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CentreTech@Service-Chimie.fr

FdT®2023



# TECHNICAL DATA SHEET

# JOHN C. DOLPH COMPANY

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# 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 and 180
- 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	Light-Dark Amber
Density @ 77°F (25°C), Lbs/gal	7.4 - 7.8
Viscosity @ 77°F (25°C), Brookfield Viscometer, cps	150 - 320
Flash Point, °F	54
Film Build, mils/side, ASTM D-115	1.0 – 3.0
Thinner (solvent)	T-200X or T-100
VOC Content, ASTM D 6053, lbs/gal	3.8
Corrosive Effect on Copper	None

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.





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#### Mechanical

Fiche technique

Bond Strength, Helical Coil Method, lbs to break	@25°C	28
	@150°C	2.5
Thermal Conductivity, ASTM C 3111, BTU-in./hr-ft <sup>2</sup> -°F		2.4

#### **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.	Suggested Bake Cycles*
1. Preheat parts to 250-325  to remove moisture.	1-2 hours @ 325℉
Note: If thermoset tapes are used, preset tapes according to	2-3 hours @ 300F
tape manufacturer's recommendations.	2-4 hours @ 275°F
2. Cool to I30°-140°F	
3. Dip until bubbling stops (15-30 minutes).	Times are taken after unit reaches baking temperature
4. Drain between 5-20 minutes	
5. Bake in a preheated oven at recommended	
time and 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.

- 1. Store in cool, dry place at 70 \(\mathbb{F}/21\)\(\mathbb{C}\) 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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