



TECHNICAL DATA SHEET

JOHN C. DOLPH COMPANY

HI THERM[®] BC-346-A

CLEAR BAKING VARNISH

PRODUCT DESCRIPTION

BC-346-A is a specially formulated, high temperature varnish which can be used in a wide range of dip and bake applications.

FEATURES & BENEFITS

- Excellent flexibility
- Excellent adhesion
- High film build
- Superior wetting properties
- Military approval - Qualified under MIL-I-24092, Grade CB, Class 155
- UL recognized varnish in systems up to 220°

TYPICAL APPLICATIONS

- Transformers
- Stators
- Form Wound Coils
- Random Wound Coils
- Armatures
- Relays

TYPICAL PROPERTIES

Physical

Color/Appearance	Clear/Amber
Density @ 77°F (25°C), Lbs/gal	7.5 - 7.8
Viscosity @ 77°F (25°C), Brookfield Viscometer, cps	150 - 320
Flash Point, °F	54
Film Build, mils/side, ASTM D-115	2 - 3
Thinner (solvent)	T-200X
Corrosive Effect on Copper	None

Mechanical

Bond Strength, Helical Coil Method, lbs to break	@25°C	28
	@150°C	2.5

Electrical

Dielectric Strength ASTM D115, volts/mi	Dry	4,000
	wet	2,900

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	MW16	240
	MW24	155
	MW28	155
	MW30	180
	MW35	200
	MW76	180

APPLICATION GUIDELINES

Following is a suggested dip and bake cycle.

- Preheat parts to 250-325°F to remove moisture.
Note: If thermoset tapes are used, preset tapes according to tape manufacturer's recommendations.
- Cool to 130°-140°F
- Dip until bubbling stops (15-30 minutes).
- Drain between 5-20 minutes
- Bake in a preheated oven at recommended time and temperature

Suggested Bake Cycles*

- 1-2 hours @ 325°F
- 2-3 hours @ 300°F
- 2-4 hours @ 275°F

* Times are taken after unit reaches baking temperature

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.

- Store in cool, dry place at 70°F/21°C or below.
- Protect from direct sunlight and sources of heat
- Keep away from heat, sparks and open flame.

SAFETY AND ENVIRONMENT

Avoid contact with skin and eyes. See Material Safety Data Sheet.