

ECCOSORB® CFS-8480

CASTABLE SILICONE RUBBER

Description :

ECCOSORB® CFS-8480 is a castable, magnetically loaded, silicone rubber material that exhibits high loss in the UHF and lower end of the microwave 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.

Typical frequency range 800MHz – 18GHz

Application :

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.

Most notably used as a coating for magnetrons and klystrons to improve insulation resistance and stop voltage flashover.

It has been cast into transmission line attenuators and terminators.

It has been used in medical applications as a moulded RF absorber.

It has been used as a potting absorber to protect sensitive components connected to conductive strips.

Physical Properties :

	CFS-8480
Colour	Dark brown
Density (g/cm ³)	2,8
Thermal Conductivity (W/m-K)	0.73
Dielectric Strength (Kv/mm)	12
Volume Resistivity (ohm-cm)	10 ¹²
Water Absorption, % 24 hours	<0.2
Mix Ratio by weight, A:B	1000:9
Hardness (Shore A)	65
Maximum service temperature (°C)	275

Emerson & Cuming Microwave Products N.V.
Nijverheidsstraat 7A – B-2260 Westerlo – Belgium
Tel: +32 14 56 25 00 – Fax +32 14 56 25 01
sales@eu.eccosorb.com - www.eccosorb.com



ECCOSORB® CFS-8480

CASTABLE SILICONE RUBBER

Electromagnetic Properties :

Frequency	Typical Attenuation (dB/cm)
600MHz	1.0
1.0 GHz	2.0
3.0 GHz	7.6
8.0 GHz	11.5
10.0 GHz	9.5

Availability :

ECCOSORB CFS-8480 is supplied as a two component kit consisting of a Part A (resin) and Part B (catalyst).

The material is available in 1kg and 4 kg kits.

The material can also be supplied as a finished cast part by in-house moulding techniques.

The shelf life is approximately one year when stored unmixed in a well sealed container.

It can be shipped as a non-dangerous good.

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 1000 parts by weight of Part A, add 9 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 to the substrate and let dry for 30 minutes.

Cure for two hours at 90 °C.

Where design temperature is anticipated above 120 °C, a post cure is recommended.

Gradually raise cast parts to the design temperature over an 8 hour or longer period.



Safety Considerations: It is recommended to consult the EMERSON & CUMING MICROWAVE PRODUCTS product literature, including material safety data sheets, prior to use EMERSON & CUMING MICROWAVE PRODUCTS products. These may be obtained from your local sales office.

WARRANTY: Values shown are based on testing of laboratory test specimens and represent data that falls within the normal range of properties of the material. These values are not intended for use in establishing maximum, minimum or ranges of values for specification purposes. Any determination of the suitability of the material or any use contemplated by the user and the manner of such use is the sole responsibility of the user who must assure that the material as subsequently processed meets the needs of this particular product or use. We hope the information given here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification but we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale INCLUDING THOSE LIMITING WARRANTIES AND REMEDIES which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions nor do we intend them as a recommendation for any use which would infringe any patent or copyright.

2007/11 - V02/1

Emerson & Cuming Microwave Products N.V., Nijverheidsstraat 7A, B-2260 Westerlo, Belgium.

ECCOSORB, ECCOSTOCK, ECCOSHIELD, ECCOLENS, ECCOPAD are registered trademarks of EMERSON & CUMING MICROWAVE PRODUCTS N.V.