ELANTAS
Electrical Insulation

Technical Data Sheet

Secondary Insulation

RanVar™ B6-640

Two-Component Non-Tracking Epoxy Coating

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RanVar™ B6-640

Product Description

RanVar™ B6-640 is a red, two-component, solvent-borne epoxy system.

It contains a mineral filler that inhibits high voltage arc tracking.

Areas of Application

Coating of insulators, separators, bushings and other surfaces requiring electrical insulation with non-tracking characteristics

Features and Benefits

- Excellent chemical and moisture resistance
- Cures to a tough, resilient coating
- Suitable for new and existing equipment
- Meets Siemens specification 53320FK
- Provided in pre-weighed kits

Application Methods

- Brush on
- Spray

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 twelve (12) months from the date of shipment.

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

Keep containers tightly sealed to minimize evaporation

Mix individual components thoroughly before use.

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value		Units
		RanVar™ B6-640A Resin	**RanVar™ B6-640B Hardener**	
Color		Red	Amber	
Non-Volatiles	1g - 3h - 135°C	67 - 70	65 - 67	%
Viscosity	25°C / 77°F	2000 – 4000	800 – 2500	cP
Weight per Gallon	25°C / 77°F	10.3 - 10.7	9.6 - 10.0	pounds
Flash Point	ASTM D93	30 86	26 79	°C °F
Mix Ratio	Parts by weight	100	100	

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Typical Properties of Mixed Materials

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	1200 – 3200	cP
Viscosity Reducer		ELAN-Plus™ BS-10421 Reducer	

Application

Mix Resin and Hardener in supplied ratio. Approximate pot life is twelve hours, longer if thinned or refrigerated.

Surface to be coated should be clean and dry.

Brush on Application:

Use as mixed. Apply to achieve a 3 - 5 mil (0.003 – 0.005 in.) coating thickness per coat, building up to a final thickness of 20 mils (0.020 in.).

Spray Application:

Thin to 35 - 50 seconds, #3 Zahn Cup with ELAN-Plus™ BS-10421 Reducer. Spray at an atomizing pressure of 30 psi. Apply to achieve a 3 - 5 mil (0.003 – 0.005 in.) coating thickness per coat building up to a final thickness of 20 mils (0.020 in.).

Curing Schedule

Air Drying:

Allow 2 - 3 hours between coats. Surface should be tack-free before applying the next coat.

Complete cure requires five days at 25°C / 77°F.

Oven Cure:

Allow 15 minutes of air drying before baking. Baking time for each coat is 30 minutes at 80°C / 175°F. Full cure requires 2 hours at 80°C / 175°F.

The cure schedules above are based on time after the unit reaches the specified temperature and are recommendations only. The user is responsible for determining the optimum cure conditions for his application.

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Typical Electrical Properties

Sample Thickness 20 mils (0.020 in.)

Property	Conditions	Value	Units
Dielectric Strength	25°C / 77°F	650	volts/mil
Dielectric Strength	25°C / 77°F – 98% R.H.	>500	volts/mil
Surface Resistivity	25°C / 77°F	2×10^{13}	ohm-cm
Surface Resistivity	25°C / 77°F – 98% R.H.	3×10^{11}	ohm-cm
Dust & Fog Track Resistance	1500 V – 15 mA failure current	>50	Hours
Arc Resistance	ASTM D495	126	seconds

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