



## Waterborne epoxy insulation varnish

### Product Description

Waterborne epoxy insulation varnish FS7100 is composed of epoxy resin, specialty curing agent, water, etc. It is a one-component waterborne epoxy insulation system that has exceptional characteristics of cost-effectiveness, easy to use, easy maintenance, zero pollution and environmental-friendliness.

### Features

- Extremely low VOC waterborne epoxy insulation varnish
- Solvent-free
- Non-toxicity and low odor, spatters are easy to clean with water
- Excellent electrical performance and bonding strength

### Applications

Suitable for the insulation treatment of winding coils such as motor and transformer. Recommended processes are immersion and vacuum immersion.

### Typical Properties

Item	Test Condition	Unit	Value	Reference
Appearance	--	-	white lotion	GB/T 1981.2-2009
Viscosity	Paint #4 cups 23±2°C	S	20-30	
Thick layer curing	125°C±2°C×180min	-	S1U1I3	
Adhesion	--		0	GB/T 1981.1-2007
	Normal(23°C±2°C, 24h)	Ω·m	≥1.0×10 <sup>11</sup>	GB/T 1981.2-2009

<b>Volume resistivity</b>	Soaking(23℃±2℃, 24h)		≥1.0×10 <sup>8</sup>	
<b>Electric strength</b>	Normal(23℃±2℃)	MV/m	≥100	
<b>Bond strength</b>	N (Helical Coil Method)	N	≥150	GB/T 11028-1999

## Processing

- Workpiece requirements: dry, clean, and pollution-free
- Impregnation process: one-time immersion or continuous for 1-5 minutes
- Drip paint: dripping till the workpiece has no paint beads on it
- Drying conditions: 120~130℃ for 2~3 hours (according to the thickness and size of the motor, the drying time can be extended accordingly)

## Precautions

- Use stainless steel paint storage tanks, paint dipping tanks, and pipes to avoid water stains and rust.
- During immersion, the workpiece should not enter the immersion tank at high temperature, the internal temperature of the workpiece should be cooled to room temperature. And the temperature of the paint in the immersion tank should not exceed 40 ℃, high temperature may cause emulsion skinning easily.
- Avoid mixing oily, acid-base and other substances in to the immersion tank, these will affect the stability of water-based paint, and even cause demulsification to be scrapped.
- During the curing process, pay attention to the control of the oven temperature and time. If the recommended oven temperature and time cannot meet the drying requirement, it can be solved by increasing the oven temperature or prolonging the oven time.
- The air outlet of the oven should be unobstructed to facilitate the volatilization and discharge of water vapor, so as not to affect the curing speed of the insulation paint.

## Package

1000kg/IBC tank, 20kg/drum