

Product Data Sheet

PHOEPOX® 4490

1/2

Maj 2021



Phoepox® 4490 is a fusion bonded epoxy powder that is designed for the internal lining of line pipe, tubings and fittings. Phoepox® 4490 can withstand severe condition (sour crude, sour gas and brine water). Phoepox® 4490 can be applied with phenolic primer. Phoepox® 4490 is suitable for operating temperatures up to 100°C.

| | | | Typical Value | Test Method / Device |
|--------------------------|-------------------------------|---|------------------------------|----------------------|
| POWDER PROPERTIES | GEL TIME | at 200°C | 100-180 sec | ISO 8130-6 |
| | THERMAL PROPERTY | Tg1 | 53 ± 5°C | ISO 21809-1 |
| | | Tg2 | 115 ± 3°C | ISO 21809-1 |
| | | ΔH | 80-120 J/g | ISO 21809-1 |
| | DENSITY | | 1.4 ± 0.05 g/cm ³ | Gas Pycnometer |
| | PARTICLE SIZE | | 99.8% < 250 μm | Laser Scattering |
| | MOISTURE CONTENT | | 0.5% | CSA Z245.20-06 |
| PHYSICAL TESTS | CATHODIC DISBONDING * | 1-3 mm at -3.5 VDC, 65°C, 24 hours 3-5 mm at -1.5 VDC, 20°C, 28 days | | CSA Z245.20-06 |
| | ADHESION * | Rating 1 or 2 at 75°C, 24 hours | | CSA Z245.20-06 |
| | FLEXIBILITY * | Pass, at 3° PPD, -30°C | | CSA Z245.20-06 |
| | IMPACT | > 5 J at -30°C | | CSA Z245.20-06 |
| | CROSS SECTION POROSITY | Rating 1-2 | | CSA Z245.20-06 |
| | INTERFACE POROSITY | Rating 2 | | CSA Z245.20-06 |



◀ corrosion protection that stays.

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2/2



STORAGE STABILITY 12 months from production date in $\leq 23^{\circ}\text{C}$ and $\leq 65\%$ relative humidity. Cooler temperatures and lower humidity are recommended.

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

APPLICATION DATA

SUBSTRATE Mild steel

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 225-240°C



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