



TECHNICAL DATA SHEET

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SYNTHITE® AC-43

CLEAR AIR DRYING VARNISH

PRODUCT DESCRIPTION

AC-43 is a high temperature; fast cure, air dry, modified polyester varnish. Perfect for dip or spray applications where a clean clear protective coating is needed over various electric apparatus.

FEATURES & BENEFITS

- Quick drying
- Toughness and flexibility
- Good penetration
- Heat resistant
- Fast cure cycles
- Solderable
- Acid and alkali resistant
- UL Systems to 180°C

TYPICAL APPLICATIONS

- Stator Windings
- Coils
- Transformers
- Printed Circuit Boards
- Resistors
- Capacitors

TYPICAL PROPERTIES

Physical

Appearance/Color	Clear/Amber
Density @ 77°F (25°C), Lbs/gal	7.0 -8.0
Viscosity @ 77°F (25° C), Brookfield Viscometer, cps	20 - 70
Film Build, mils/side, ASTM D-115	1 - 1.5
Flash Point, °F	54
Thinner (solvent)	T-200X
Air Drying Time on Copper Strip, ASTM D-115, Min.	Set to Touch Tack Free 10 60
VOC Content, ASTM D 6053, lbs/gal	4.3
Corrosive Effect on Copper	None

Electrical

Dielectric Strength, ASTM D115, volts/mil	Dry	2,000
	Wet	1,200

Chemical Resistance

Water	Excellent
Acid (10% Sulfuric Acid)	Excellent
Alkali (1% Sodium Hydroxide)	Excellent
Salt Water	Excellent
Oil, ASTM D-115	Passed

Thermal Class (UL-1446)

Twisted Pair	MW-24	155
	MW-28	130
	MW-35	180

APPLICATION GUIDELINES

AC-43 may be applied by brushing, dipping, or spray. It will air dry in one hour but can be baked to improve its chemical and oil resistance. A 10-15 minutes bake at 300°F will provide a film with optimum toughness and bond strength.

For fast conveyor operation, the following cycle is recommended. We recommend that all ovens be preheated prior to the units being preheated and/or cured.

NOTE: AC-43 should be thinned 15% by volume for this type of cycle.

1. Preheat 10 minutes at 300°F.
2. Dip 15 seconds, or until bubbles have stopped.
3. Drain 45 seconds.
4. Bake 5 minutes at 330°F.

STORAGE AND SHELF LIFE

Shelf life is one year from date of shipment from our plant, when stored in closed containers at 70°F or below.

1. Store in cool, dry place at 70°F/21°C or below.
2. Protect from direct sunlight and sources of heat
3. Keep away from heat, sparks and open flame.

SAFETY AND ENVIRONMENT

Avoid contact with skin and eyes. See Material Safety Data Sheet