

3M™ Scotchkote™ Urethane Coating 165 HB

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Coating 165 HB has been specifically developed as a 100% solids lining with a degree of flexibility for the internals of pipes, tanks, vessels and other equipment in contact with fresh water, sea water and effluent. The product can also be used on externals of pipes where an abrasion-resistant system is required.

Product Features

Scotchkote Urethane Coating 165 HB combines good application characteristics with excellent corrosion protection and chemical resistance.

Scotchkote Urethane Coating 165 HB is designed for application in a single high build coat of up to 2mm, by plural feed hot airless spray.

Scotchkote Urethane Coating 165 HB is suitable for use on both steel and concrete surfaces.

- **Adhesion**—Excellent to both blast cleaned and mechanically scraped surfaces.
- **Corrosion Resistance**—Excellent even under aggressive immersion conditions.
- **Chemical Resistance**—Virtually unaffected by most 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. Scarify or lightly blast concrete surfaces and seal with 3M™ Scotchkote™ Urethane Sealer 165 CS.
3. Apply Scotchkote Urethane Coating 165 HB 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	Light Grey, 12B21
Ratio	4:1 By volume 100:23 By weight
Drying & Cure times at 20°C (68°F)	
Touch Dry	3 hours
Hard Dry	6 hours
Full Cure	7 days
Volume Solids	100%
Shelf Life	Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).
Specific Gravity	1.3
Film Thickness (Typical)	Wet/Dry 1000 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.
Theoretical Coverage Rate	1 sq metre per litre at 1000 microns dft.
Dielectric Strength	> 20KV
Standards Met	DIN 30671



Application Procedures for 3M™ Scotchkote™ Urethane Coating 165 HB

Surface Preparation: Steel Surfaces

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.

Concrete Surfaces

Surfaces should be lightly abrasive blasted or mechanically scarified, taking care not to expose the aggregate. All dust and loose residue should then be removed and surfaces then sealed using 3M™ Scotchkote™ Urethane Sealer 165 CS.

Application Procedures

Scotchkote Urethane Coating 165 HB should not be applied when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.

Scotchkote Urethane Coating 165 HB is intended for application by plural feed airless spray. A material temperature of 50–60°C is required, which should be attained by heating the Part A and Part B components.

- Airless Spray Minimum 45:1 pump ratio
- Tip Size 19–27 Thou orifice;
- Tip pressure typically 4000 psi

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.

Ideally Scotchkote Urethane Coating 165 HB should be applied in a single high-build coat. If a second coat is required for any reason, thorough mechanical or flash blasting of the first coat should be carried out once the coating is hard dry.

Clean all equipment immediately after use with 3M™ Scotchkote™ Thinners PU71.

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

Part A and Part B supplied separately in 18 and 180 litre units, (4 x Part A + 1 x Part B).

Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 30°C.

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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