

ROYAPOX 512, two component thermal class F - 155°C



PRODUCT DESCRIPTION

ROYAPOX 512 is an epoxy resin presented in two-component form. The components react slowly at room temperature or rapidly when heated. They form a solid and adherent mass with flexibility, conferring great cohesion to coil against centrifugal force and good heat conductivity. Good compatibility with Class F and H enameled wires. High resistance to refrigeration gases (FREON 22).

APPLICATION

ROYAPOX 512 resin with hardener 512 should be used with the mixing ratio of 100/23 by weight. Life time of the mixture at room temperature is approximately 1 hour.

HOW TO USE

The resin is supplied in two separate components: ROYAPOX 512 and ENDURECEDOR 512. The mixture weight ratio (resin / hardener) is 100/23. Containers should be stored at room temperature (15-25 °C) for up to 1 year. The crystallized resin can be restored to the original form by heating to 80 °C without affecting the quality.

Trickle impregnation process:

1. Mixing resin/hardener weight ratio 100/23
2. Preheat to 120°C winding (oven or joule effect)
3. Apply by drip with rotation and tilt
4. Curing at 130°C. for 5-6 minutes
5. If you want maximum performance mechanical and electrical make a post cure for 1 hour at 120°C.

CHARACTERISTICS

	ROYAPOX 512	ENDURECEDOR 512	MIX 100/23
Viscosity at 25°C (mPa.s)	4000 ± 1000	30 ± 15	800 ± 200
Density at 20°C (g/cm ³)	1,15 ± 0,02	0,895 ± 0,02	1,0 ± 0,02
Pot Life at 25°C mixing (minutes)	60		
Total polymerization	2h at 120°C		
Shore D hardness	75 ± 5		
Tensile strength (MPa).....	69		
Flexion strength (Mpa).....	120		
Water absorption 24h 20°C (%weight)	0.15		
Dielectric strength, 50Hz 20°C (KV/mm)	20		
Surface resistance (Ohm)	5 x 10 ¹²		
Specific resistance (Ohm.cm)	1.3 x 10 ¹²		
Dissipation factor tg, 50Hz 20°C	0.016		
Inductive capacity, 50Hz 25°C.....	3.8		
Martens Heat deformation resistance	110		
Thermal conductivity (W/mK)	0.15		

PACKAGES

The product is available in 1kg, 5kg and 25kg packages.