

3M™ Scotchkote™ Urethane Coating 105

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Coating 105 has been developed to provide a durable gloss finish for use within the rail, automotive and commercial transport industries.

Product Features

- Combines good application characteristics with excellent gloss and colour retention.
- Tested for limited fire hazard performance in conjunction with 3M™ Scotchkote™ Epoxy Primer EA9. Compliant with BS6853 1999 Code of Practice
- Widely used throughout the rail industry, other forms of passenger transportation, heavy engineering, fabrication and civil engineering work especially for underground and confined locations.

Abrasion: Good resistance to abrasion and mechanical damage.

Adhesion: Excellent on correctly prepared and primed surfaces.

Chemical Resistance: The fully cured coating offers excellent resistance to aqueous solutions, oils, fats and a wide range of industrial chemicals.

Temperature resistance: Dry service temperature range up to 100°C.

General Application Steps

1. Ensure primed surface is clean, dry and free from contamination.
2. Apply Scotchkote Urethane Coating 105 at the specified thickness.
3. Allow to cure.
4. Visually or electrically inspect the coating for defects.
5. Repair all defects.

Properties

Property	Value
Colour	Manufactured to order from a select range of BS, RAL or NCS colour standards.
Ratio	4:1 by volume (Full Gloss, Semi Gloss and Clear Finishes) 5:1 by volume (Low Gloss, Semi Matt and Matt)
Drying & Cure times at 20°C (68°F)	
Usable Life	Approximately 2 hours
Touch Dry	1 hour
Hard Dry	4 hours
Overcoating Minimum	1 hour
Maximum	24 hours
Full Cure	7 days
Volume Solids	50%
Specific Gravity (Average Mixed)	1.2
V.O.C (As Supplied)	486-585g/litre depending on colour and gloss
VOC (Thinned 30%)	520-610g/litre depending on colour and gloss
Film Thickness (Typical)	Wet 100 microns. Dry 50 microns
Theoretical Coverage Rate	10 sq metres per litre at 50 microns dft.

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.

Detailed application instructions in the form of system recommendations are available on request.



Application Procedures for 3M™ Scotchkote™ Urethane Coating 105

Surface Preparation

All surfaces should be prepared and primed in accordance with the appropriate 'SYSTEM RECOMMENDATION.'

Primed surfaces should be clean, dry and free from contamination.

Application Procedures

Mixing

To ensure a homogenous mix, Part A should be stirred then whilst continuing stirring Part B should be added and thoroughly mixed.

Application

- Do not apply when relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.
- Minimum temperature for application is 2°C.

Method

Scotchkote Urethane Coating 105 gives the optimum finish appearance when applied by spray, the product can also be applied by brush and roller.

Typical spray settings are:

Airless Spray: 32:1 pump ratio minimum

Tip Size: 11-15 Thou orifice;

Tip pressure approx: 2,000 psi (145 Bar)

Conventional Spray Pressure Pot

Needle Setup: 1.1 - 1.8mm

Scotchkote Urethane Coating 105 should be thinned for spray application, up to 30% 3M™ Scotchkote™ Thinners PU71 may be added by volume.

Good quality brushes and mohair rollers should be used for these methods of application.

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

Packaging and Storage

Supplied in 5 litre packs.

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).

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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Infrastructure Protection Division (IsPD) 3M United Kingdom plc

23 Standard Way Industrial Estate
Northallerton
North Yorkshire DL6 2XA
United Kingdom
Phone: +44 (0)1609 780170
Fax: +44 (0)1609 780438
www.3M.co.uk/scotchkote

Infrastructure Protection Division (IsPD) 3M United Kingdom plc

3M Centre
Cain Road, Bracknell
Berkshire RG12 8HT
Phone: 01344 858000
Fax: 01344 857970
www.3M.co.uk

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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.