



**ROYAPOX 5050**  
**2 COMP. EPOXY RESIN**

**THERMAL CLASS B (130°C)**  
**IMPREGNATION**

ROYAPOX 5050 is an epoxy resin presented in two-component form, the components reacting at room temperature or rapidly when heated. They form a solid, hard and adherent mass with certain flexibility, conferring great cohesion to coil against centrifugal force and good heat conductivity. Good compatibility with Class F and H enamelled wires.

**FIELD OF APPLICATION**

ROYAPOX 5050 epoxy resin is specially designed for impregnating circuits and electronic coils.

**PRESENTATION**

The resin is supplied in two separate and pre-dosed components: ROYAPOX 5050 and ENDURECEDOR 5050. The weight mixture ratio (resin/hardener) is 100/40. The airtight and sealed recipients should be stored at room temperature (15-25°C) for a shelf-life of up to 1 year.

**SUGGESTED USES**

At the mix proportion of the two components mentioned above, it keeps for a period of 45 minutes at a room temperature of 20°C. Therefore, it is convenient to mix the product on an as-needed basis.

<b>SPECIFICATIONS</b>	<b>ROYAPOX 5050</b>	<b>ENDURECEDOR 5050</b>	<b>MIXING 100/40</b>
Viscosity at 25°C (mPa.s)	4000 +- 1000	30 +- 10	1000 +- 200
Density at 20°C (g/cm <sup>3</sup> )	1.15 +- 0.01	0.99 +- 0.02	1.0 +- 0.01
Pot Life at 25°C (min.)	45		
Total polymerization	3h. at 100°C		
Shore D hardness	85		
Tensile strength (MPa)	70		
Elongation (%)	7		
Water absorption 24h. 20°C (%weight)	0.2		
Dielectric strength, 50Hz 20°C (KV/mm)	20		
Surface resistance (Ohm)	5. 10 <sup>12</sup>		
Specific resistance (Ohm.cm)	1.3. 10 <sup>15</sup>		
Dissipation factor tg, 50Hz 20°C	0.0094		
Dielectric constant 50Hz 25°C	3.8		
Martens Heat deform. resist	60		
Thermal conductivity (W/mK)	0.15		

**SUPPLY/ STORAGE**

In metal containers with 1, 5, 25kg. capacity, with separate dose for hardener.

Can be stored for at least one year. Crystallized resin can be returned to the original form by heating to 80°C without negative effects to the quality.