

# TECHNICAL DATA SHEET

# JOHN C. DOLPH COMPANY

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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 155°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 Tou Tack F	
VOC Content, ASTM D 6053, Ibs/gal	4.3
Corrosive Effect on Copper	None

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#### **Electrical**

Dialogtria Strongth ASTM D445 volta/mil	Dry	2,000
Dielectric Strength, ASTM D115, volts/mil	Wet	1200

#### **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

**AUTHORIZED DISTRIBUTOR** 

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