ELANTAS
Electrical Insulation

Technical Data Sheet
Secondary Insulation
Impregnating Resin

# Sterling E134 Thixo Thermopoxy

Single Component Hermetic Epoxy Resin

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**Description**
Sterling E 134 is a heat curing epoxy resin system designed for use in hermetic motors. This resin system is designed for use in medium voltage motors.

**Uses**
- Impregnation or overcoat of medium voltage motors
- Random wound motors

**Cured Properties**
The Sterling E134 is resistant to refrigerants such at R 134.

**Catalyst**
No catalyst is required.

**Recommended Cure**
2 to 4 hours at 165°C (325°F) to 175°C (350°F) after part reaches cure temperature

**Features and Benefits**
- Good film build
- Offers thermal ratings up to 180°C
- Not moisture sensitive

**Application Methods**
- Vacuum Pressure Impregnation (VPI)
- Dip and Bake

**Storage/Shelf Life**
This resin should be stored at a 5°C (40°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. Agitate before use. Failure to store this product as recommended above may lead to deterioration in product performance and invalidate shelf life.

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**Properties of Material Supplied**

| *Test* | *Value* | *Units* |
|---|---|---|
| Viscosity @ 25°C (77°F) (ASTM D2196) | 1800 – 3700 | Cp |
| Gel Time @ 150°C (300°F) (ASTM D3056), typical | 8 – 15 | Minutes |
| Flash Point (ASTM D93) | 77 (170) | °C (°F) |

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# TYPICAL PROPERTIES

## Mechanical Properties – Cured 2 hours at 175°C (350°F), Single dip

| *Test* | *Value* | *Units* |
|---|---|---|
| Helical Coil Bond Strength @ 25°C (ASTM D2519) MW35 | 48 | Pounds |
| Helical Coil Bond Strength @ 150°C (ASTM D2519) MW35 | 6 | Pounds |
| Hardness, Shore D (ASTM 2240) | 84 | |

## Electrical Properties

| *Test* | *Value* | *Units* |
|---|---|---|
| Dielectric Strength – AS MADE (ASTM D149) | 3200 | Volts/mil |
| Dielectric Strength after 24 hours in water (ASTM D149) | 2800 | Volts/mil |
| Film thickness | 3.5 | mils |

## UL Recognized Insulation Systems (E87039)

| *Class* | *Systems* |
|---|---|
| Class 180 | PDG 14 |

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

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