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## AQUA-THERM BC-380/870-D

AQUA-THERM BC-380/870-D is a white, water-based varnish with low environmental impact.

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### Attributes

AQUA-THERM BC-380/870-D has the following features:

- UL approved
- very good bond strength
- very good abrasion resistance
- very good resistance to moisture and chemicals
- good flexibility
- Freon R22 resistant
- high flash point (over 100 °C)

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### Application

AQUA-THERM BC-380/870-D is mainly used for impregnation of:

- stators
- rotors
- transformers
- hermetic motors
- electrical devices
- laminations

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### Standards

- UL-approved, File OBOR2.E317427 and OBJS2.E317429
- Thermal class 180 °C acc. UL 1446

magnet wire Twisted Pairs  
MW35-C 180°C

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### Delivery forms

AQUA-THERM BC-380/870-D is supplied in 20 kg containers and 200 kg barrels.

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### Storage

Store in a cool dry place (max. 30 °C) away from direct sunlight. Protect from moisture and humidity. Shelf-life is 9 months when stored in closed original container at max. 30 °C. Being a water-thinnable emulsion with a very low co-solvent content, this product suffers from cold and must be stored at temperatures included between 0 and + 30 °C.

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.  
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## Hardening

Typical curing times:

- at 170 °C 2-4 h
- at 150 °C 3-5 h
- at 135 °C 5-8 h

Curing times after reaching the object temperature.

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## Protection

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

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## Processing

AQUA-THERM BC-380/870-D 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.

| Mechanical    | Unit of measure | Value | Conditions                    | Test method |
|---------------|-----------------|-------|-------------------------------|-------------|
| Bond strength | N               | >170  | 25 °C helical coil / MW 35-C  | IEC 61033B  |
| Bond strength | N               | >38   | 155 °C helical coil / MW 35-C | IEC 61033B  |

| Thermal       | Value      | test method |
|---------------|------------|-------------|
| Thermal class | H (180 °C) | MW 35-C     |

| Electrical          | Unit of measure | Value | Conditions              | Test method |
|---------------------|-----------------|-------|-------------------------|-------------|
| Dielectric strength | kV/mm           | >100  | 0.025 mm film thickness | ASTM D-115  |

| Liquid phase     | Unit of measure   | Value | Test method       |
|------------------|-------------------|-------|-------------------|
| Viscosity        | s                 | 35-80 | ISO Cup 3 / 25 °C |
| Flashpoint       | °C                | >100  | SETA closed cup   |
| Specific density | g/cm <sup>3</sup> | 1.04  | 25 °C             |

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