



TECHNICAL DATA SHEET

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SYNTHITE® AC-46

CLEAR AIR DRYING VARNISH

PRODUCT DESCRIPTION

AC- 46 is a high temperature; fast cure, air dry, moisture and fungus resistant, polyurethane varnish, and is an excellent conformal coating for all electrical and electronic parts. SYNTHITE® AC-46 is also available as **DOLPH - SPRAY® AC-46**.

FEATURES & BENEFITS

<ul style="list-style-type: none"> • Fungus resistant • Fast drying - units can be handled in 30 min • Versatile application (dip, brush or spray) • High temperature rating (155° C) • Excellent chemical resistance • Oil and moisture resistant • Excellent printed circuit board coating 	<ul style="list-style-type: none"> • Superior abrasion resistance • Good flexibility • UV tracer • Excellent adhesion • Excellent conformal coating for all types of electrical and electronics parts • Approved Under Mil Spec V-173-C-2
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TYPICAL APPLICATIONS

<ul style="list-style-type: none"> • Field Coils • Control Coils • Motor Frames • Switch Bases • Molded Bakelite • Electrical Connectors 	<ul style="list-style-type: none"> • Collector Rings • Fuse Tubes • Solenoid Coils • Controller Shafts • Printed Circuit Boards • Commutator Ends 	<ul style="list-style-type: none"> • Porcelain • Soldered Joints • Stators • Transformers • Buss bars • Junction Boxes and Cables
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TYPICAL PROPERTIES

Physical

Color/Appearance	Clear/Amber
Weight per Gallon @ 77°F (25°C), ASTM D 1475, lbs/gal	7.0 – 8.5
Viscosity, Brookfield @ 77°F (25°C), ASTM D 2196, cps	130 - 270
Thinner (solvent)	T-200X
Film Build, ASTM D 115, mils/side	1-1.5
Air Drying Time on Copper Strip, ASTM D 115, minutes	Set to Touch Tack Free 10 60
Federal Specification, TT-P-1436, Free of After-Tack, hr.	1
Flash Point, ASTM D 3278, °F	81°F
VOC Content, ASTM D 6053, lbs/gal	4.75
VOC-aerosol (calculated)	47%

All statements, technical information and recommendations related to Sellers' products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before using the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liabilities whatsoever in connection with such use. The statements contained herein are made in lieu of all warranties, expressed or implied. Seller shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or inability to use its products. The sole liability of John C. Dolph Co., Inc. for any claims arising out of the manufacture, use or sale of its products shall be for the buyer's purchase price.

Electrical

Dielectric Strength, ASTM D 115, volts/mil	Dry	1,800
	Wet	1,200

Chemical Resistance

Water, ASTM D 5638	Excellent
Acid (10% Sulfuric Acid), ASTM D 5638	Excellent
Alkali (1% Sodium Hydroxide), ASTM D 5638	Excellent
Salt Water, ASTM D 5638	Excellent
Oil, ASTM D 115	Passed
Corrosive Effect on Copper	None

Fungus Resistance, MIL-V-173C-2

Aspergillus Niger	Passed
Aspergillus Flavus	Passed
Penicillium Funiculosum	Passed
Trichoderma Sp	Passed

Thermal Class (UL-1446)

Twisted Pair	Magnet Wire MW28	Temp 130
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APPLICATION GUIDELINES

AC-46 may be applied by brush, dip or spray. It is used as supplied in many applications or may be thinned as required with T-200X. For spray applications, it is usual to thin 20 - 25%.

The film thickness should be kept to no more than 1.5 mils per application. This allows for complete solvent release and proper cure. AC-46 will air dry so that it can be handled in 30 minutes. For optimum chemical and abrasion resistance, allow to air dry for at least 24 hours.

SPECIAL SAFETY PRECAUTIONS

When AC-46 is applied by spray methods, care should be taken to keep the spray area clean. Filters and other waste from the area should be soaked in water and disposed of in safety containers.

STORAGE AND SHELF LIFE

Shelf life is one year from date of shipment from our plant, when stored in closed containers at 70°F/21°C 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

<p>AUTHORIZED DISTRIBUTOR</p>
