



- TECHNICAL DATA SHEET -

SYNTHITE AC-43 CLEAR AIR DRYING VARNISH

DESCRIPTION

SYNTHITE AC-43 is a high temperature, modified polyester air drying varnish which is suitable for class H applications. SYNTHITE AC-43 air dries very quickly giving a very tough and flexible coating, and even faster drying times are possible with a short bake. It has the following outstanding properties:

- UL Recognized (file OBOR2.E317427 and OBJS2.E317429)
- Very fast air drying
- Excellent chemical resistance
- Solderable
- Excellent adhesion
- Good penetration

TYPICAL APPLICATIONS

Stators	Form Wound Coils	Transformers
Printed Circuit Boards	Resistors	Capacitors

CHARACTERISTICS

Physical properties	
Color	Clear
Density, @ 25°C	900±30 g/l
Viscosity, Ford Cup n. 4 @ 25°C	18-24"
Viscosity, ISO Cup n.4 @ 25°C	50-70"
Build up, D.F.T. (ASTM D-115-55)	75-100 µm
Air-drying time (on a copper plate)	Set to touch: 10'
Corrosive effects on copper	None

Electrical Properties	
Dielectric Strength (on 25 µm thickness dry film) ASTM D-115	2000 Volts
Dielectric Strength after 24h.dipping into water (on 25 µm thickness dry film)	1200 Volts
CTI according to IEC 60112	600 M

Thermal class according to UL 1446		
Magnet Wire	Twisted Pairs	Helical Coils
MW 24-C	155°C	155°C
MW 28-C	130°C	130°C
MW 35-C	180°C	180°C



Chemical resistance (on a 40 micron thickness dry film. Drying time 24h @ RT + 24h @ 60°C)			
ISO 2812 Method 2 168h exposure	Evaluation according to ISO 4628/2-3-4		
	Blistering	Rusting	Cracking
Water	0	0	0
Acid (10% Sulfuric Acid)	0	0	0
Alkali (1% Sodium Hydroxide)	0	0	0
Salt Water	0	0	0
Resistance to Transformer oil IEC 60296, ASTM D 115-55	Test Passed		
Corrosion resistance (salt spray) ISO 9277	200 h		
Humidity resistance, ISO 6270	72 h		

APPLICATION GUIDELINES

SYNTHITE AC-43 may be applied by dipping, brushing or spraying as supplied. It will air dry in 1 hour but can be baked to improve its chemical and oil resistance. A baking of 20-30 minutes at 150°C will provide a film with optimum toughness and bond strength.

For fast conveyor application, the following cycle is recommended:

1. Preheat units for 10 minutes at 110°C.
2. Dip into the varnish for 30 seconds.
3. Drain 10-20 minutes.
4. Bake 60-90 minutes at 110°C.

NB: For this type of cycle Synthite AC-43 should be diluted 10-15% with Dolph's T-200 thinner
The pre-heating, even if recommended, is not absolutely necessary

STORAGE AND STABILITY

Store in a cool dry place (max 30°C) away from direct sunlight. Protect from moisture and humidity.
Shelf life is 24 months when stored in closed original container at max 30°C.

HANDLING PRECAUTION

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

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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