



TECHNICAL DATA SHEET

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DOLPHON[®] CC-1141

HIGH FLASH, SOLVENTLESS EPOXY MODIFIED RESIN

PRODUCT DESCRIPTION

CC-1141 is designed for both VPI and dip and bake applications, it offers the advantages of both epoxy and polyester resins. Its unique proprietary formulation allow for maximum stability and versatility.

FEATURES & BENEFITS

- Slightly Thixotropic —excellent impregnation
- Solventless
- High flash point
- Excellent coating appearance
- Superior electrical properties at elevated temperatures
- UL-approved Systems up to 220° C
- Use in Dip, Vacuum, VPI
- Moisture and chemical resistance
- Flexible
- Minimizes corrosion
- Excellent tank stability

TYPICAL APPLICATIONS

Rotors
Stators
Random wound coils
Armatures
Coils

Motors
Generators
Form wound coils
Transformers
Hermetic applications

TYPICAL PROPERTIES

Physical

Color/Appearance	Translucent
Density @ 77°F (25°C), Lbs/gal	9.8 - 10.2
Viscosity, Brookfield Viscometer, Model RVT, #3 Spindle @ 10 RPM, @ 77°F/23° C cps	1,500 - 3,000
Flash point, °F,	>200
Gel Time @ 212°F (100°C), minutes	110 -190
Film build, mils/side	1.5 - 2.5
VOC's, Industry Modified Method, 10 gm sample, #/gal (%)	1.0 (10)
Hardness, Shore D	50

Mechanical

Bond Strength, Helical Coil Method, lbs to break	@ 23°C	35
	@ 150° C	15

Electrical

Dielectric Strength, ASTM D-volts/mil	4,000
Dielectric Constant, ASTM D-150 1KHz, 50% RH, 23° C	2.5
Dissipation Factor, ASTM D-150, 1KHz, 50% RH, 23° C	0.008
Volume Resistivity, ASTM D-257, 50% RH, 23° C, ohm-cm	2×10^{16}
Surface Resistivity, ASTM D-257, 50% RH, 23° C, ohms	2×10^{14}

THERMAL CLASS (UL1446)

Twisted Pair	MW35	200
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APPLICATION AND CURE

Dip and bake cycle.

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

Suggested Bake Cycles*

- | | |
|-----------|----------|
| 1-3 hours | @ 350° F |
| 2-4 hours | @ 325° F |
| 3-5 hours | @ 300° F |

**Times are taken after unit temperature reaches baking.*

Vacuum Pressure Impregnation (VPI)

The following cycle has been established as a starting point for using CC-1141 in VPI systems. Adjustments may be required to obtain desired results with your specific application

1. Preheat the unit to 250°-325°F and allow the unit to cool to a temperature of 130 to 150°F.
2. Place the unit in the vacuum chamber and apply approximately 1 - 4 mm Hg dry vacuum for 30 -60 minutes. For form wound, coils use 20 minutes per half lap of tape.
3. Transfer the resin to the chamber still under vacuum. It is best to have the resin flow up around the unit from the bottom of the chamber. Allow the resin to cover the unit by a depth of at least 1 inch and maintain vacuum
4. for 20-60 minutes. Apply pressure of 80 - 90 psi for 30-120 minutes. For form wound coils, apply pressure for 15 minutes per half lap of tape. Release pressure. Remove the unit slowly from the resin. A rate of 4 inches per minute is recommended. Better drain will be obtained if the unit is suspended at an angle rather than level.
5. Bake at suggested bake cycles above.

EQUIPMENT RECOMMENDATIONS AND PRECAUTIONS

DOLPHON CC-1141 will react with copper, copper alloys, and natural rubber. Therefore, do not use these materials in the tank or recirculating system. Tanks should be constructed of black iron or stainless steel and flexible fittings should be made of synthetic rubber or plastic.

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.

ENVIRONMENTAL SAFETY

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

AUTHORIZED DISTRIBUTOR