

# 3M™ Scotchkote™ Epoxy Primer MC 145

## Data Sheet and Application Guide

### Product Description

Scotchkote Epoxy Primer MC 145 is a solvent based two component primer suitable for use on a wide range of metallic and GRP surfaces prior to the application of Scotchkote finish systems. The product can also be used on concrete surfaces.

### Product Features

- Combines good application characteristics with excellent adhesion to correctly prepared surfaces.
- As a primer, it offers proven long term corrosion protection of ferrous and non ferrous metallic substrates.
- Extended overcoating window for a wide range of top coats.
- Can be applied by brush, roller or spray.

### General Application Steps

1. Remove oil, grease and loosely adhering deposits.
2. Appropriately prepare the surface
3. Apply Scotchkote Epoxy Primer MC 145 coating 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	White
Ratio	3:1 By volume
<b>Drying &amp; Cure times at 20°C (68°F)</b>	
Usable Life	8 hours
Touch Dry	4 hours
Hard Dry	16 hours
Minimum Overcoating	16 hours
Maximum Overcoating	3 months
Full Cure	7 days
Volume Solids	44%
Specific Gravity	1.34
V.O.C	530g/litre as supplied 559g/litre thinned 10%
<b>Outside Scope for 2004/42/EC Directive</b>	
Film Thickness	115 microns wet, 50 microns dry.
Theoretical Coverage Rate	8.8 sq metres per litre at 50 microns dft..
<b>Performance Data</b>	
Abrasion Resistance	70mgm weight loss per 1000 cycles - 1kg load - CS17 wheel (ASTM D4060)
Impact Resistance	Direct - 5mm (0.2 inch) Reverse - 2.5mm (0.1 inch) (BS3900 - E3)
Dry Heat Resistance	100°C (212°F) (ASTM D2485)
Direct Pull Adhesion	3.8N/mm <sup>2</sup> (550 psi) (Abrasive Blasted Steel) (ASTM D4541)
Salt Fog Resistance	Excellent, unaffected after 5000 hours exposure (ASTM B117)
Humidity Resistance	Unaffected 500 hours exposure (BS 3900 - F2)



# Application Procedures for 3M™ Scotchkote™ Epoxy Primer MC 145

## Surface Preparation

All surfaces should be thoroughly degreased.

**Steel:** Abrasive blast clean to NACE No. 2/SSPC-SP10 near white metal, ISO 8501:1, Sa2½ BS 7079 Part A1 1989/ISO 8501-1: 1988 - with a medium profile - 35 microns average, where blast cleaning is not possible surfaces should be mechanically abraded to create a profile.

**Aluminium:** Mechanically abrade with 120 grade paper or Scotchbrite pad.

**Galvanised Steel:** New galvanising only requires degreasing. Weathered galvanising should be abraded to remove corrosion deposits.

**GRP:** Surfaces should be abraded using 180 grade abrasive paper.

**Concrete Surfaces:** Prior to coating, the concrete should be dry and the moisture content should be checked using a proprietary surface moisture indicator such as an Elcometer 7420 Digital Moisture Meter. when tested in accordance with the manufacturers instructions the reading should be classified as 'dry'. All surface laitance must be removed by light abrasive blasting or scarifying and all loose dust must be removed. Any oil and grease must be removed by steam cleaning or detergent pressure washing.

## Application Procedures

### Product Mixing

Stir the contents of the Part A (Base) component. Continue stirring whilst gradually adding the total contents of the Part B (Activator) container. Continue stirring until a homogeneous mix is obtained.

**Note** When mixing complete units of product, the use of a slow or variable speed mechanical mixer is beneficial in terms of ease and complete mixing.

## Application

- Do not apply when relative humidity exceeds 90% or when the surface to be coated is less than 3°C above the dew point.
- For optimum results a minimum material and substrate temperature of 7°C is necessary.

**METHOD** Scotchkote Epoxy Primer MC 145 can be applied by most types of spray equipment, brush and roller.

The product is supplied ready for use by airless or air assisted spray.

The product will require thinning for application by conventional spray, where the minimum quantity of **3M™ Scotchkote™ Thinners SA65** required for optimum atomisation should be used. Typically this is up to 10% volume.

Detailed guidance on the spraying procedures is available from the Technical Centre at 3M Northallerton.

### Typical Spray Settings are:

Airless Spray Tip Size 13 - 15 thou

Conventional Spray Pressure Pot. Needle Setup 1.4 - 1.8 mm

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

### Packaging and Storage

Supplied in 5 and 20 litre units.

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

**ALWAYS PROTECT FROM FROST DURING STORAGE AND USE.**

## Handling and Safety Precautions

Read all Health Hazard, Precautionary and First Aid, Material Safety Data Sheet, and/or product label prior to handling or use.

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## Important Notice

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## Warranty; Limited Remedy; Limited Liability.

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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](http://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](http://www.3M.co.uk)

## 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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