

3M™ Scotchkote™ Epoxy Coating EP2306 HF

Data Sheet and Application Guide

Product Description

Scotchkote Epoxy Coating EP2306 HF has been specifically developed as an internal lining for pipelines transporting sweet gas to provide maximum flow, which has been confirmed by independent testing.

Product Features

Scotchkote Epoxy Coating EP2306 HF combines good application characteristics with excellent corrosion protection and chemical resistance. The cured coating is designed to withstand hydrostatic testing and pigging operations in service and make a very significant contribution to increased gas flow and associated financial benefits. The use of the product on gas pipelines has been the subject of numerous presentations and papers. The cost savings achieved with this coating have been reproduced worldwide. Scotchkote Epoxy Coating EP2306 HF conforms to most major international specifications for gas pipeline coatings.

- **Adhesion**—Excellent to both blast cleaned and mechanically scraped surfaces.
- **Corrosion Resistance**—Excellent even under aggressive immersion conditions.
- **Chemical Resistance**—Virtually unaffected by crude oil, natural gas.
- **Temperature Resistance**—Suitable for use up to 100°C in dry service conditions.

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.
3. Apply Scotchkote Epoxy Coating EP2306 HF 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	Red Oxide
Ratio	1:1 By volume 100:77 By weight
Drying & Cure times at 20°C (68°F)	
Usable Life	8 hours
Touch Dry	2 hours
Hard Dry	16 hours
Full Cure	7 days
Volume Solids	50%
Shelf Life	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).
Specific Gravity (Average Mixed)	1.15
V.O.C. (As Supplied)	440g/litre
V.O.C. (Thinned 5%)	463g/litre
Film Thickness (Typical)	Wet: 150 microns Dry: 75 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	6.67 sq metres per litre at 75 microns dft.
Standards Met	
USA	API RP 5L2
France	Gaz de France
Italy	SNAM
International	ISO 15741



Application Procedures for 3M™ Scotchkote™ Epoxy Coating EP2306 HF

Surface Preparation

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 35–60 microns.

Mixing

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

Application

Do not apply when relative humidity exceeds 90% or when surfaces to be coated are less than 3°C above the dew point. The preferred method of application for Scotchkote Epoxy Coating EP2306HF is by plural feed airless spray. Standard airless spray, brush or roller can also be used.

- Airless Spray Minimum 30: 1 pump ratio
- Tip Size 15-21 Thou orifice;
- Tip pressure minimum 2500 psi (175 bar)

Depending on prevailing conditions Scotchkote EP2306 HF may require thinning for spray application, where thinning is required no more than 2-5% 3M™ Scotchkote™ Thinners 1075 should be added by volume.

For small areas, good quality brushes and mohair rollers should be used.

Clean all equipment immediately after use with Scotchkote Thinners 1075.

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

Packaging and Storage

Supplied in either 5 & 20 litre packs and 200 litre drums.

Use within 2 years of date of manufacture. Store in original sealed containers at temperatures between 5°C and 30°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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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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