



- DATA SHEET -

AQUA THERM BC-380@
BC-380/870-D version
Class 180°C

DESCRIPTION

It is a water-based insulating varnish having bonding characteristics and chemical and electrical resistances similar to the polyester resins, with a low environmental impact. It is recommended for the impregnation of hermetic motors, laminations, transformers, stators, rotors and electrical devices.
It has the following outstanding characteristics:

- UL approved (File E 317427)
- Very good bond strength
- Very good abrasion resistance
- Very good resistance to moisture and chemicals
- Good flexibility
- Freon R22 resistant
- High flash point (> 100°C)

CHARACTERISTICS

Physical Properties

Appearance in the can	white
Specific gravity at 25°C.	1020±30 gr./lt
Viscosity Ford Cup n. 4/25°C.	14-24"
Viscosity Ford Cup n. 2/25°C	50-60"
Viscosity ISO Cup n. 3/25°C	50-80"
Diluent	Tap water
Flash point	> 100°C.

Electrical Properties

Dielectric strength (ASTM D-115)	2500±200 V/0,025 mm.
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Mechanical Properties

Bond strength (Helical Coil Test) ASTM D-2519 (test performed on MW 35 – double immersion and double curing 2 h a 150°C.)	Temperature	N at break
	25°C	170
	180°C	38

Chemical Properties

Refrigerant resistance/extractable	NEMA RE2	%	Freon R22 0,003%
Humidity test	ISO 6270-1980	hours	200 no blistering



APPLICATION

The product is suitable for the impregnation of :

Stators	Magnetic Laminations	Trasformers
Rotors	Coils	Electrical devices

The product can be used as supplied or diluted up to 70% with tap water depending on the final objects.

It is recommended to mix the product in the original container before use.

It is recommended to mix the product into the tank for some minutes twice a day to avoid sedimentation.

The following cycles are suggested as a starting point for the treatment of most units:

5 - 8 hrs at 135°C. (*)	3 - 5 hrs at 150°C. (*)	1,5-2 hrs at 170°C. (*)
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(*)Times must be taken after units reach the curing temperature).

For specific conditions, please consult with us.

GENERAL PROPERTIES

Compatibility with magnet wire coatings

AQUA THERM BC-380@ is compatible with most of the magnet wires available on the market. We suggest to run tests on the simple polyurethane coating only, being it the less resistant coating among all.

Storage stability

AQUA-THERM BC-380@ has a shelf-life of at least 10 months in its original closed containers, at room temp. (max. 30°C). Keep away from the sun light and from heat sources. Being a water-thinnable emulsion with a very low co-solvent content, this products suffers from cold and must be stored at temperatures included between 0 and + 30°C.

Warning: All the information and application instructions concerning this product are based on technical specifications that we consider reliable, and are provided by way of example, according to our application experience. They do not establish any guarantee but only represent a starting point subject to alterations, according to the application and the kind of material to be treated. Before the product's use the utilizer must determine the suitability for the intended use undertaking all risks and responsibility for whatever may happen in connection with the application. The producer and/or seller will not be considered responsible for any accident, loss or damage (immediate or consequent) originating from the use and/or the inability to use the concerned product. Albesiano Sisa Vernici srl reserves the right to change or modify at any time and without any notice the technical specifications of the product described in this data sheet.

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