

High build solvent-free heat activated coating

Product Description

Corroline EP HA100 is a single component heat activated high build solvent-free epoxy novolac coating designed to provide outstanding corrosion protection of steel.

Corroline EP HA100 is designed to be applied over hot surfaces, including hot pipework, process vessels and tanks, etc; particularly to overcome problems of corrosion under insulation (CUI).

Product Features

- Ready to use and requires no mixing
- Excellent adhesion to grit blasted steel
- Heat activated
- High build coating easily applied

Surface Preparation

General

Correct surface preparation is essential for the success of any protective coating system. All surfaces should be clean, dry and free from contamination. The substrate surface should be fully inspected and assessed after surface preparation has been completed before proceeding with the application of Corroline EP HA100.

Steel Substrate

All steel surfaces to be coated should be abrasive blasted using a suitable blast medium to produce a minimum cleanliness of ISO 8501/4 Standard SA 2.5 (SSPC SP 10/NACE2) and a minimum blast profile of 75 microns using an angular abrasive. Remove all residual blast debris and inspect the surface. Profile checks should be taken and recorded. Once blast cleaned, the surface must be degreased and cleaned using Corroclean and all prepared surfaces must be coated before rusting or oxidation occur.

Where abrasive blast cleaning is not possible (excluding salt contaminated surfaces) the surface should be roughened by MBX, needle gun or gridding. Under these conditions adhesion levels will not be optimal although satisfactory for most applications.

Application

Precautions

- Do not apply when relative humidity exceeds 90%, when the surface to be coated is less than 3°C above the dew point or when the ambient temperature is less than 5°C. For best results, especially when applying material by hand, substrate temperature should be at least 75°C but not greater than 150°C.

• Over-coating times:

The applied material can be over-coated as soon as it is touch-dry. If the over-coating time exceeds 6 hours, the material should be allowed to harden before being abraded or flash-blasted to remove surface contamination.

Application Method

The material is supplied ready to use and requires no mixing.

Do not apply when the ambient or substrate temperature is below 5°C or the relative humidity is above 90%. For best results the material should be applied directly to a hot surface. Apply the material onto the prepared surface by brush or roller. In normal circumstances this should be in two coats at a target thickness of 250 microns (10mil) per coat.

The coating will remain in an unsolidified state until it has been exposed to at least 90°C (195°F) and should ideally be heated to at least 100°C (212°F), either through the substrate it is being applied to or the use of an external heat source. The second coat should be applied as soon as the first coat has become dimensionally stable and not more than 2 hours after it has reached this state. Where the maximum over coating time is exceeded the surface of material should allowed to fully harden before being abraded, ideally by sweep blasting, and then cleaned and coated.

Alternatively the material can be applied by heated airless spray in as a single coat in multiple passes. The material should be heated to 50-60°C (120°F-140°F) using heated lines to facilitate spraying.

Coverage Rates

4ltrs (1.25 US gallons) of fully mixed product will give the following coverage rates – 16m² at 250 microns; 172ft² at 10 millimeters.

Overcoating Window

Cure Times

Cure times depends on the cure temperatures as indicated in the table below:

Tempertaure	Touch dry	Light load	Full load
100°C	50 min	2 hours	24 hours
110°C	35 min	70 min	16 hours
120°C	25 min	50 min	12 hours
130°C	15 min	30 min	8 hours
140°C	7 min	15 min	6 hours
150°C	3 min	7 min	4 hours

Inspection

Corroline EP HA100 can be inspected for pinholes and holidays using a low voltage tester. Before testing, the coating should be washed down with clean water to remove any contamination on the surface and allowed to dry. Please refer to the equipment manufacturer's recommendations as voltages may vary with equipment type.

Technical Support

Corrotech Construction Chemicals offer complete technical support and assistance from discussing application requirements to training approved local contractors. For further information please contact a Corroline representative or your nearest dealer.

Health & Safety

Please refer to the product material safety data sheet for detailed information on handling, storage, shipping and disposal.

Storage

Shelf life 5 years providing it is stored between 5°C and 30°C in original sealed containers.

Technical Data

Test	Standard	Result
Appearance		Red thixotropic material
Pigment volume concentration		24%
Sag resistance		Nil at 500 microns
Total solids content		100%
Volume capacity		714 cc/kg
Density		1.40 g/cc
Tensile shear adhesion	ASTM D1002	197 kg/cm ²
Shore D	ASTM D2240	@ 20°C - 90 @ 150°C - 80 @ 100°C - 86 @ 200°C - 72
Corrosion resistance	ASTM B117	> 1000 hours
Pull of adhesion	ASTM D4541	> 21 Mpa (3045 psi)
Cathodic disbondment 28 days @ 23°C 28 days @ 65°C	ISO 21809-3	average disbondment 4 mm (pass) average disbondment 4 mm (pass)

Warranty

Corrotech Construction Chemicals guarantees this product will meet the performance claim stated herein when material is stored and used as instructed. Corrotech Construction Chemicals further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognized standards (ASTM, ANSI, BS, DIN, etc). Since Corrotech Construction Chemicals has no control over the use of the products described herein, no warranty for the application can be given.