

3M™ Scotchkote™ Urethane Coating UV 840

Data Sheet and Application Guide

Product Description

Scotchkote Urethane Coating UV 840 has been developed to provide a durable gloss finish for use as the final coat of 3M coating systems in the construction and transport industries, where an ease of removal of graffiti is required.

Product Features

- Combines good application characteristics with excellent gloss and colour retention.
- Suitable for use in corrosion protection applications.

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 coated surface is clean, dry and free from contamination.
2. Apply Scotchkote Urethane Coating UV 840 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	3:1 by volume (Full & Semi Gloss) 4:1 (Matt & Low Gloss)

Drying & Cure times at 20°C (68°F)

Usable Life	Approximately 2 hours
Touch Dry	3-4 hours
Hard Dry	16 hours
Overcoating Minimum	6 hours
Maximum	24 hours
Full Cure	7 days
Volume Solids	55%
V.O.C (As Supplied)	425-485g/litre depending on colour
VOC (Thinned 30%)	463-520g/litre depending on colour
Film Thickness (Typical)	Wet 72 microns. Dry 40 microns
Theoretical Coverage Rate	13.75sq metres per litre at 40 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.

Performance Data (Applied over Epoxy Primer MC135)

Abrasion Resistance	25mgm weight loss per 500 cycles - 1kg load-CS10 wheel (ASTM D4060)
Impact Resistance	No failure (0.9kg (1.98lbs) load dropped 45 cm (18 inches)) (BS 2782 - 3)
Dry Heat Resistance	100°C (212°F) (ASTM D2485)
Direct Pull Adhesion	6.2Mpa (900psi) - steel 4Mpa (600psi) - concrete (Concrete Failure) (ASTM D4541)
Salt Fog Resistance	Excellent, unaffected after 1,000 hours exposure (ASTM B117)
UV Resistance	1000 hours QUV-B no loss of gloss, no colour change (ASTM G53)
Reaction to Fire	Class 0 (BS476 - 6) Class 1 (BS476 - 7)



Application Procedures for 3M™ Scotchkote™ Urethane Coating UV 840

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 (Base) should be stirred then whilst continuing stirring Part B (Activator) should be added and thoroughly mixed.

Application

Application should not be carried out when relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point. The minimum temperature for application is 2°C.

Brush: Good quality brushes should be used with even strokes, ensuring that the 3M Scotchkote Urethane Coating UV 840 is not over-brushed leading to less than the specified coating thickness.

Roller: Short pile mohair rollers are the preferred equipment for this application method. Scotchkote Urethane Coating UV 840 should be spread evenly with regular checks made to ensure the correct uniform wet film thickness is achieved.

Scotchkote urethane coating UV 840 does not normally require thinning for brush/ roller application. Where thinning is required 3M™ Scotchkote™ Thinners PU71 may be added.

Airless Spray: Typical spray settings are as follows:

Pump Ratio 32:1

Tip Size 0.013-0.015"

Tip Pressure 2000 psi

Excessively high tip spraying pressure should be avoided. The minimum pressure at the pump conducive to good atomisation should be used. Scotchkote Urethane Coating UV 840 may require the addition of up to 10% Scotchkote Thinners PU71 for airless spray application.

Conventional Spray: Most types of equipment are suitable.

Pressure Pot

Needle Set Up 1.1 - 1.8mm

Scotchkote Urethane Coating UV 840 may require thinning by up to 20% Scotchkote Thinners PU71 for conventional spray application.

All equipment must be cleaned IMMEDIATELY after use with Scotchkote Thinners PU71.

Packaging and Storage

Supplied in 4 and 20 litre packs.

Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 32°C.

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

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