TECHNICAL DATA SHEET

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DOLPHON® CC-1120

ELASTOMERIC POTTING COMPOUND

PRODUCT DESCRIPTION

CC-1120 is a unique two-part, room temperature curing, potting compound with low viscosity and easy pourability.

FEATURES & BENEFITS

- Convenient mix ratio
- Easy mixing
- Low viscosity for easy pouring over sand or fillers
- Long pot life
- Room temperature cure with low exotherm
- Very low shrinkage
- Easy removal and repair
- Excellent electrical properties
- High resistance to degradation by heat or pressure
- Finished product can be used continuously at 150℃ and intermittently at temperatures up to 180℃
- No embedment stress
- Flexible at temperatures as low as -65℃
- Removable
- Repairable

TYPICAL APPLICATIONS

- Filling electromagnets
- Potting transformers
- Potting electronic modules
- Encapsulating thick film circuits
- Circuit boards
- Magnetic chucks
- Conformal coating

TYPICAL PROPERTIES

Physical

	CC-1120-A	CC-1120-B	Mixed
Appearance/Color	**Clear**	**Amber**	**Amber**
Density @ 77°F (25°C), Lbs/gal	**7.5 – 8.0**		
Viscosity, Brookfield Model RVT, Spindle #1, @ 77°F, cps	**1,800 – 2,200**		**1,400 -1,600**
Mix Ratio, weight (volume)	**100 (100)**	**25 (20)**	
Shrinkage during cure, %			**0.2**
Gel Time @ 212℉ (100 °C), minutes,			**8 – 12**
Pot Life @ 77°F (25°C), Hours (100 grams)			**2.5 - 3**
Cure Time, initial cure (full cure), Hours			**3 – 5**

Mechanical

Hardness, Shore A (After 7 Days @ 77°F)	**30 - 40**
Coefficient of Linear Thermal Expansion, in/in/℃	**4.0×10^{-6}**
Thermal Conductivity ASTM C 3111, BTU/hr/ft^2/℉/in	**2.2**
Typical Operating Temperature, °C	**130**

Electrical

Dielectric Strength, short time (volts/mil)	**620**
Surface Resistivity, (ohms), ASTM D-257	**3.12×10^{13}**
Volume Resistivity, (ohms, cm), ASTM D-257	**12×10^{14}**
Dissipation Factor, 60 Hz - ASTM D-150	**0.035**

APPLICATION AND CURE

1. Some units, such as transformers, require impregnation with a varnish to bond and moisture-proof the coil.
2. Since the insulating materials may contain a high percentage of moisture because of high humidity, units should be preheated or energized before filling with *Dolphon* CC-1120.
3. The compound should be mixed 100 parts of CC-1120-A to 20 parts of CC-1120-B hardener by volume. Materials should be measured carefully to maintain the proper ratio. Pot life of mixture is approximately **70 minutes** in quantities of 2 lb or greater, so material should be poured as soon as possible after mixing. Mix only enough material as can be poured in the period.
4. The compound should be poured slowly and carefully.
5. Pour down one side of unit so that material flows to the bottom of the container and fills from the bottom up, allowing minimum bubble formulation.
6. If level of compound is lower than required, topping with fresh material can be done at any time.
7. Material hardens in approximately 3 hours at room temperature. Compound cures in 24-26 hours at room temperature to the consistency of art gum. ***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

CC-1120 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 CC-1120-A and CC-1120-B stored under these conditions is 6 months @ 70º F or cooler.

ENVIRONMENTAL SAFETY

See Material Safety Data Sheet

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AUTHORIZED DISTRIBUTOR