

Jotapipe HT 2004

PRODUCT DESCRIPTION

This product is a fusion-bonded epoxy coating for higher operating temperatures designed for use as a primer in multi-layer polyolefin systems. The product is characterized by a high glass transition temperature and good flexibility.

Operating conditions

This product is suitable for pipelines operating at continuous temperatures up to 150 °C (302 °F). However, product performance including maximum operating temperature can depend on plant application, pipe configuration, coating system and local field conditions.

POWDER PROPERTIES

Property	Standard	Result
Cure time	CSA-Z245.20-10 (12.1)	< 90 seconds
Gel time	CSA-Z245.20-10 (12.2)	14-21 seconds
Moisture content	CSA-Z245.20-10 (12.4B)	Below 0.50 % (at time of manufacture)
Particle size	CSA-Z245.20-10 (12.5)	2.0 % max retained on 150 µm (100 mesh) 0.2 % max retained on 250 µm (60 mesh)
Density	CSA-Z245.20-10 (12.6)	1330 ± 50 g/l
Thermal characteristics	CSA-Z245.20-10 (12.7) Inflection point	T _{g1} = 43-55 °C (109-131 °F) T _{g2} = 152-164 °C (306-327 °F) ΔH = 126-156 J/g

Powder DSC heating cycles, 20 °C/min: 30-70 °C (conditioning), 30-255 °C (T_{g1} and ΔH), 30-190 °C (T_{g2}). Cured film DSC heating cycles, 20 °C/min: 30-160 °C hold 1.5 min (conditioning), 30-255 °C (T_{g3}), 30-190 °C (T_{g4}).

Storage

When stored at a maximum 25 °C (77 °F), a shelf life of 12 months is obtained from the date of manufacture.

APPLICATION

Powder application

Application conditions depend on such factors as specification, plant capability and pipe characteristics.

Application conditions	Typical application temperature	Typical film thickness
As a primer	190-240 °C (374-464 °F)	150-500 µm (6-20 mils)

Please refer to the relevant Application Guide for guidelines on the factory application of this product.

PERFORMANCE

Property	Standard	Result
Cathodic disbondment	CSA-Z245.20-10 (12.8) 24 hours, -3.5 V, 65 °C (149 °F) 28 days, -1.5 V, 20 °C (68 °F)	2-3 mm radius average 3-4 mm radius average
	Modified CSA-Z245.20-10 (12.8) 48 hours, -1.5 V, with steel temp 110 °C (230 °F)	3-4 mm radius average
Flexibility	CSA-Z245.20-10 (12.11) 3.0° PPD at 0 °C (32 °F)	Pass
Impact resistance	CSA-Z245.20-10 (12.12)	> 1.5 J
Strained polarization	CSA-Z245.20-10 (12.13) 28 days	Pass / No cracking
Adhesion	CSA-Z245.20-10 (12.14) 24 hours, 75 °C (167 °F)	Rating 1-2

The performance of the coating is based on 300-400 µm thick film applied as a stand-alone FBE on 6 mm steel plates which have not been chemically pretreated. These are typical results and should not be viewed as a product specification.

Repair system

Jotapipe RC 490

Disclaimer

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Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.