

DVB-5300 SM FREE

Non-solvent-based insulation varnish



DVB-5300 SM FREE is an insulating varnish for motors developed for impregnation and dripping of automobile starter motors. This varnish mainly consists of an epoxy resin that can be cured with acid anhydride and has high heat resistance (type H) as well as long pot life and outstanding electrical properties.

Usage

For impregnation of automobile starter motors and armatures

Specification

Type of varnish	Triple-component epoxy resin		
Product Features	<ol style="list-style-type: none">1. It features outstanding heat resistance. (Type H: 180°C)2. It is free of styrene monomers.3. It features outstanding adhesiveness.4. It features outstanding electrical properties.5. It features outstanding wear resistance due to high Tg.6. It features outstanding noise characteristics due to its low hardness.		
Thinner	None	Storage stability (40°C) (A + B + C)	Over 3 days
Exterior	A/B/C: Lemon yellow / Light yellow / No color		
Viscosity	11 - 15 POISE	Curing conditions	Over 1 hour at 130 - 150 °C
Specific gravity	1.15 ± 0.02	UL-certified	Not certified
Gel time (120 °C)	2.5 - 3.5 min.	Storage conditions	Store in a shaded indoor space with sufficient ventilation.
Mixing ratio	A : B : C = 100 : 10 : 4.3 (Weight)	Shelf life	6 months from the manufacturing date (when storage conditions are met)

Product Properties (Physical Property Data)

Breakdown voltage	Above 9 KV (Twist Pair method, MW-35 Coil)
Volume resistivity	At least $1.0 \times 10^{14} \Omega\text{cm}$

How to Use

How to Use	<ol style="list-style-type: none">1. Mix evenly after adding the substances according to the designated mixing ratio.2. Preheat the substrate at 80 - 120 °C for 10 - 30 minutes to eliminate cutting oil and debris from the substrate.3. Maintain the surface temperature of the substrate at above 100 °C.4. Rotate the substrate and drip the evenly mixed varnish using a nozzle.5. Rotate the substrate until the varnish does not drop any longer, and dry it according to the designated curing conditions.
Caution	<ol style="list-style-type: none">1. Liquid B (hardener) is sensitive to heat. So store it in a refrigerated space.2. When the varnish temperature is high, there is a risk of varnish turning into gel. So maintain the varnish temperature inside the tank at below 30 °C.3. Instructions above may vary depending on the type of substrate and the painting line conditions.4. Please refer to the MSDS when handling the product.

► The data shown above were obtained under the laboratory conditions, and the product properties may vary depending on work method and circumstances. Please refer to the property data listed above only as reference.