

Technical Data Sheet

Electronic & Engineering Materials

RanVar™ TR-315 Red

Two-Component Epoxy Adhesive / Sealant

RanVar™ TR-315 Red Epoxy

Product Description

RanVar™ TR-315 Red is a two-component, room temperature curing, 100%-solids epoxy system.

Areas of Application

Sealant for armature and stator end windings

Bus bar coating

General sealing and patching of electrical equipment

Features and Benefits

- Convenient 1:1 mix ratio
- Thixotropic / non-slumping
- Low shrinkage
- Long pot life
- Chemical and moisture-resistant
- Suitable for Class 155 use

Application Methods

Brush, spatula or putty knife

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.

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™ TR-315A Red Resin	RanVar™ TR-315B Hardener	
Viscosity	25°C / 77°F	Thixotropic Paste	Thixotropic Paste	
Color		Red	Amber	
Weight per Gallon	25°C / 77°F	14.1 – 14.5	12.9 – 13.3	pounds
Flash Point	ASTM D93	> 94 > 201	> 94 > 201	°C °F
Mix Ratio	Parts by weight Parts by volume	100 100	100 113	

RanVar™ TR-315 Red Epoxy

Typical Properties of Mixed Materials

Property	Conditions	Value	Units
Viscosity	25°C / 77°F	Thixotropic Paste	
Pot Life	25°C / 77°F – 250 grams	1½ - 2	hours
Gel Time	110°C / 230°F	6 – 10	minutes

Curing Schedule

Mixed resin cures tack-free within 12 – 16 hours at room temperature and will develop full properties after 4 – 5 days.

Alternatively, the resin may be allowed to gel at room temperature followed by curing for 1 - 2 hours at 100 - 110°C / 212°- 230°F.

Cure schedule is based on time after the unit reaches the specified temperature.

Typical Mechanical Properties

Specimens cured 16 hours at 25°C / 77°F plus 2 hours at 100°C / 212°F

Property	Conditions	Value	Units
Hardness	Shore D	67	
Tensile Strength	ASTM D229	> 9000 > 62	psi MPa
Elongation at Break	ASTM D229	10 – 12	%
Water Absorption	24 hours @ 25°C / 77°F	0.2	%
Weight Loss	24 hours @ 180°C / 356°F	0.95	%

Typical Electrical Properties

Property	Conditions	Value	Units
Volume Resistivity	ASTM D257 – 25°C / 77°C	4.3 x 10 ¹³	ohm-cm
Dielectric Constant	1 kHz – 25°C / 77°F	4.7	
Dissipation Factor	1 kHz – 25°C / 77°F	0.04	

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

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