- TECHNICAL DATA SHEET -

SYNTHITE AC-46
CLEAR AIR DRYING VARNISH

DESCRIPTION

SYNTHITE AC-46 conforms to Military Specification MIL-V-173C, and to UL as Conformal coating and Insulation. It is a high temperature electrical insulator that dries very quickly to a tough and clear film. SYNTHITE AC-46 is an excellent coating for printed circuits boards and for all kinds of electrical and electronic devices; it provides excellent abrasion resistance, and a very good chemicals and moisture protection.
It has the following outstanding properties:

- UL homologation (files OBOR2.E317427, QMJU2.E317426 and OBJS2.E317429)
- Fungicidal
- Fast drying - Units can be handled in 30 minutes
- Easy application - It can be Applied by dip, brush or spray
- Easy quality check - Contains an UV tracer
- Excellent printed circuit board coating
- Superior chemical and abrasion resistance
- Excellent adhesion

TYPICAL APPLICATIONS

Printed Circuit boards	Resistors	Electrical connectors
Field coils	Control coils	Solenoid coils
Switches	Capacitors	

CHARACTERISTICS

Physical properties	
Color	Clear
Density, @ 25°C	900±30 g/l
Viscosity, Ford Cup n. 4 @ 25°C	50-65"
Viscosity, ISO Cup n.5 @ 25°C	60-90''
Build up, D.F.T. (ASTM D-115-55)	60-75 µm
Air-drying time (on a copper plate)	Set to touch: 10'
Corrosive effects on copper	None

Electrical Properties	
Dielectric Strength (on 25 µm thickness dry film) ASTM D-115	2000 Volts
Dielectric Strength after 24h.dipping into water (on 25 µm thickness dry film)	1200 Volts

Thermal class according to UL 1446	
Magnet Wire	Twisted Pairs
MW 28-C	130°C

ALBESIANO SISA vernici S.r.l. – Via Rigolfo, 73 - 10028 Trofarello (TO) – Italy
Tel. +39 011 6493111 – Fax +39 011 6493112 – E-mail info.albesiano@vonroll.com
Licenziataria per la produzione in Italia della JOHN C. DOLPH Co. Monmouth Junction – New Jersey - USA

Chemical resistance (on a 40 micron thickness dry film. Drying time 24h @ RT + 24h @ 60°C)			
ISO 2812 Method 2 168h exposure	**Evaluation according to ISO 4628/2-3-4**		
	Blistering	**Rusting**	**Cracking**
Water	0	0	0
Acid (10% Sulfuric Acid)	0	0	0
Alkali (1% Sodium Hydroxide)	0	0	0
Salt Water	0	0	0
Resistance to Transformer oil IEC 60296, ASTM D 115-55			Test Passed

Fungus resistance, MIL-V-173C-2	
Aspergillus Niger	Passed
Aspergillus Flavus	Passed
Penicillium Funiculosum	Passed
Trichoderma Sp.	Passed

APPLICATION GUIDELINES

SYNTHITE AC-46 may be applied by brushing, dipping or spraying. For many applications it can be used as supplied, but when required it can be diluted. Dilution for spray application is usually with 20-25% of Dolph's T-200; for conformal coating applications with automatic machines the dilutor is Dolph's T-200X.

The film thickness should be 40 microns maximum per each application in order to allow a complete solvent release and a proper cure. SYNTHITE AC-46 is air drying and it can be handled in 30 minutes. For optimum chemical and abrasion resistance, allow to dry in air for 24 hours at least.

Special precautions

When SYNTHITE AC-46 is applied by spray methods, care should be taken to keep clean the spraying area. Filters and other waste from the spraying area should be soaked in water and disposed off in safety containers. Due to their exothermic curing, droplets of overspray may generate huge amount of additional heat; take care on it.

STORAGE AND STABILITY

Store in a cool dry place (max 30°C) away from direct sunlight. Protect from moisture and humidity.
Shelf life is 24 months when stored in closed original container at max 30°C.

HANDLING PRECAUTION

Use in well ventilated area, avoid contact with skin and eyes and wear protective clothes.
For more details, see the SDS.

Warning: All the information and application instructions concerning this product are based on technical specifications that we consider reliable, and are provided by way of example, according to our application experience. They do not establish any guarantee but only represent a starting point subject to alterations, according to the application and the kind of material to be treated. Before the product's use the utilizer must determine the suitability for the intended use undertaking all risks and responsibility for whatever may happen in connection with the application. The producer and/or seller will not be considered responsible for any accident, loss or damage (immediate or consequent) originating from the use and/or the inability to use the concerned product. Albesiano Sisa Vernici srl reserves the right to change or modify at any time and without any notice the technical specifications of the product described in this data sheet.

File:	Issued on:	Updated on:	This document cancels and replaces all previous ones.
AC-46 eng	16.06.2012	17.06.2015	

ALBESIANO SISA vernici S.r.l. – Via Rigolfo, 73 - 10028 Trofarello (TO) – Italy
Tel. +39 011 6493111 – Fax +39 011 6493112 – E-mail info.albesiano@vonroll.com
Licenziataria per la produzione in Italia della JOHN C. DOLPH Co. Monmouth Junction – New Jersey - USA