Allow to cure.
5. Visually or electrically inspect the coating for defects.
6. Repair all defects.

Properties

Property	Value
Colour	Grey or Water Industry Blue
Note: Not a colour stable product.	
Ratio	2:1 By volume 2:1 By weight
Drying & Cure times at 20°C (68°F)	
Usable Life	30 minutes
Touch Dry	4 hours
Hard Dry	6 hours
Full Cure	7 days
Volume Solids	100%
Specific Gravity (Average Mixed)	1.48
Film Thickness (Typical)	Wet/Dry: 500 microns.
Note: The actual thickness to be applied should be agreed between the specifier and the manufacturer dependant on operational performance criteria and may be higher or lower than the quoted typical value.	
Note: For NSF certified applications the maximum approved thickness is 1mm (40mil)	
Theoretical Coverage Rate	2 sq metres per litre at 500 microns dft.
Potable Water Approvals	
UK	Regulation 31(4)a, WRAS
France	AFNOR XP P 41-256
USA	ANSI/NSF 61
Australia	AS/NZS 4020
Spain	OTEC
Italy	ARPAL
Performance Data	
Abrasion Resistance	40mgm weight loss per 1000 cycles-1kg load-CS17 Wheel (ASTM D4060)
Impact Resistance	0.26kg.m (ASTM D2794)
Direct Pull Adhesion	12Mpa (1760 psi) - Grit blasted steel (ASTM D4541)
Water Vapour Permeability	3.75 x 10 ⁻⁶ perm.cm (ASTM D1653)
Pencil Hardness	5H (ASTM D3363)
Salt Fog Resistance	Excellent, unaffected after 5,000 hours exposure (ASTM B117)
Cathodic Disbondment	Pass <6mm (ASTM G8)
Humidity Resistance	Unaffected 5,000 hours exposure (BS 3900 Part F2)
Scratch Resistance	No Failure 2.5kg (5.5lbs) load (BS 3900 Part E2)



Application Procedures for 3M™ Scotchkote™ Epoxy Coating 162PWX

Surface Preparation: Steel Surfaces

Coating performance is dependent on the cleanliness of the substrate surface. It must be clean, dry and free of loose rust and scale etc.

Steel surfaces should be abrasive blasted to NACE No 2/SSPC-SP10 near white metal, ISO 8501:1 Grade Sa2½. The blast profile is generally specified by the client; a typical profile is 75–100 microns.

Application Procedures

Do not apply the product when the relative humidity exceeds 90% or when the surface to be coated is less than 3°C above the dew point. The minimum temperature of application is 7°C.

Scotchkote Epoxy Coating 162PWX is intended for application in a single coat by plural feed airless spray. A material temperature of 35–65°C is required, which should be attained by heating the Part A (Base) and Part B (Activator) components.

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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Important Notice:

All statements, technical information and recommendations are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using the 3M™ Scotchkote™ Product, you must evaluate it and determine if it is suitable for your intended application. Because conditions of product use are outside of 3M control's and vary widely you assume all risks and liability associated with such use. Any product related statements not contained in current 3M publications, or any contrary statements contained in your purchase order, shall have no force or effect unless expressly agreed to in writing by an authorised officer of 3M.

Warranty; Limited Remedy; Limited Liability

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. 3M has no obligation under this warranty with respect to any product that has failed due to inadequate or improper storage, handling, surface preparation, application, or maintenance; failure to follow product instructions or recommendations or alteration or damage to the Product caused by accident, neglect, or misuse. OTHER THAN IN THE CASE OF DEATH OR PERSONAL INJURY CAUSED BY ITS NEGLIGENCE AND EXCEPT WHERE PROHIBITED BY LAW, IN NO EVENT SHALL 3M BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGES (INCLUDING LOST PROFITS) ARISING FROM THIS PRODUCT, REGARDLESS OF THE LEGAL THEORY ASSERTED.

- Airless Spray Minimum 45:1 pump ratio
- Tip pressure typically 4000 psi
- Tip Size 19–25 Thou orifice;

For small areas, good quality brushes and mohair rollers should be used, a material and substrate minimum temperature of 10°C is advisable when using hand application.

Clean all equipment immediately after use with 3M™ Scotchkote™ Thinners SA65.

Note: When airless spray is being used, excessively high tip spraying pressures should be avoided. The minimum pressure at the pump conducive with good atomization should be used.

Packaging and Storage

Supplied in 1 litre packs or the Part A (Base) and Part B (Activator) supplied separately in 18 and 180 litre units, (2 x Part A (Base) + 1 x Part B (Activator)).

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

Ordering Information/Customer Service

For ordering information, technical information, product information, or to request a copy of the Material Safety Data Sheet, call:

Phone: +44 (0) 1609 780170

Fax: +44 (0) 1609 783762 (Sales)/788718 (Technical)

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



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