



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

DOLPHON[®] CB-1130-EF

BLACK, FLAME RETARDANT, POLYBUTADIENE RESIN

PRODUCT DESCRIPTION

CB-1130-EF is formulated for potting, casting and coating electrical and electronic devices where a flexible, flame retardant material is required. This EF version is Environment friendly; it has an updated flame retardant ingredient.

FEATURES & BENEFITS

- Flame retardant - meets UL 94VO
- Very flexible
- Excellent hydrolytic stability
- Excellent chemical resistance
- Low shrinkage
- Low embedment stress - protects delicate components
- Repairable
- Excellent thermal shock resistance
- Fast cure
- Exceptional protection in harsh environments
- Excellent for stress relief type applications
- Excellent adhesion
- Very low exothermic reaction

TYPICAL APPLICATIONS

- Modules
- Sensors
- Relays
- Ground Fault Interrupters
- Ferrite Cores
- Transformers
- Amplifiers
- Power Supplies
- Coils
- Instrumentation
- Electronic Assemblies
- Connectors
- Junction Boxes
- Splice Filling
- Cable Repair
- Motors
- High voltage power supplies
- Power converters

TYPICAL PROPERTIES

Physical

	<u>CB-1130 EF</u>	<u>CB-1130 B</u>	<u>Mixed</u>
Color/Appearance	Black	Dark Amber	Black
Mix Ratio Parts by weight	100	10	
Density @ 77°F (25°C), Lbs/gal	10.5 – 11.0	8.9 – 9.3	10.4 – 10.9
Viscosity, @ 80°F (26°C) Brookfield HBF, cps	12,000 – 15,000	100 - 140	
Pot Life @ 70°F (21°C) minutes	NA	NA	20 – 30

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Mechanical (Cured with CB-1130 B)

Hardness, Shore A (after 7 days at room temperature cure)	55
Shrinkage, %	<0.01

Electrical

Dielectric Strength, 1/8" Specimen, volts/mil, ASTM D-149	1000
Surface Resistivity, ohms, ASTM D-257	3.0×10^{15}
Volume Resistivity, ohm-cm, ASTM D-150	6.0×10^{16}
Dielectric Constant @ 25°C, 60 Hz, ASTM D-150	2.29
Dissipation Factor @ 25°C, 60 Hz, ASTM D-150	0.0003

APPLICATION GUIDELINES

Preparing the Unit

1. For potting applications, assure that the parts, case or shell are clean and free of oil and grease.
2. For casting applications.
 - a) Assure that the mold is clean and dry.
 - b) Coat the mold with non-silicone mold release. If using a multi-part mold, be sure the mating surfaces are coated with release agent.

Preparing the Resin

Important: Before measuring or removing any filled resin or reactor from the shipping container, thoroughly mix in the container to redistribute the filler, which may have settled during shipping and storage.

1. Thoroughly stir CB-1130-EF in the container to assure uniform filler distribution. Measure resin and reactor according to the table below and place in a straight sided, round metal, glass or unwaxed paper container. Mix using a flat stick or spatula.
2. Mix 10 parts CB-1130 B into 100 parts CB-1130-EF by weight thoroughly, stirring to the bottom of the container and scraping the sides to assure a complete mix throughout.

Preparation of Unit:

1. Parts should be clean and free of oil and grease.
2. Mix resin.
3. Measure 100 parts CB-1130-EF and 10 parts CB-1130-B by weight.
4. Mix thoroughly to assure uniform compound.
5. Deaerate resin - This step critical in heat-accelerated applications
6. Pour resin into cavity or properly prepared mold.

Curing Process, Pot Life:

The pot life of CB-1130-EF is 20-30 minutes at 70°F. Initial cure occurs in 2-4 hours at 70°F, full cure in 24 hours. For faster cure, CB-1130-EF may be cured at 150°F for 2-4 hours. *Note:* Resin will be firm and tack-free after initial cure but may not reach ultimate hardness for several days. Typical hardness after 7 days is given.

STORAGE AND SHELF LIFE

The shelf life of CB-1130-EF is 12 months when stored at room temperature (70°F/21°C) or lower. Store in a cool, dry location. Keep away from direct sunlight and from heat sources. CB-1130-B is sensitive to moisture and it should be stored under the following conditions:

1. Tightly closed containers
2. Room Temperature
3. Dry location

Shelf life of CB-1130-B stored under these conditions is 6 months at 70°F from date of shipment

AUTHORIZED DISTRIBUTOR

ENVIRONMENTAL SAFETY

See Material Safety Data Sheet – 3/21/14