Product Data Sheet PHOEPOX® 4410

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August 2020



Phoepox® 4410

is a fusion bonded epoxy powder that is used for the internal corrosion protection of line pipes and fittings used for the transport of potable water. Phoepox® 4410 passes AWWA C213-015 and BS 6920 requirments.

			Typical Value	Test Method / Device
POWDER PROPERTIES	GEL TIME	at 200°C	140-250 seconds	ISO 8130-6
	THERMAL PROPERTY	Tg1	60 ± 5 °C	ISO 21809-1
		Tg2	101 ± 5°C	ISO 21809-1
		ΔΗ	30-70 J/g	ISO 21809-1
	DENSITY		$1.5 \pm 0.1 \text{ g/cm}^3$	Gas Pycnometer
	PARTICLE SIZE		99.8% < 250 μm	Laser Scattering
	MOISTURE CONTENT		≤ 0.5%	CSA Z245.20-06
	COLOR		Red-Brown or Blue	Red-Brown or Blue
PHYSICAL Tests	CATHODIC DISBONDING		.5 VDC, 65°C, 24 hours .5 VDC, 20°C, 28 days	CSA Z245.20-06
	HOT WATER SOAK* Rating 1 at 95°C			
	HOT WATER SOAK*	Rating 1 at 9	95°C, 24 hours	AWWA C 213-07
	HOT WATER SOAK* FLEXIBILITY	Rating 1 at 9	95°C, 24 hours	AWWA C 213-07 AWWA C 213-07
		Pass	95°C, 24 hours at 50° C, 15 weeks	
	FLEXIBILITY	Pass		AWWA C 213-07
	FLEXIBILITY WATER RESISTANCE*	Pass No blistering		AWWA C 213-07 ASTM B117 AWWA C 213-07 ASTM D 1044 CS 17
	FLEXIBILITY WATER RESISTANCE* IMPACT	Pass No blistering ≥ 13 J		AWWA C 213-07 ASTM B117 AWWA C 213-07 ASTM D 1044 CS 17 Wheel 5000 hours and



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STORAGE STABILITY 12 months from production date in

 \leq 23°C and \leq 65% relative humidity. Cooler temperatures and lower humidity are recommended.

APPLICATION DATA

SUBSTRATE Mild steel

SURFACE PREPARATION Surface must be free from contamination and

blasted as defined by swedish Sa 2½

SURFACE ROUGHNESS 45-100 µm

RECOMMENDED FILM THICKNESS

300-500 µm

APPLICATION TEMPERATURE

190-230°C

POST CURE CONDITIONS

 $\Delta Tg \leq 2$

^{*} The performance will be affected by surface preparation and curing condition.