



# TECHNICAL BULLETIN

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### PRODUCT INFORMATION

### **ULTIMEG 2220 SOLVENTLESS IMPREGNATING EPOXY RESIN**

#### GENERAL DESCRIPTION

ULTIMEG 2220 is a solventless, single component, epoxy impregnating resin especially formulated for VPI of traction machines conforming to thermal class 220°C .

The cured product exhibits excellent mechanical and electrical properties throughout its working temperature range together with a high level of performance in its resistance to chemicals and moisture.

#### APPLICATION

A high performance, zero VOC resin for vacuum pressure impregnation of traction machines

#### SPECIFICATION

VISCOSITY	Brookfield @ 25°C	45-55 poise
GEL TIME	10 grms @ 165°C	5-10 mins
SPECIFIC GRAVITY	@ 21°C	1.13 - 1.17
SHELF LIFE	@ 20°C	12 months

#### CURE SCHEDULE

TIME (hours)	12	8
TEMPERATURE (°C)	150	165

To maximise properties a cure of 24 hours @ 150°C or an additional post cure of 8 hours at 180°C is recommended.

**NOTE:** Due to the introduction of improvements from time to time the right is reserved to supply products that may differ slightly from those illustrated or described in this publication.

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### ULTIMEG 2220

#### PROPERTIES OF CURED RESIN

BOND STRENGTH	ASTM D2519	20°C	38kg
		150°C	8.6kg
THERMAL ENDURANCE	ASTM D2307	20,000 hours	220°C
GLASS TRANSITION TEMP	IEC1006	Tg	148°C
DIELECTRIC STRENGTH	ASTM D115	At 50Hz & 20°C	190 kV/mm
	50µm film	At 50Hz & 150°C	100 kV/mm
		24hr water immersion	115 kV/mm
TAN θ	IEC 455-2	At 50Hz & 20°C	<0.005
VOLUME RESISTIVITY	IEC 93	20°C.	10 <sup>14</sup> Ohm cm
DIELECTRIC CONSTANT	IEC250	At 50Hz	3.7
COMPARITIVE TRACKING INDEX	IEC112	Proof test	>550V
THERMAL CONDUCTIVITY	VDE0304		0.2W/mK
SHORE D-HARDNESS	DIN53505	25°C	91

#### HEALTH AND SAFETY

Refer to Material Safety Data Sheet available.

#### PACKAGING

5kg, 25kg, 220kg

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