

# Product Data Sheet

## PHOEPOX® 4455

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February 2019



### Phoepox® 4455

is a fusion bonded epoxy-modified powder that is designed for the internal lining of certain types of production casing and downhole tubings. This grade can withstand severe conditions (sour crude, sour gas and brine water).

			Typical Value	Test Method / Device	
<b>POWDER PROPERTIES</b>	<b>GEL TIME</b>	at 200°C	165-200 seconds	ISO 8130-6	
	<b>THERMAL PROPERTY</b>	Tg1		60 ± 5°C	ISO 21809-1
		Tg2		105 ± 4°C	ISO 21809-1
		ΔH		30-70 J/g	ISO 21809-1
	<b>DENSITY</b>			1.55 ± 0.1 g/cm <sup>3</sup>	Gas Pycnometer
	<b>PARTICLE SIZE</b>			99.8% < 250 μm	Laser Scattering
	<b>MOISTURE CONTENT</b>			≤ 0.5%	CSA Z245.20-06
<b>COLOR</b>			Grey		
<b>PHYSICAL TESTS</b>	<b>ADHESION*</b>		Rating 1 at 75°C, 24 hours	CSA Z245.20-06	
	<b>FLEXIBILITY*</b>		Pass, at 2°PPD, -30°C	CSA Z245.20-06	
	<b>IMPACT</b>		≥ 3 J at -30°C	CSA Z245.20-06	



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**STORAGE STABILITY** 12 months from production date in  
≤ 23°C and ≤ 65% relative humidity.  
Cooler temperatures and lower  
humidity are recommended.

\* The performance will be affected by surface preparation and curing condition.

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### APPLICATION DATA

**SURFACE PREPARATION** Surface must be free from contamination and  
blasted as defined by swedish Sa 2½

**SURFACE ROUGHNESS** 50-100 µm

**RECOMMENDED  
FILM THICKNESS** 300-500 µm

**APPLICATION  
TEMPERATURE** 190-220°C

**POST CURE CONDITIONS** 220°C, 20 min.