

Electrical Insulation System

Coating varnish

Elmotherm[®] 1033/70 C

former: Finishing Varnish 1033/70 C

Product information

Finishing Varnish: Thinner:
Elmotherm® 1033/70 C 7230

- Thermal class F (155 °C)
- Fast initial drying
- Excellent flexibility
- Good resistance to steam
- Good resistance to acids and bases
- Good electric properties

General

The Elmotherm® 1033/70 C is a solvent based, air drying Finishing Varnish based on modified alkydic resins.

Application

Elmotherm® 1033/70 C can be used for the protection of impregnated stator, rotor and transformer windings and offers a good resistance to acids and bases. Finishing Varnish is already tack-free after 10 minutes and has a good compatibility with all common enamelled magnet wires, including those for high temperature applications.

Properties

- as delivered:

	Elmotherm® 1033/70 C
Colour	red
Viscosity at 25°C (Ford cup 4 mm) [s]	90 ± 20
Spec. gravity at 20°C [g/cm ³]	1.03 ± 0.02

– after curing:

	Elmotherm® 1033/70 C		
Thermal class	F (155 °C)		
Bond strength (ASTM D 2519-68) [kg]	4		
Samples prepared according to ASTM Standard			
Curing-cycle: 2 h @ 150 °C			
Dielectric breakdown voltage (ASTM D 115) [kV] @ 40 µm film-build as made after 24 hrs. storage in water after 24 hrs. in transformer oil at 100 °C	4.5 4.0 4.0		
Dielectric loss tan δ (ASTM D 150) - at 25 °C - at 50 °C - at 100 °C	100 Hz 0,0180 0,0284 0,0386	1 kHz 0,0111 0,0256 0,0198	10 kHz 0,0069 0,0185 0,0226
Volume resistance (ASTM D 257)[Ω x cm] as made after 24 hrs. storage in water	10 ¹⁴ 10 ¹³		
Surface resistance (ASTM D 257) [Ω] as made after 24 hrs. storage in water	10 ⁶ 10 ⁶		

Processing

Physiological data:	We refer to the provisions set forth in the corresponding EU Safety Data Sheet.		
Pretreatment:	The components subject to varnishing must be dry, clean and free from grease and fat.		
Application:	The Elmotherm® 1033/70 C may be applied by brushing, dipping, spraying or flow coating. For application by dipping or spraying, the consistency should be adjusted, if necessary, by adding thinner 7230 appropriately.		
Curing:	Drying periods at room temperature: Initial drying (dust-drying period): approx. 10 min. Through-drying (final drying period): approx. 24 hrs.		

Shelf life

6 months in the unopened original container, when stored properly (at room temperature).

Container sizes

Elmotherm® 1033/70 C:	Can @ 20 kg
Thinner 7230:	Can @ 25 kg

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