



# 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**

<b>Appearance/Color</b>	<b>Light-Dark Amber</b>
<b>Density @ 77°F (25°C), Lbs/gal</b>	<b>7.0 – 8.0</b>
<b>Viscosity @ 77°F (25° C), Brookfield Viscometer, cps</b>	<b>20 – 70</b>
<b>Viscosity Dolph's viscosimeter @ 77°F</b>	<b>5 – 20 sec.</b>
<b>Film Build, mils/side, ASTM D-115</b>	<b>1 - 1.5</b>
<b>Flash Point, °F</b>	<b>54</b>
<b>Thinner (solvent)</b>	<b>T-200X</b>

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VOC Content, ASTM D 6053, lbs/gal		4.3
Corrosive Effect on Copper		None
Air Drying Time on Copper Strip, ASTM D-115, Min.	Set to Touch	10
	Tack Free	60

## 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 300°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

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