
AQUA-THERM BC-367/832-D

AQUA-THERM BC-367/832-D is a white, 1K, water-borne varnish based on polyester.

Attributes

AQUA-THERM BC-367/832-D is characterised by the following properties:

- UL-approved
- good moisture resistance
- good adhesion and flexibility
- good stability into the dipping tank (at $T > +5$ °C)
- relatively high curing cycle at low temperatures (110-130 °C)
- high flash point (over 95 °C)
- suitable for the impregnation of motors working in humid environments

Application

AQUA-THERM BC-367/832-D is a proven dip varnish for impregnating:

- motors in humid environments
- small- and medium-size stators
- small transformers
- coils

Standards

- UL-approved Class 180, File E 317427
- OBOR2.E317427, OBJS2.E317429
- RoHS-compliant acc. 2011/65/EU
- Temp. class acc. UL 1446

Magnet wire Twisted Pairs
MW 35-C 180 °C

Delivery forms

Aqua-Therm BC-367/832-D is supplied in 25 kg disposable containers and in 230 kg barrels.

Storage

AQUA-THERM BC-367/832-D can be stored for 12 months at room temperature in a sealed container (max. 30 °C). The impregnating resin must be protected against direct sunlight and sources of heat. Being a water-thinnable emulsion with a very low cosolvent content, this product suffers from cold and must be stored at temperatures included between +5 and +30 °C. The stability of the product into the tank can be

indefinitely extended by means of monthly addition of fresh varnish in a proportion of at least 15-20 % on the tank content. It is recommended to keep the pH value not below 6.7.

The impregnating bath must be stirred on working days for 30 min.

Hardening

Curing is possible in a closed oven with or without preheating.

Typical curing times:

at 150 °C - 2-4 h

at 130 °C - 3-5 h

at 110 °C - 5-8 h

The curing time commences once the object temperature has been reached.

Protection

Use in well ventilated area, avoid contact with skin and eyes and wear protective clothes. For more details see the technical data sheet.

Processing

Exemplary dipping process:

1. Dilute Aqua-Therm BC-367/832-D to the desired viscosity, thinning it with drinkable water. The recommended dilution is Aqua-Therm BC-367/832-D 100 p.b.w + tap water 30-40 p.b.w.
2. Dip the units into the varnish for 5 min. about.
3. Let it drain for 30 min.
4. Bake in the oven according to one of the following cycles:
 - 110 °C - 5-8 h
 - 130 °C - 3-5 h
 - 150 °C - 2-4 h

(Times must be taken when unit reaches the baking temperature)

Mechanical	Conditions	Values	Test method
Bond strength	25 °C	>180 N	IEC 61033
Bond strength	155 °C	>50 N	IEC 61033

Thermal	Values	Test method
Thermal class	H (180 °C)	MW 35-C

Liquid phase	Unit of measure	Conditions	Values	Test method
Colour			transparent	
Specific density	g/l		1020 ± 30	at 25 °C
Viscosity	s	at 25 °C	12-16	Ford Cup 4
Viscosity	s	at 25 °C	20-40	ISO Cup 3
Flashpoint	°C		> 95	Seta Closed Cup
pH-value			7.2 - 8.2	

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.

Updated 07/19



Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm	0.025 mm film	80	ASTM D-115

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