TECHNICAL DATA SHEET

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SYNTHITE® AC-41

CLEAR AIR DRYING VARNISH

PRODUCT DESCRIPTION

AC-41 is a high temperature; fast cure, air dry, polyurethane varnish, and is an excellent conformal coating for all electrical and electronic parts. It is especially recommended as a circuit board coating. SYNTHITE® AC-41 is also available in aerosol as **DOLPH - SPRAY® AC-41**.

FEATURES & BENEFITS

- Fast drying - Units can be handled in 30 minutes
- Ease of Application (dip, brush or spray)
- High temperature rating
- Excellent chemical resistance
- Oil and moisture resistant
- Superior abrasion resistance
- Excellent adhesion
- UL recognized systems

TYPICAL APPLICATIONS

- Field Coils
- Control Coils
- Motor Frames
- Switch Bases
- Molded Bakelite
- Electrical Connectors
- Collector Rings
- Fuse Tubes
- Solenoid Coils
- Controller Shafts
- Printed Circuit Boards
- Commutator Ends
- Porcelain
- Soldered Joints
- Finger Blocks
- Oil reservoir interior
- Buss bars
- Touch up overcoat

TYPICAL PROPERTIES

Physical

Color /Appearance		**Light-Dark Amber**
Density @ 77℉ (25 °C), Lbs/gal		**7.0 – 8.0**
Viscosity @ 77°F (25°C) Brookfield Viscometer cps		**125 – 275**
Flash point		**81°F (27°C)**
Cure Time @ 77°F (25°C) on Strip, min	**Set to Touch** **Tack Free**	**10** **30**
Film Build, mils/side, ASTM D-115		**1-1.5**
Thinner (Solvent)		**T-200X**
Federal Specification, TT-P-1436, Free of After-Tack		**1 Hour**
VOC-bulk, lb/gal **VOC-aerosol (calculated)**		**4.3** **47%**

Electrical

Dielectric Strength, ASTM D 115, \ volts/mil	**Dry** **Wet**	**2,000** **1,200**

Chemical Resistance

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

Thermal Class (UL-1446)

Twisted Pair	**MW - 28**	**130**

APPLICATION GUIDELINES

AC-41 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 spraying applications, it is usual to thin 20 - 25%.

The film thickness should be kept to no more than 1.5 mils per side per application. This allows for complete solvent release and proper cure. AC-41 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-41 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 (bulk) is one year from date of shipment from our plant, when stored in closed containers at 70℉ or below. Shelf Life (Spray) - 18 months @ 70℉ (21℃) or cooler.

1. Store in cool, dry place at 70℉/21℃ 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

JCD/ds/AC41.2/23/07