EPOXY RESIN PRODUCTS

エピフォーム®

SOMAR

F－472

TECHNICAL INFORMATION

No.D-TI-0000F472-001-C

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Epiform F-472 is a powder epoxy resin designed for the purpose of insulating electric parts. It is particularly suitable for bus bars and could also be used for coil impregnation and iron core coating.
A cured layer of Epiform F-472 has excellent insulation properties as shown in electric resistant and breakdown voltage. It also possesses flexibility and fire-resistivity.

1. Powder Properties

Item		Unit	Value	Measuring method
Horizontal melting flow rate 140℃		%	12	Somar internal method
Gel time 200℃		sec	23	JIS C 2161
Bulk Density		g/cm^3	0.65	JIS C 2161
Particle distribution	Mean particle size	um	55	Dry dispersion laser analysis
	Fine content (Below 10 μ m)	%	7	

2. Cured properties

Item	Unit	Value	Measuring method
Glass transition temperature	℃	110	JIS C 2161 (DSC)
Cupping resistance	mm	8	JIS C 2161
Barcol hardness	—	75	JIS C 2161 (GYZJ935)
Lap top shear strength	MPa	15	JIS K 6850 (SPCC-SPCC)
Impact strength	cm	30	JIS C 2161 (Impact head R=3.18mm, load500g)
Breakdown voltage	kV/0.5mm	18	JIS C 2161 (t=0.5mm)
Volume resistivity	Ω・cm	1×10^{16} or more	JIS C 2161 (t=3mm)
Tracking resistant (Comparative tracking index)	—	175	JIS C 2161
Flame retardancy	—	V-0 approved	UL94 Vertical Burn Test

Test pieces curing condition：30minitues at 150℃

3. Curing conditions

Curing at 130 to 200℃ for 5 to 60 minutes is recommended.
Based on intended application, high temperature and short curing time are possible

All values above are representative values