



Electrical Insulating Varnish

This product is based on epoxy resin (PAO E 1028A) and the acid anhydrous (PAO E 1028BI, hardening agent) as the main ingredient, And to 100 / 28 ratio mixture, and then high-temperature curing (110 - 150 °C), curing time depend on the amount of the use of adjustment, after hardening, the material is with excellent electrical insulation.

Processing Method:

PAO E 1028 A / PAO E 1028BI operating procedures for high-temperature hardening are as follows:

1. First PAO E 1028A resin preheated to a mobile mixed state (60-70 °C, because the resin, high viscosity mixing is not easy.)
2. The PAO E 1028 A / PAO E 1028BI 100 / 28 of the mixing ratio of the full re-use (if the mixing ratio difference is too large or mixed uneven, will affect the hardening speed and curing properties.)

Basic Properties:

PAO E 1028 A / PAO E 1028BI because of the mixing ratio and curing procedural differences affect the physical properties of the final hardened product. Therefore, be sure to use precise control of mixing ratio, and proper hardening process.

Varnish features:

Item	Properties		Test Condition
Items	PAO E 1028A	PAO E 1028BI	
Appearance	Gray sticky fluid	Yellow liquid	Visual
Viscosity(Poise)	50 ± 10 / 80°C	0.37 ± 0.2 / 30°C	DV III Programmable Rheometer (20rpm)



Mix Ratio	100 ± 1	28 ± 0.5	Weight
The initial mixed viscosity (Poise)	60 ± 10 / 30°C		DV III Programmable Rheometer (20rpm)
Lifetime after mixing	4hr (50°C) / 8hr (30°C)		

After hardening characteristics:

Item	Properties	Test Condition
Hardness	90 (shore D)	ASTM D2240
Tg(°C)	125°C	DSC
Dielectric Breakdown	1.0 KV/mil (min)	ASTM D149
Coefficient of thermal expansion	43 * 10 ⁻⁶ / °C	ASTM D696
Surface Resistance	2.9 * 10 ¹³ Ω	ASTM D257
Dielectric constant (D _k)	3.8	ASTM D150
Dissipation factor (D _f)	0.57	ASTM D150

After curing the trust test

Item	Properties				Units
Time	0	168	500	1000	Hours
Dielectric Breakdown	1.00	1.10	1.05		KV/mil(min)

Packaging and storage:

1. This product unopened state should be stored at general room temperature, also avoid direct sunlight and rain,
2. PAO E 1028A at 25 °C, kept under seal conditions can be stored for 6 months.
3. PAO E 1028BI at 25 °C, kept under seal conditions can be stored for 12 months.
4. PAO E 1028A & PAO 1028BI preservative mixture: a mixture of preservative will be in accordance with ambient temperature change, the more heat the shorter shelf life, 4hr (50 °C) / 8hr (30 °C), so please used up



within this period.

5. If the mixtures of residual material over mixed recommend the use of the period (non-hardening can be handled) Please clean the container or tools with acetone.
6. Packing: 20kg