



# **ECCOSHIELD® VY**

General Purpose RF Conductive Caulking Compound and Sealer

#### **Material Characteristics**

- ECCOSHIELD® VY is a single-component, electrically conductive, non-hardening compound of metallic particles
- When properly applied, ECCOSHIELD® VY will exhibit a dramatic improvement in virtually any RFI situation. It assures long-term integrity of the shielding enclosure and will prevent corrosion in the contact area
- ECCOSHIELD® VY is effective over the entire useful radio and microwave frequency range for magnetic fields, electric fields, and plane waves
- Due to high tack and non-hardening characteristics, ECCOSHIELD® VY will function under vibration and displacement due to temperature changes
- ECCOSHIELD® VY is fast and economical to use

## **Applications**

- ECCOSHIELD® VY is specifically designed for use on radio frequency shielded structures, cabinets, conduits, seams, threads, and other components to ensure containment or exclusion of RF energy
- Sealing the seams of equipment cabinets by forcing ECCOSHIELD<sup>®</sup> VY into the seams. Vibration or handling will not affect the material since it remains in a plastic state
- Corrugated sheet metal buildings are made tight (RF and weather seal) by caulking with ECCOSHIELD®
  VY
- Removable cover plates are readily gasketed by an application of ECCOSHIELD® VY prior to bolting. They can easily be removed from time to time since ECCOSHIELD® VY does not harden
- Conduit threaded joints are made RF tight by the application of a small amount of ECCOSHIELD® VY to the threads prior to tightening. The conduit fittings can be unthreaded easily

### Shipping & Availability

- ECCOSHIELD® VY is sold by the pound and packaged in small (4 oz.) glass jars
- ECCOSHIELD® VY ships as a hazardous material: Class 3 Flammable, UN1866, PG II
- Upon special request ECCOSHIELD<sup>®</sup> VY can be supplied in a small plastic syringe for extruding small diameter beads

### **Typical Properties**

Service Temperature, °F (°C)	-40 to 550 (-40 to 288)
Density	4.9 g/cc
Volume Resistivity	0.001 ohm-cm
Typical Insertion Loss at Caulked Joint	>100 dB
Length of 1/8" (0.32 cm) dia. bead/lb	50 ft. (15 m)
Shelf Life	6 months

#### Instructions for Use

- For best results, the material should be applied at room temperature (minimum 68°F, 20°C).
- ECCOSHIELD® VY can be used with conventional caulking equipment to develop fast and uniformweight beads. ECCOSHIELD® VY can also be applied by spatula, putty knife, plastic syringe applicators, or other suitable tools such as caulking guns. For spatula application, small amount of methyl ethyl ketone (MEK) can be added to adjust consistency
- All surfaces for application should be prepared by removing rust, scale, non-conductive oxides and dirt.
  Wire brushing and/or solvent cleaning is usually adequate. Surfaces should be bright and electrically conductive
- Apply ECCOSHIELD® VY to the prepared surface using a syringe, caulking gun, or spatula. Lap joints may be made immediately. Excess and spillage may be collected and reused
- Hardened or thick material can be reactivated by the addition of small amounts of methyl ketone
- For cleanup, acetone or trichloroethylene are suitable
- <u>Caution:</u> ECCOSHIELD® VY contains flammable solvents. Keep away from heat and open flames. When not in use, keep sealed to avoid evaporation. The handling of these products should present no problems if ordinary care is exercised to avoid breathing vapors, the skin is protected against contamination, swallowing is avoided, and eyes are protected

EMERSON & CUMING MICROWAVE PRODUCTS, INC., 28 York Avenue, Randolph, MA 02368 / Telephone (781) 961-9600. <u>Use of Information and Material</u>: Values shown are based on testing of laboratory test specimens and represent data that falls within normal range 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 for any purpose contemplated by the user and the manner of such use is the responsibility of the user. The user should determine that the material meets the needs of the user's product and use. We hope that 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. Emerson & Cuming Microwave Products Inc.

Revision: 5/11/07 <u>www.eccosorb.com</u> **\$1** 

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>Laird Performance Materials</u>: 304010003