

Technical Data Sheet

Secondary Insulation

Pedigree[®] E 900 Thixo

Single-Component Epoxy Impregnating Resin

Pedigree[®] E 900 Thixo

Product Description

Pedigree[®] E 900 Thixo is a single-component, heat-cured, epoxy impregnating resin.

Areas of Application

Impregnation of transformers, motor windings and form-wound coils

Coating and impregnation of electronic components,

Protective overcoat for electrical apparatus

Features and Benefits

- Outstanding bond strength
- Good chemical resistance
- No catalyst required
- Thixotropic for high film build

Application Methods

- Dip-and-Bake
- Vacuum-Pressure Impregnation

Transportation / Storage

Store below 25°C / 77°F in a dry controlled environment out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for six (6) months from the date of shipment.

Usable life may be extended by refrigerated storage at 5°C / 41°F.

Failure to store this product as recommended above may lead to deterioration in product performance.

Mix product thoroughly before use

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

| Property | Conditions | Value | Units |
|--------------------|---------------|----------------|----------|
| Viscosity – 2 rpm | 25°C / 77°F | 9,000 – 13,500 | cP |
| Viscosity – 20 rpm | 25°C / 77°F | 4,000 – 7,000 | cP |
| Sunshine Gel Time | 150°C / 302°F | 9 – 14 | minutes |
| Weight per Gallon | 25°C / 77°F | 9.6 – 10.0 | pounds |
| Flash Point | ASTM D93 | > 94 > 201 | °C °F |

Curing Schedule

Cure for 2 – 4 hours at 163 - 177°C / 325 - 350°F.

Cure schedule is based on time after unit reaches specified temperature

Preheated units should be no hotter than 52°C / 125°F when placed into the resin.

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Typical Mechanical Properties

| Property | Conditions | Value | Units |
|---|------------------------------|----------|------------------|
| Hardness | Shore D – 25°C / 77°F | 80 | |
| Film Build | | 2 – 4 | mils |
| Helical Coil Bond Strength ASTM D2519 over MW 35 | 25°C / 77°F 150°C / 302°F | 60 20 | pounds pounds |
| Weight Loss | 1000 hours @ 180°C / 356°F | 2.1 | % |

Typical Electrical Properties

| Property | Conditions | Value | Units |
|---------------------|--|--|------------------|
| Dielectric Strength | ASTM D149 – 1.4 mils | 2700 | volts/mil |
| Dielectric Strength | ASTM D149 – 1.4 mils After 24 hours in water | 2200 | volts/mil |
| Volume Resistivity | ASTM D257 – 25°C / 77°F ASTM D257 – 100°C / 212°F | 1.5 x 10 ¹⁵ 1.7 x 10 ¹⁰ | ohm-cm ohm-cm |
| Dielectric Constant | 1 kHz – 25°C / 77°F 1 kHz – 100°C / 212°F | 3.1 4.5 | |
| Dissipation Factor | 1 kHz – 25°C / 77°F 1 kHz – 100°C / 212°F | .01 .20 | |

Underwriters Laboratories Recognition (ELANTAS File E75225)

| Wire Construction | Helical Coil | Twisted Pair |
|-------------------|--------------|--------------|
| NEMA MW76 | Class 155 | Class 130 |
| NEMA MW35 | Class 180 | Class 155 |

The above properties are typical values and are not intended for specification use.

ELANTAS PDG, Inc. warrants the chemical composition of its products within stated tolerances, but does not guarantee that a product will be appropriate for any particular application. Any recommendation, performance of tests or suggestion is offered merely as a guide and is not a substitute for a thorough evaluation by the user. No representative of ELANTAS PDG, Inc. has the authority to offer a warranty that a product will perform satisfactorily in manufacturing a product and no such representation should be relied upon.