

ECCOSORB[®] CFS-8480

Castable Silicone Rubber

Material Characteristics

- Flexible, ferrite filled, two-part, castable silicone rubber which exhibits high loss in the UHF and lower end of the microwave frequency range
- It is physically similar to ECCOSORB[®] CRS, but has quite different electrical properties making it much more useful in the UHF region and the lower microwave frequency range.
- Frequency range from 800 MHz - 18 GHz
- Dark Brown almost black in color

Applications

- ECCOSORB[®] CFS-8480 can be poured or painted on surfaces
- When applied, ECCOSORB[®] CFS-8480 can be used to reduce surface currents or lower the Q of cavities
- It has been cast into transmission line attenuators and terminators
- Has been used in medical applications as a molded RF Absorber

Availability

- ECCOSORB[®] CFS-8480 is supplied as a two Part system consisting of a Part A and Part B. Does not ship as a dangerous good
- ECCOSORB[®] CFS-8480 is available in 2 pound and 8 pound kits
- Can be supplied as a finished cast part
- Shelf life is approximately 6 months when stored unmixed in a well sealed container.

Instructions for Use

- Mix the ECCOSORB[®] CFS-8480 Part A in the container in which it is received using a power stirrer. This is to insure complete uniformity from top to bottom of the container
- Weigh out the desired amounts of Part A. To each 100 parts by weight of Part A, add 1 parts of Part B
- Mix thoroughly! Accurate weighing and blending are essential for proper and uniform cure.
- Pot life is about one hour after mixed
- Pour into cavity to be filled. If adhesion is required, apply a thin coat of Primer S-11 to the substrate and let dry for 30 minutes
- Cure for two hours at 90°C
- Where actual use temperature is anticipated above 121°C, a post cure is recommended. Gradually raise cast parts to the use temperature over an 8 hour or longer period

Typical Properties

Service Temperature, °F (°C)	<527 (<275)
Density, g/cm ³	2.8
Thermal Conductivity, (W/m-K)	0.73
Hardness, Shore A	65
Water Absorption, % 24 hours	<0.2
Dielectric Strength, (Kv/mm)	12
Volume Resistivity, ohm-cm	>10 ¹²
Mix Ratio by weight, A:B	100:1

Typical Attenuation (dB/cm)

600 MHz	1.0
1.0 GHz	2.0
3.0 GHz	7.6
8.0 GHz	11.5
10.0 GHz	9.5