Product title: Corrocoat Fibrecoat

Valid from: 19th May 2017

Last reviewed: May 2019

Type

A glass fibre reinforced vinyl ester glass-flake lining. This product is a high performance vinylester lining containing both glassfibre and glassflake.

Suggested use

As a rehabilitation and high performance lining for thinned/corroded pipes and where additional tensile properties are required, Corrocoat Fibrecoat may be applied in single or multiple layers at up to 3000 microns per coat.

Health & safety

Before handling or using this product the material safety data sheet should be read and all precautions observed.

Chemical resistance

Refer to the chemical resistance list. Affected by some highly polar solvents and some solutions having a high pH above 50°C.

Surface preparation

Metals: The surface must be decontaminated, degreased and loose materials removed from the surface. Where possible and for optimum performance, grit blast to ISO 8501-1 Sa 2½ or equivalent. (For full details refer to Corrocoat Surface Preparation SP1.)

Application equipment

Airless pump of 45:1 ratio or greater. Fit leather and PTFE seal combination and remove all fluid filters. Fibrecoat is designed to be ap-plied using the Agmec Pipe-sprayer. Refer to Corrocoat Technical Services for further instructions.

Brush application; is not recommended.

Application

Dependent on intended use and site conditions, Corrocoat Fibrecoat is normally applied direct to the surface wet on wet at films >3000 microns. Single coat applications are recommended.

Recommended DFT

Greater than 3000 microns dependent upon duty and environment. This material is a barrier coating and the thickness needed is dependent upon service conditions and the existing condition of the substrate.

Mixing ratio / mixing

98:2 base to hardener. For inhibitor use and mixing instructions refer to Polyglass Application Data Sheet. Adding inhibitor after the catalyst will ruin the product.

Pot life

Circa 2 hours at 20°C but may be varied by use of inhibitor or special manufacture for low application temperatures, refer to Polyglass Application Data Sheet.

Thinners

Corrocoat Fibrecoat is adversely affected by the addition of solvents and their use is prohibited. Thinning can be achieved by the addition of no more than 1 litre of styrene monomer per 20 litres of base. It should be noted that dilution with styrene may affect hold up and chemical resistance.

Packaging

10 and 20 Litre composites.
Storage life
Base and catalyst (Hardener) 6 months, stored at temperatures below 20°C, away from heat sources and out of direct sunlight. Frequent temperature cycling will shorten storage life. See ‘other information’ in the Corrocoat ‘Tech Manual’ for extension of shelf life.

Colour availability
Std. Off-White or Translucent Brown. Other colours are available on request but the addition of dyes adversely affects chemical resistance and air inhibition suppressant is required for colour stability.

Theoretical spreading rate
0.33m²/litre at 3000 microns.

Volume solids
This material contains volatile liquid convertible to solids. Volume solids obtained will vary dependent upon polymerisation conditions. Nominally 99% of the product is convertible to solid.

Practical spreading rate
0.25m²/litre at 3000 microns.

NOTE: This information is given in good faith but rate may vary significantly dependent upon environmental conditions, the geometry, the nature of work undertaken and the skill and care of application. Corrocoat accept no responsibility for any deviation from this value.

Specific gravity
Corrocoat Fibrecoat base: 1.11 gms/cc. Hardener: 1.07 gms/cc.

Catalyst type
Methyl Ethyl Ketone Peroxide, type P2-45.

Mixing ratio
98:2 base to hardener, refer to Application Data Sheet for inhibitor levels.

Flash point
28°C.

Hardness
45 Barcol after full cure.

Cathodic disbondment
0-1mm.

Adhesion
> 10 MPa (ASTM D4541).

Temperature limits
90°C immersed. 160°C non-immersed. No known lower limit.

Abrasion resistance
137 mg loss/1000 cycles/1000 gm load. (H18 wheel)

Overcoating
It is important to observe maximum overcoating times and note these will vary substantially with climatic conditions. Minimum, as soon as gel has occurred and whilst still tacky. Maximum, at 20°C 48 hours. Strong ultra-violet/sunlight will substantially reduce overcoating time. Once maximum overcoating time has been reached, adhesion values attained by any subsequent coat will reduce dramatically. Should this occur overcoating should be treated as a repair, with the coating flash blasted to provide a physical key. Styrene cannot be used to reactivate the surface of this product and may impair adhesion. Take care to avoid contamination before application of subsequent coats. Ensure ventilation during cure.
Curing time
With standard inhibitor level, tack free circa 6 hours, full cure 3-4 days at 20°C, but may be immersed in many environments after 24 hours.

Cleaning fluid
Methyl Ethyl Ketone, Methyl Iso Butyl Ketone - before gel.