

WATER BASED IMPREGNATING VARNISH, CLASS H

Type A 850



PRODUCT INFORMATION

AQUAMEG 850

PHENOLIC CO-POLYMER

HIGH BOND STRENGTH

LOW VOC

WATER BASED

CLASS H (180°C)

AQUAMEG 850 CLASS H WATER BASED IMPREGNATING VARNISH

GENERAL DESCRIPTION

Aquameg 850 is a water based modified phenolic co-polymer, which produces a tough resilient film with high bond strengths at all operating temperatures up to Class H (180°C). Even when the material is diluted down to 20% NV content high bond strengths are still maintained. Where higher-class insulation systems are employed this varnish can be used in components working up to 220°C. Being water based it is non-flammable, low odour, does not require special storage facilities, and allows greater operator safety during processing. The varnish has a very low VOC (volatile organic content) giving lower environmental emissions. It exhibits excellent penetration through windings with clean drainage and low secondary drainage properties. The cured product has excellent resistance to chemicals and moisture.

APPLICATION

A quality water based product designed to give high bond strength for impregnated rotors, stators and other general windings.

SPECIFICATION:

VISCOSITY	40-60 secs BS3900 PTA6 B4 flow cup at 25°C
NON-VOLATILE CONTENT	40-44%
VOC %	<3%
SPECIFIC GRAVITY	1.01 - 1.04
pH VALUE	8.0-8.5
FLASHPOINT	> 100°C
SHELF LIFE	12 months at 20°C

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.

AQUAMEG 850 PROCESSING

METHOD	-	Cold, hot dip or vacuum impregnation
VISCOSITY	-	<u>Cold Dip</u> <u>Hot Dip</u> <u>Vacuum</u> -As supplied-
REDUCER	-	Tap water or water co-solvent blend T68

WORKSHOP PRACTICE

Varnish in impregnating tanks should be checked for viscosity on a regular basis to ensure consistent impregnation.

A temperature/viscosity graph is available on request.

Regular additions of fresh varnish to the tank are recommended to maintain stability. A tank turnover of at least 10% per month is recommended, with pH and viscosity periodically controlled.

Tank samples will be analysed free of charge by our laboratories.

The cure time chosen for impregnation is dependent on the size and type of component, and the oven efficiency. Typical figures are given.

CURE PRACTICE - A pre polymerisation of 1-2 hrs @ 90°C is recommended as foaming can be a problem of water based varnishes when exposed to high temperatures.

TIME (hours)	8	4	3
TEMPERATURE (deg c)	135	150	165

The times given are for the component once it reaches stoving temperature. Allowances should be made for the component to attain the stoving temperature especially with larger components that

AQUAMEG 850**PROPERTIES OF CURED VARNISH**

BOND STRENGTH (ASTM D2519 Helical coil)	20°C	25Kg
	150°C	8.5Kg
	180°C	2.5Kg
BREAKDOWN VOLTAGE (ASTM D115- Copper panels)	20°C	3500v/mil
	24 hrs immersion in distilled water	3100v/mil

It is recommended that a suitable Stainless Steel, plastic or plastic lined tank be used with this product.

HEALTH & SAFETY

Refer to Material Safety Data Sheet available.

PACKAGING

210 ltr, 25 ltr, 5 ltr