Technical data sheet

100	**Mixing ratio by weight**	25

Applications

Repairing of structural capacity of pipelines without extensive excavation, through the use of main liners

Processing

Manual or mechanical mixing of the two components, by avoiding any further friction that can lead to the warming of the mixture. Cast the system inside the liner and distribute it evenly through the calendaring process of rollers.

	Temperature	***Time estimate***
Curing time	60°C	90 - 120 minutes

Product information

Two components unfilled epoxy system, medium viscosity. The low reactive system gives the possibility to use medium- sized liners. Moreover, it needs to be hot-cured.

Products characteristics	**Resin**	**Hardener**
Colour	Blue	Colourless
Viscosity at 25°C (mPas)	1.800 – 2.600	10 – 50
Density at 25°C (g/ml)	1,08 – 1,12	0,92 – 0,95
Mixing ratio by volume (ml)	100	30

System typical characteristics

Pot life (100 ml, 40 mm, 25°C)	min	40 – 45
Exothermal peak (100 ml, 40 mm, 25°C)	°C	200 – 230

TA = temperatura ambiente (23±2°C)
Fattori di conversione: 1 mPas = 1 cPs 1MN/m^2 = 10 kg/cm^2 = 1 MPa

RP 2100 DE Blu_IPE 180/25B

CURED SYSTEM TYPICAL PROPERTIES

(24 h standard curing at room temperature + 15h 60 °C)

Final Colour			Blue
Hardness Shore		D/15	82 – 86
Glass transition		°C	80 - 84
Maximum Transition Glass (p.c. 2h 100°C)		°C	118 – 120
Elastic bending modulus	ASTM D 790	MN/m^2	3.300 – 3.400
Bending Strength	ASTM D 790	MN/m^2	92 – 96
Tear Strength	ASTM D 790	MN/m^2	53 - 57
Elongation at break	ASTM D 790	%	2,8 – 3,3
Under compression Strength	ASTM D 790	MN/m^2	90 - 100

Instructions for a proper use

Verify and, if necessary, homogenize components before use.
Mix the two components (resin and hardener) in the proper mixing ratio avoiding air trapping until obtaining a homogeneous mixture, and then apply.

Post-curing

Post-curing is always suggested to stabilize the cured handwork to reach the best mechanical properties. Post-curing becomes necessary when the handwork works at elevated temperatures.
Post-cure the handwork increasing temperature avoiding thermal gradients over 10°C/hour. The thermal gradient and post curing time refer to standard specimens. Users should find the best conditions depending on the component size and shape. For big size components decrease the thermal gradient and increase the post-curing time; in the case of thin layer applications and composites post cure on the jig.

Storage and handling precautions

Epoxy resins and hardeners can be stored over two years in the original sealed package in a cool and dry place. Hardeners are moisture sensitive.
Refer to the product health and safety data sheet.

First emission date: **12th October 2018**

Information given in this publication is based on the present state of our technical knowledge. Buyers and users should make their own assessments of our products under their own applications conditions.