



# TECHNICAL DATA SHEET

**JOHN C. DOLPH COMPANY**

P.O. Box 267  
320 New Road  
Monmouth Junction, NJ  
08852

Ph:(732) 329-2333  
Fax:(732) 329-1143  
info@dolphs.com  
www.dolphs.com

## **HI-THERM<sup>®</sup> BC-359MS**

### **CLEAR BAKING VARNISH**

#### **PRODUCT DESCRIPTION**

BC-359MS is a ready to use varnish developed for motor shop applications. With its high temperature rating and solderability this varnish has no equal.

#### **FEATURES & BENEFITS**

- Superior moisture resistance
- Excellent abrasion and chemical resistance
- Prevents lead wire embrittlement
- Fast curing
- Low temperature cure (from 230°F)
- Economical

#### **TYPICAL APPLICATIONS**

- Armatures
- Generators
- Random Wound Devices
- Form Wound Coils
- Stators
- Transformers

#### **TYPICAL PROPERTIES**

##### **Physical**

<b>Color/Appearance</b>	<b>Clear/Amber</b>
<b>Density @ 77°F (25°C), Lbs/gal</b>	<b>7.0 – 8.0</b>
<b>Viscosity @ 77°F (25°C) Brookfield Viscometer, cps</b>	<b>20 - 80</b>
<b>Flash point</b>	<b>60°F (15°C)</b>
<b>Cure Time @ 230°F (110°C) in a 20 gram test cup, hours</b>	<b>2</b>
<b>Film Build, mils/side, ASTM D-115, mils/side/dip</b>	<b>0.25 - 1</b>
<b>Thinner</b>	<b>T-100</b>
<b>Corrosive Effect on Copper</b>	<b>None</b>

##### **Mechanical Properties**

<b>Bond Strength, Helical Coil Method, lbs to break</b>	<b>@150°C@25°C</b>	<b>28 3.5</b>
---------------------------------------------------------	--------------------	-------------------

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	3,000
	Wet	3,000

**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	220
	MW24	155
	MW28	130
	MW35	180
	MW76	180

**APPLICATION GUIDELINES**

<p><b>Following is a suggested dip and bake cycle.</b></p> <ol style="list-style-type: none"> <li>Preheat parts to 250-325°F to remove moisture. <i>Note: If thermoset tapes are used, preset tapes according to tape manufacturer's recommendations.</i></li> <li>Cool to 130°-140°F</li> <li>Dip until bubbling stops (15-30 minutes).</li> <li>Drain between 5-20 minutes</li> <li>Bake in a preheated oven at recommended time and temperature</li> </ol>	<p><b>Suggested Bake Cycles*</b></p> <p>1-2 hours @ 325°F  2-3 hours @ 275°F  3-4 hours @ 250°F  6-9 hours @ 230°F</p> <p>* <i>Times are taken after unit reaches baking temperature</i></p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**THINNING AND VARNISH MAINTENANCE**

BC-359MS may be thinned with either T-200X or T-100. (For *Rule 66* requirements, T-100 must be used.)

**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.
- Keep away from heat, sparks and open flame.

**SAFETY AND ENVIRONMENT**

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

AUTHORIZED DISTRIBUTOR