

# Technical Data

## Corro-Coat EP-F 1020



Jotun Protects Property

### Product Description

Corro-Coat EP-F 1020 is a Fusion Bonded Epoxy designed as a stand-alone anti corrosion coating and a primer in multilayer polyolefin systems for higher operating temperatures. 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.

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### 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 220°C to 245°C (450°F to 473°F). When used as part of a multilayer polyolefin system, Corro-Coat EP-F 1020 can be applied at temperatures down to 190°C (374°F).

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### Operating Conditions

Corro-Coat EP-F 1020 is suitable for operating at continuous temperatures up to 120°C (248°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 1020 as a stand-alone coating is in the range of 350 – 500 µm (higher thickness may be used for applications under concrete weight coating) and as a primer 150 – 300 µm. Evaluations, however, show that thicker films enhance service capabilities.

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### 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.

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### Typical Powder Properties

Description	Norm	Result
Cure time	CSA-Z245.20-06 (12.1)	<60 seconds
Gel time	CSA-Z245.20-06 (12.2)	12 - 19 seconds
Moisture content	CSA-Z245.20-06 (12.4B)	Below 0.50% (at time of manufacture)
Density	CSA-Z245.20-06 (12.6)	1400 ± 50 g/l
Particle size	CSA-Z245.20-06 (12.5)	99.8% below 250 µm (60 mesh)
Flexibility	CSA-Z245.20-06 (12.11) 3.0° PPD @ -30°C (-22°F)	Pass

Strained polarization <sup>A</sup>	CSA-Z245.20-06 (12.13) 28 days	Pass/no cracking
Hardness	Shore D ASTM D2240-97	Average of 85
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 <sup>2</sup>
Thermal characteristics <sup>B</sup>	CSA-Z245.20-06 (12.7)	Tg 1 = 44-53°C (111-127°F) Tg 2 = 112-124°C (234-255°F) Delta H = 80-100 J/g Delta Tg = ± 5°C (9°F)
Adhesion <sup>A</sup>	CSA-Z245.20-06 (12.14) 75°C (167°F), 24 hours	Rating 1 or 2
Cathodic disbondment <sup>A</sup>	CSA-Z245.20-06 (12.8) 24 hours, 3.5v, 65°C (149°F) 28 days, 1.5v, 20°C (68°F) Modified CSA-Z245.20-06 (12.8) 48 hours, 1.5v, with steel temp 110°C (230°F)	2 - 3 mm radius average 4 mm radius average  3 - 4 mm radius average

<sup>A</sup> The performance of the coating is based on substrates which have not been chemically pretreated.

<sup>B</sup> Powder DSC heating cycles: 25-70°C, 25-255°C, 25-190°C; Cured film DSC heating cycles: 25-160°C, 25-255°C, 25-190°C

## 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.

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THIS PRODUCT DATA SHEET SUPERSEDES ALL PREVIOUSLY ISSUED VERSIONS.