



## **PRODUCT INFORMATION**

### **ULTIMEG 2001WW**

SINGLE COMPONENT

HEAT CURE EPOXY

THIXOTROPIC

WET WINDING

CLASS H (180°C)

### **ULTIMEG 2001WW WET WINDING EPOXY RESIN**

## **GENERAL DESCRIPTION**

ULTIMEG 2001WW is a solventless, single component, thixotropic epoxy resin system, which gives 100% filled windings with exceptional high bond strengths at all operating temperatures up to Class H (180°C). The thixotropy of the system gives a low potential to drip during application together with minimal flows during cure which results in very little or no wastage due to primary or secondary drainage. The resin can also be applied to achieve high film builds to protect the outside of windings if required.

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. Other benefits featured are good heat transfer characteristics, no flash point, and a long shelf life.

## **APPLICATION**

A high performance product designed for wet winding field coils. Could also be used for sealing or enveloping of end or other windings where exceptional mechanical strength is required.

## **SPECIFICATION**

VISCOSITY	Brookfield viscometer @ 25°C	22rpm 2200-2600poise 20rpm 850-1150 poise
GEL TIME	10 grms @ 165°C	5-10 mins
SPECIFIC GRAVITY	@ 21°C	1.45-1.51
SHELF LIFE	@ 20°C	12 months

**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 2001WW

### PROCESSING

METHOD	Apply to the windings by stiff brush, spatula or notched spreader.
VISCOSITY	1. As supplied 2. If a lower viscosity is required the material can be warmed to 30- 40°C. DO NOT HEAT ABOVE 40°C (see workshop practice).

### WORKSHOP PRACTICE

The process of wet winding is best achieved by the application of the resin with a stiff brush, spatula or notched spreader in an even film after each layer of the coil is wound. An even complete coverage is necessary if a strong void free winding is required.

Impregnation at a lower viscosity might be required to give penetration for some winding designs. This is best undertaken by applying the resin at 30-40°C. CARE SHOULD BE TAKEN during this process to only heat small quantities of the resin gently to 40°C. At temperatures above 40°C the system is less thermally stable.

The material should be stored between 10-25°C away from direct sunlight, heat sources or moisture contamination. On long term storage there are minimal risks of a slight settlement of the filler (if suspected stir with a spatula) or on cold temperature storage of some crystallisation (material thickens and has a granular nature. If suspected gently warm with stirring to 40°C. TAKE CARE AS ABOVE).

### CURE SCHEDULE

Cure times are dependant on component size and design, together with the oven efficiency. The figures given are typical.

TIME (hours)	4	2
TEMPERATURE (°C)	150	165

If maximum heat distortion temperature (HDT) is required a cure of 16 hours @ 150°C or an additional post cure of 4 hours at 180°C is recommended.



TECHNICAL BULLETIN  
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**PROPERTIES OF CURED RESIN**

BOND STRENGTH	20°C	45kg
IEC61033 Twisted coil	180°C	8kg
BREAKDOWN VOLTAGE	20°C	100kV/mm
ASTM D115 3mm plaque 24hrs water		85 kV/mm
LOSS TANGENT 59hz	20°C	<0.1
	125°C	<0.5
VOLUME RESISTIVITY	25°C	>14 log Ohm Cm
	125°C	>10 log Ohm Cm

**HEALTH AND SAFETY**

Refer to Material Safety Data Sheet available.

**PACKAGING**

7kg, 28kg

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