

3M™ Scotchkote™ Urethane Coating 165BG

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Coating 165BG has been specifically developed as a 100% solids protection system with a degree of flexibility for hand application to the externals of pipes. The product can be used for protection of field girth weld joints on pipeline systems.

Not For Use With Potable Water Applications.

Product Features

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

Scotchkote Urethane Coating 165BG is designed for application by brush at thicknesses between 500–1000 microns

Scotchkote Urethane Coating 165BG is fully compatible with all spray grades of Scotchkote Urethane Coating 165

Scotchkote Urethane Coating 165BG is primarily designed for use on steel surfaces but also exhibits good adhesion to polyethylene and other common external pipe coating materials, and can also be used on concrete surfaces in combination with 3M™ Scotchkote™ Urethane Sealer 165CS

- **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 Scotchkote sealer 165CS.
3. Apply Scotchkote Urethane Coating 165BG 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	12B21 and grey Note: Not colour stable, where a colour stable finish is required it must be overcoated with an appropriate top coat.
Ratio	3:1 By volume 3:1 By weight
Drying & Cure times at 20°C (68°F)	
Useable life	20 mins
Touch Dry	4 hour
Hard Dry	8 hours
Full Cure	7 days
Overcoating; Minimum	4 hours
Maximum	18 hours
Volume Solids	100%
Specific Gravity (Average Mixed)	1.2
Film Thickness (Typical)	Wet/Dry: 500–1000 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. 2 sq metres per litre at 500 microns dft
Performance Data	
Tensile Strength	19.5Mpa 2825 psi (ASTM D412)
Dielectric Strength	> 20KV 400 volts/mil (ASTM D149)
Elongation	35% (ASTM D412)
Maximum Operating Temperature	80°C (176°F) - Dry 50°C (122°F) - Wet
Abrasion Resistance	95mgm (0.08ml) loss per 1000 cycles 1kg load CS17 Wheel (ASTM D4060)
Shore D Hardness	80 (ASTM D2240)
Corrosion Resistance	Unaffected after 5000 hours exposure (ASTM B117)
Impact Resistance	10 Joules (93 ins lbs) (ASTM D256)
Direct Pull Adhesion (Steel)	14Mpa (2030 psi) (ASTM D4541)
Standards Met	GBE/CW6 Pt 1



Application Procedures for Scotchkote Urethane Coating 165BG

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 165CS.

Mixing

The contents of the Part A (Base) container should be stirred, and while stirring, the contents of the Part B (Activator) container should be added with stirring continuing until a homogenous mix is achieved.

Application Procedures

Scotchkote Urethane Coating 165BG should not be applied when the relative humidity exceeds 90% or when the surface to be coated is less than 3°C above the dew point.

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.

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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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Scotchkote Urethane Coating 165BG is intended for application by brush and should be applied to give a uniform even thickness.

Ideally Scotchkote Urethane Coating 165BG should be applied in a single high build coat. If a second coat is required for any reason, overcoating must be carried out within 24 hours of application of the preceding coat. If the overcoating time is extended, thorough mechanical abrading 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.

Packaging and Storage

Supplied in 1 litre and 2 litre packs

Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°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
For emergencies, please contact +44 (0)1344 858000.

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