

Solvent free two component gas flow pipe lining

Product Description

Corroline EP SF100 has been specifically developed as a solvent free, internal coating for gas pipelines that has proven to reduce black powder build up and improve flow efficiency.

Corroline EP SF100 is a solvent free system that can be applied in a single coat by either a heated plural feed spray pump, brush or roller. The cured coating is able to withstand hydrostatic testing and normal pigging operations in service and can significantly contribute to increased gas flow.

Product Features

- Solvent free - no VOC's
- Single coat application
- Increases gas flow rates
- Reduces black powder build up
- Excellent adhesion to steel and concrete
- Withstands hydrostatic testing
- Withstands general pigging operation
- Excellent corrosion resistance

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 SF100.

Steel Substrate

All steel surfaces to be coated should be abrasive blasted using a suitable blast medium to produce a minimum cleanliness of Swedish Standard SA 2.5 or equivalent and a mean profile of 45-65 microns. 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.

Concrete

New concrete must be cured for at least 28 days before lightly abrading taking care not to expose the aggregate. Any obvious voids or damage should be repaired using a suitable epoxy mortar, and re-abraded. All dust and spent abrasive should be removed from the surface prior to coating. In some situations a primer coat will be necessary - please consult your local Corroline representative.

Mixing

Corroline EP SF100 is a two component system supplied as a base and activator.

For brush or roller application stir the content of the base component and while continuing stirring, gradually add the total contents of the activator and continue agitating until a homogenous mix is obtained.

Once mixed, the usable life of the product is 2 hours at 20°C. This time will increase at lower temperature and decrease at higher temperatures.

Where small volume mixes are required, the mixing ratio is 2.5 parts base to 1 part activator by volume.

For spray application (see below) a suitable in-line static mixer should be used.

Application

Precautions

- Do not apply when the relative humidity exceeds 90%, when the surface to be coated is less than 3°C above the dew point or when the ambient or substrate temperature is less than 5°C. For best results, especially when applying material by hand, the ambient or substrate temperature should be at least 10°C.

- To ensure coating integrity and minimum thickness, use a short bristled brush to stripe coat all welds, around bolt holes, edges and other sharp protrusions. Allow to cure until touch dry prior to carrying out the overall application of Corroline EP SF100 and do not exceed the maximum over-coating time of 12 hours.

Application Method

Corroline EP SF100 is best applied by heated plural airless spray equipment but for smaller applications brush or foam roller is suitable.

Plural Component Airless Spray: both the activator and base should be warmed so that the temperature at the tip is between 40 - 50°C while avoiding excessive heating of the activator. Suggested temperature of base, 50 - 55°C and activator, 30 - 35°C. These temperatures will vary depending on climatic conditions.

Typical tip sizes of between 19 - 23 thou should be employed along with a tip pressure of around 3,000 psi to give effective atomization. Further information on application procedures and spin spraying is available from the Corroline technical service department. Wet film thickness measurement should be taken and recorded at regular intervals to verify compliance to specification.

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Brush or roller: a good quality brush or foam roller should be used when applying Corroline EP SF100 by hand. Corroline EP SF100 should be applied to give a uniform even coating thickness and wet film thickness checks made as above.

All equipment can be cleaned immediately after use with Corroclean.

Cure Times

Where it is necessary to apply more than one coat of Corroline EP SF100, this can be done as soon as the material is touch dry and no longer than 12 hours after the initial application. Where this maximum over-coating time is exceeded the material should be allowed to fully harden before being lightly sweep blasted to remove the surface layer prior to over-coating.

Curing Times	20°C	30°C	40°C
Touch Dry	6 hrs	3 hrs	2 hrs
Hard Dry	16 hrs	6 hrs	4 hrs
Full Cure	7 days	5 days	4 days

Cure times can be reduced by force curing the material at temperatures of up to 80°C after an initial cure time of at least 12 hours.

Inspection

Corroline EP SF100 can be inspected for pinholes and holidays using a high voltage spark 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 Data

Colour	red oxide
Mix ratio	2.5:1 by volume 100:26 by weight
Total solids content	100%
VOC	NIL
Film thickness	100 microns wft/dft
Specific gravity	1.38
Theoretical coverage rate	10 m ² / litre at 100 microns dft
Temperature resistance	suitable up to 100°C dry service
International test standard	ISO 15741

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.

Packaging and Storage

Supplied in 3.5 & 17.5 litre packs. Bulk packaging also available on request.

Shelf life 2 years providing it is stored between 5°C and 35°C in original sealed containers.

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.