ELANTAS

Secondary Insulation

Product Information
VERNICE HI-THERM BC-346-A

E317427

Modified Polyester Baking Varnish
Thermal class 180 (H)
Dip & Bake

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Product description

HI-THERM BC-346-A Baking Varnish is a modified polyester based varnish suitable for impregnating electrical machinery windings. It exhibits an outstanding compatibility with the following magnet wires coatings: Amide-Imide, Polyamide, Polyurethane-Polyamide, Polyvinyl Formal, Polyurethane, Epoxy, Polyvinyl Formal-Polyamide, Polyimide, Textile, Polyester Amide -Imide, Polyester.

Product advantage

- UL approved (File OBOR2.E317427 and OBJS2.E317429)
- Military approved, qualified under MIL-V-1137A, grade CB, type M, and
- MIL-I-24092, type M, class 180
- Excellent adhesion
- Excellent flexibility
- Ready to use
- Excellent stability in tank

Application area

Impregnation of stators, low speed rotors, transformers, windings, coils.

Processing

HI-THERM BC-346-A is suitable for both atmospheric pressure and under vacuum impregnations; if necessary, it can be diluted with DOLPH'S T-100 or T-200 thinner.
The following cycle is recommended as a starting point in the treatment at atmospheric pressure of most units:

- Preheat the unit to 110°C.
- Cool to 25-40°C.
- Dip into the varnish for 15-30 s.
- Drain 15-30 s (to obtain a high build-up, we suggest to shorten the draining time).
- Place in the oven and bake according to one of the following cycles :

3-5 hours at 135°C, or 2-4 hours at 150°C or 1-2 hours at 165°C (times must be taken when unit reaches the baking temperature)

For specific application feel free to contact us.

Package

This product is currently sold in 17 kg and 180 kg package.

Healthy & safety

Please refer to safety data sheet (SDS)。

Storage & shelf life

The shelf life is 12 months, when stored in original closed containers at maximum 25 °C, protected from direct sunlight, moisture and humidity.

Properties of component as supplied

Properties	Condition	Test Method	Typical Value
Appearance	-	Visual Inspection	Clear amber liquid
Density	25°C	ISO 2811 EEIZ-WI/RD 05.002	0.88-0.98 g/ml
Viscosity	25°C，Brookfield	ISO 2555 EEIZ-WI/RD 05.007	150-320 cps
Solid Content	1.5g,150°C,45min	ISO 3251 EEIZ-WI/RD 05.003	48-54 %
Build-up, D.F.T	25°C	ASTM D-115	25-50 µm
Corrosive effects on copper	-	-	None

Dielectrical properties in cured condition

Properties	Condition	Test Method	Typical Value
Comparative Tracking Index CTI	-	IEC 60112	600 V
Dielectric strength	25°C	IEC 60464 EEIZ-WI/RD 05.037	> 160 kV/mm
	25°C, after 24h water immersion		> 116 kV/mm

Thermal class according to UL 1446

Magnet wire	Twisted pairs	Helical coils
MW 16-C	240°C	200°C
MW 24-C	155°C	180°C
MW 28-C	155°C	130°C
MW 30-C	180°C	180°C
MW 35-C	200°C	200°C