

Technical Data Sheet

Secondary Insulation

RanVar™ B277-1

Air-Drying Impregnating Resin

RanVar™ B277-1

Product Description

RanVar™ B277-1 is a clear, air-drying, modified alkyd impregnating resin.

Areas of Application

Impregnation of motor stators, transformers and coils

Insulating dip coating of coils and electronic components

Features and Benefits

- Fast drying
- Excellent moisture resistance
- Thermal ratings to Class 180
- Low viscosity for excellent penetration

Application Methods

- Dip-and-Bake

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 product thoroughly before use

Health / Safety

Refer to the Material Safety Data Sheet.

Typical Properties of Material as Supplied

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	45 - 100	cP
% Non-Volatiles	0.5 g - 3 h - 110°C	34 - 36	%
Weight per Gallon	25°C / 77°F	7.6 - 7.9	pounds
Flash Point	ASTM D93	24 75	°C °F
Adjustment Thinner		ELAN-Plus™ BS-107 Reducer	

RanVar™ B277-1

Curing Schedule

RanVar™ B277-1 will air dry at 25°C / 77°F to a tack-free surface in 15 - 20 minutes and to a hard surface in 1 - 2 hours. Cure can be accelerated by baking at 110°C / 230°F for 30 minutes after an initial flash-off of one minute.

Impregnated windings must allow a minimum of three days at room temperature for evaporation of solvent and penetration of oxygen to achieve best properties.

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.

Typical Electrical Properties - Specimens cured 72 hours at 25°C / 77°F

Property	Conditions	Value	Units
Dielectric Strength	ASTM D149 - 0.5 mils	4100	volts/mil
Dielectric Strength	ASTM D149 - 0.5 mils After 24 hours in water	3000	volts/mil

Underwriters Laboratories Recognition (ELANTAS File E75225)

Wire Construction	Helical Coil	Twisted Pair
NEMA MW24	130	155
NEMA MW26	155	155
NEMA MW28	105	130
NEMA MW30	180	180
NEMA MW35	130	180

UL Recognized Insulation Systems (ELANTAS File E87039)

Thermal Class	System
Class 130	MEGA I
Class 155	B2
Class 180	MEGA III

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

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