

Jotapipe IL 6001 60S

PRODUCT DESCRIPTION

This product is a fusion-bonded epoxy coating designed as an anti-corrosion coating for the internal surface of line pipe used to transport non-aggressive media (raw water, sweet and water contaminated oils) up to 110 °C (230 °F).

Jotapipe IL 6001 60S can be applied with or without a primer (Jotapipe PR 460) depending on the specification requirements.

POWDER PROPERTIES

Property	Standard	Result
Gel time	ISO 8130-6 200 °C	48-72 seconds
Moisture content	CSA-Z245.20 (12.4B)	Below 0.50 % (at time of manufacture)
Particle size	CSA-Z245.20 (12.5)	2.0 % max retained on 150 μ m (100 mesh) 0.2 % max retained on 250 μ m (60 mesh)
Density	CSA-Z245.20 (12.6)	1540 ± 50 g/l
Thermal characteristics	CSA-Z245.20 (12.7)* Inflection point	$T_g1 = 54-70 ^{\circ}\text{C} (129-158 ^{\circ}\text{F})$ $T_g2 = 105-115 ^{\circ}\text{C} (221-239 ^{\circ}\text{F})$ $\Delta H = 40-70 \text{J/g}$

^{*} Powder DSC heating cycles, 20 °C/min: 30-70 °C, 30-300 °C under inert gas, (T_01 and ΔH), 30-140 °C (T_02). Cured film DSC heating cycles, 20 °C/min: 30-120 °C and hold 1.5 min, 30-285 °C (T_03), 30-140 °C (T_04).

These are typical results and should not be viewed as a product specification.

Storage

When stored at a maximum 25 $^{\circ}$ C (77 $^{\circ}$ F), a shelf life of 12 months is obtained from the date of manufacture.

APPLICATION

Powder application

Surface preparation meeting Sa $2\frac{1}{2}$ to Sa 3 with a surface profile of $40-100~\mu m$ is recommended. For details of primer application, refer to TDS of Jotapipe PR 460 (if primer is required). Pre-heat time depends on factors such as plant configuration and pipe characteristics.

Application conditions	Typical application temperature	Typical film thickness
With Jotapipe PR 460 primer	Typical pre-heat temperature 160-180 °C (320-356 °F) Typical post curing temperature and duration 200-220 °C (392-428 °F), 20-30 minutes	350-625 μm (14-25 mils)

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Without primer	Typical pre-heat temperature 180-230 °C (356-446 °F) Typical post curing temperature and duration 180-230 °C (356-446°F), 20 minutes*	350-625 μm (14-25 mils)	
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^{*} Postcuring schedule can be detailed by applicators in consultation with Jotun TSS.

Optimum duration of post cure for different wall thicknesses shall be determined by the applicator and full cure shall be confirmed by a DSC cure test.

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

PERFORMANCE

Property	Standard	Result
Flexibility	CSA-Z245.20 (12.11) 3.0° PPD at 0 °C (32 °F)	Pass / No cracking
Adhesion	CSA-Z245.20 (12.14) without primer 28 days, 50 °C (122 °F) 28 days, 75 °C (167 °F)	Rating 1 Rating 1
Appearance	AWWA C-213 (5.3.2.4)	Smooth, glossy finish
Impact resistance	AWWA C-213 (5.3.2.5)	> 11.3 J
Abrasion resistance	AWWA C 213 (5.3.2.9) CS-17 wheel, 1 kg load, 5000 cycles	165 mg weight loss
Water soak test	AWWA C 213 (5.3.2.9) 24 hours, 95 °C (203 °F)	Rating 1
Cure test*	CSA-Z245.20 (12.7)	ΔT_{g} of ± 3 °C is considered as full cure

^{*} Powder DSC heating cycles, 20 °C/min: 30-70 °C, 30-300 °C under inert gas, $(T_91 \text{ and } \Delta H)$, 30-140 °C (T_92) . Cured film DSC heating cycles, 20 °C/min: 30-120 °C and hold 1.5 min, 30-285 °C (T_93) , 30-140 °C (T_94) .

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Disclaimer

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

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

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