

Technical Data

Corro-Coat EP-F 1003



Jotun Protects Property

Product Description

Corro-Coat EP-F 1003 is a Fusion Bonded Epoxy designed as an anti corrosion coating for pipelines. The product is available in a choice of reactivities to ensure suitability as both a stand-alone FBE and a primer in multilayer polyolefin systems. For further information please contact your local Jotun representative.

Application Conditions

Application conditions depend on factors such as specification, plant capability and pipe characteristics. Typical application temperature as part of an FBE system is 232°C to 250°C (450°F to 482°F). Typical application temperature as part of a multilayer polyolefin system is 205°C to 240°C (400°F to 464°F).

Operating Conditions

Corro-Coat EP-F 1003 is suitable for operating at continuous temperatures up to 100°C (212°F). However, this is often constrained by the requirement of the specification and will also be affected by field conditions.

Typically the film thickness of Corro-Coat EP-F 1003 as a stand-alone coating is in the range of 350 – 500 µm and as a primer 150 – 300 µm. Evaluations show, however, that thicker films can enhance service capabilities.

Storage Conditions

A shelf life of at least 12 months is obtained when stored at maximum 25°C (77°F) with relative humidity of 65%. Do not exceed 33°C (91°F) during transport.

Typical Powder Properties

Description	Norm	Result
Cure time	CSA-Z245.20-06 (12.1)	< 60 seconds
Gel time	CSA-Z245.20-06 (12.2) EP-F 1003 LD EP-F 1003 HW	12-18 seconds 18-24 seconds
Moisture content	CSA-Z245.20-06 (12.4B)	Below 0.50% (at time of manufacture)
Particle size	CSA-Z245.20-06 (12.5)	99.8% below 250 µm (60 mesh)
Density	CSA-Z245.20-06 (12.6)	1350 to 1500 g/l
Flexibility	CSA-Z245.20-06 (12.11) 3.0° PPD @ -30°C (-22°F)	Pass

Strained polarization*	CSA-Z245.20-06 (12.13) 28 days	Pass/no cracking
Hardness	Shore D ASTM D2240-97	Average of 90
Impact resistance	CSA-Z245.20-06 (12.12)	> 1.5 J
Dielectric strength	ASTM D149-95	> 550v per 25 µm (1 mil)
Electrochemical impedance		Maximum 13.3 logZ ohms.cm ²
Thermal characteristics	CSA-Z245.20-06 (12.7)	Tg 1 = 50-66°C (122-151°F) Tg 2 = 98-110°C (208-230°F) Delta H = 40-60 J/g Delta Tg = ± 5°C (9°F)
Adhesion*	CSA-Z245.20-06 (12.14) 75°C (167°F), 24 hours 75°C (167°F), 28 days	Rating 1 or 2 Rating 1 or 2
Cathodic disbondment*	CSA-Z245.20-06 (12.8) 24 hours, 3.5v, 65°C (149°F) 28 days, 1.5v, 20°C (68°F)	3 – 4 mm radius average 3 – 4 mm radius average

* The performance of the coating is based on substrates which have not been chemically pretreated.

Recommended repair system

Jotun 120T640 two-component epoxy from Jotun Powder Coatings.

Note: The information on this Product Data Sheet is given to the best of the manufacturer's knowledge, based on laboratory testing and practical experience. However, as the product is often used under conditions beyond the manufacturer's control, only the quality of the product itself can be guaranteed. Jotun Powder Coatings reserves the right, without notice, to alter or change the content of this Product Data Sheet.

Jotun Powder Coatings. Revised May 2011.

THIS PRODUCT DATA SHEET SUPERSEDES ALL PREVIOUSLY ISSUED VERSIONS.