

3M™ Scotchkote™ WB Epoxy Coating EA9WB

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Supersedes September 2013

Data Sheet and Application Guide

Product Description

Scotchkote WB Epoxy Coating EA9WB is a leading member of the range of Scotchkote waterborne coatings, supplied in both primer and finish coats.

Product Features

- Combines good application characteristics with excellent corrosion protection and chemical resistance.
- As a primer, it offers proven long term corrosion protection of ferrous and non ferrous metallic substrates.
- As the basis of a multi coat system, the primer can be overcoated with either Scotchkote WB Epoxy Coating EA9WB or by one of a number of Scotchkote waterborne finishes.
- Systems have been extensively tested for limited fire hazard performance to various International Standards, test data available on request.
- Widely used throughout the Rail Industry and increasingly in Original Equipment Manufacture involving 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 surfaces.
- **Chemical Resistance** - The fully cured coating offers outstanding resistance to aqueous solutions and a wide range of industrial chemicals.
- **Temperature resistance** - Dry service temperature range up to 100°C.

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, abrade aluminium surfaces.
3. Apply Scotchkote WB Epoxy Coating EA9WB 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 | Primer, Red Oxide, Grey, White or black Finish to selected BS or RAL Colours, in high gloss, semi gloss and low gloss. Note: Not colour stable, where a colour stable finish is required it must be overcoated with an appropriate top coat. |
| Ratio | 9:1 by volume |
| Drying & Cure times at 20°C (68°F) | |
| Usable Life | 2 hours (Primer) 4 hours (Finish) |
| Touch Dry | 1 hour |
| Hard Dry | 2 hours (Primer) 4 hours (Finish) |
| Minimum Overcoating | 2 hours |
| Maximum Overcoating | 3 months |
| Full Cure | 7 days |
| Volume Solids | 45% |
| Specific Gravity (Average Mixed) | 1.27 |
| V.O.C Content (As Supplied) | 76.5g/litre (Primer) 65gm/litre Finish. Note: Thinning for spray application will reduce the applied V.O.C . |
| Film Thickness (Typical) | Wet 135 microns. Dry 60 microns |
| Theoretical Coverage Rate | 7.5 sq metres per litre at 60 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. | |
| Fire Resistance | Class 1 (BS476 - 7) Class 0 (BS 476 - 6) BS 6853 Annex D Section 8.4 (Panel Test) |



Application Procedures for Scotchkote WB Epoxy Coating EA9WB

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.

Aluminium Either mechanically abrade with 120 grade paper or Scotch-brite™ pad. For specific recommendations consult the 3M Northallerton Technical Centre.

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

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 Procedures

- Do not apply when relative humidity exceeds 85% 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 15°C is necessary.

METHOD

Scotchkote WB Epoxy Coating EA9WB can be applied by most types of spray equipment. Also by brush or roller for limited areas.

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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The product is supplied ready for use by airless or air assisted spray. Small additions of clean water (up to 5% by volume) may be required to cater for variations in application conditions.

The product will require thinning for application by conventional spray, where the minimum quantity of clean water required for optimum atomisation should be used. Typically this is up to 10% volume.

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

Application

Typical Spray Settings are:

Airless Spray Tip Size 13 - 17 thou

Conventional Spray Pressure Pot. Needle Setup 1.1 - 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 litre packs or Part A and Part B supplied individually in 20 litre Containers (9 Part A and 1 Part B).

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). Protect from frost

during storage and use.

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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