

Three layer anticorrosion coating 3 LPE

Type of test	Test conditions	Required result	Obtained result
Holiday test	Voltage U = 25 kV	No holidays	No holidays
Impact resistance	23 °C Voltage U = 25 kV	≥ 7 J/mm No holidays	≥ 7 J/mm No holidays
	-40 °C Voltage U = 25 kV	≥ 7 J/mm No holidays	≥ 7 J/mm No holidays
Indentation	23 °C, 24 hours.	≤ 0,2 mm	0,06 mm – 0,10 mm
	80 °C, 24 hours .	≤ 0,4 mm	0,10 mm – 0,17 mm
Elongation at break	23 °C	≥ 400 %	580 % - 800 %
Peel strength	23 °C	180 N/cm No adhesion failure between steel and epoxy	250 N/cm – 775 N/cm No adhesion failure between steel and epoxy
	80 °C	50 N/cm No adhesion failure between steel and epoxy	60 N/cm – 280 N/cm No adhesion failure between steel and epoxy
Product stability during application	190 °C, 2,16 kg	ΔMFR ≤ 20%	1,9% - 12,3%
Cathodic disbondment	23 °C/28 days -1,38 V	≤ 5 mm	2,2 mm – 4,7 mm
	65 °C/24 hours -3,38 V	≤ 4 mm	0,2 mm – 3,8 mm
	80 °C/28 days -1,38 V	≤ 15 mm	9,2 mm – 14,6 mm
Flexibility	Bend angle 2,0° on pipe diametric length	No cracks	No cracks
Hot water immersion resistance	80 °C, 48 hours	Average ≤ 2,0 mm Maximum ≤ 3,0 mm	No disbondment
Thermal ageing resistance	100 °C, 4800 hours	ΔMFR ≤ 35%	ΔMFR ≤ 10%
UV ageing resistance	2210 hours (7 GJ/m ²)	ΔMFR ≤ 35%	ΔMFR ≤ 10%
Specific electrical coating resistance	23 °C, 100 days	R _s > 10 ⁸ Ωm ²	R _s > 10 ¹⁰ Ωm ²