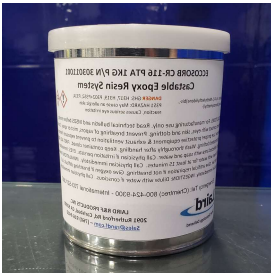


TWO PART CASTABLE LOAD ABSORBER



Eccosorb CR is a series of castable epoxy resins which can be used to mold waveguide terminations, attenuators, loads and other custom parts to finished size. When fully cured, these materials will duplicate the physical and electrical properties of the corresponding material in the Eccosorb MF series. For example Eccosorb CR-117 is the equivalent to Eccosorb MF-117. Due to their low outgassing properties, these materials are suitable for space applications.

FEATURES AND BENEFITS

- Castable
- Low outgassing

MARKETS

- Commercial Telecom
- Security and Defense

SPECIFICATIONS

TYPICAL PROPERTIES	ECCOSORB CR
Frequency Range	>1 Ghz
Service Temperature °C (°F)	<180 (<356)
Density (g/cm ³)	1.6 – 4.6
Thermal Expansion Coefficient per°C	30 x 10 ⁻⁶
Izod Impact, ergs/cm (ft-lb/in of notch)	1.6x10 ⁶ (0.3)
Water Absorption, % 7 days immersion	0.1
Flexural Strength, kg/cm ² (psi)	1050 (15,000)
Outgassing (%TML) (%CVCM)*	0.08-0.51 / 0.001-0.01

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

* Outgassing data per ASTM E595-07; criteria for acceptability is 1.00% TML and 0.10% CVCM.

APPLICATIONS

- Eccosorb CR can be used to mold waveguide terminations, attenuators, and loads to size.
- It can also be used to precisely pot small amount of absorber in or around areas of RF leakage.

AVAILABILITY

- CR-110, CR-112, CR-114, CR-116 and CR-117 are available as standard in Europe in 1 kg packaging. All grades are available in 1 and 2 kg packaging in NA as well as 5kg for CR-124.
- Eccosorb CR is supplied as a 2-part system, consisting of a Part A (resin) and Part B (catalyst) which need to be mixed

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Two-Part Castable Load Absorber

INSTRUCTIONS FOR USE

- Prepare mold by applying a thin coat of mold release wax.
- Mix Part A in its shipping container to a uniform consistency before removing any material.
- If crystals appear in part B, gently heat to 65°C (150°F) until crystals go into solution.
- Weigh out the desired amounts of both Part A and Part B in accordance with the table below.
- Heat Part A to about 65 °C(150°F). This will reduce the viscosity substantially and improve pourability. Note: in an effort to drop viscosity do not dilute with any chemical as this would alter the electrical performance of the material.
- Thoroughly blend Part A and Part B. Remove entrapped air, if necessary, by vacuum evacuation.
- Pour into mold (pot life at 65°C is about 30 minutes) and cure per the below schedule. The mold is also preferably preheated to about 65 °C.
- Clean up can be done with a solvent such as MEK.

Recommended Cure Schedule

Temperature	Cure Time
75 °C (167°F)	12 hours
90 °C (194°F)	4 hours
120 °C (248°F)	2 hours
150°C (302°F)	1 hour

Mix ratios and recommended frequency range are given in the table below:

Series	Range (Ghz)	Part A	Part B
CR-110	26+	100	16.5
CR-112	12-18	100	11.3
CR-114	10-14	100	6.5
CR-116	6-12	100	4.3
CR-117	4-8	100	3.2
CR-124	<5	100	2.6

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