

Technical Data

Corro-Coat EP-F 2005HW



Jotun Protects Property

Product Description

Corro-Coat EP-F 2005HW is a Fusion Bond Epoxy primer coat used in three-layer pipe coating systems designed for higher operating temperatures. Corro-Coat EP-F 2005HW is a novel coating benefiting from binodal Tg technology typically applied at up to 500 µm (20 mil) thickness.

Corro-Coat EP-F 2005HW exhibits a wide processing window with a normal application temperature range of 190°C (374°F) to 220°C (428°F).

Operating Conditions

Corro-Coat EP-F 2005HW is suitable for operating at continuous temperatures up to 120°C (248°F) dependent on the other components of the multi-layer system.

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)	13-23 seconds
Moisture content	CSA-Z245.20-06 (12.4B)	Below 0.50% (at time of manufacture)
Density	CSA-Z245.20-06 (12.6)	1420 ± 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 ^{A, B}	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)
Dielectric constant	ASTM D150-74	2.7 @ 1 MHz
Electrochemical impedance		Maximum 13.3 logZ ohms.cm ²

Thermal characteristics	CSA-Z245.20-06 (12.7)	Tg 1 = 44-55°C (111°F-131°F) Tg 2 = 98-108°C (208°F-226°F) Tg 3 = 112-120°C (234°F-248°F) Delta H = 55-75 J/g
Adhesion ^{A, B}	CSA-Z245.20-06 (12.14) 75°C (167°F), 24 hours	Rating 1 or 2
Cathodic disbondment ^{A, B}	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 4 - 5 mm radius average

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

^B Based on 350 microns on 3 mm steel plate applied as a stand-alone FBE.

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.