

# ECCOSHIELD<sup>®</sup> VX

ONE COMPONENT CONDUCTIVE COMPOUND FOR CAULKING

## Description :

Eccoshield VX is a single-component conductive paste formulated with a high concentration of silver-plated copper particles in a hydrocarbon resin.

When properly applied to the seams of an enclosure or to the threads of conduit, it is possible to achieve insertion losses in excess of 100 dB from 200 kHz through 10 GHz.

Eccoshield VX as a thread compound is in accordance with the following MIL Standards:

MIL-A-18123 (ships), MIL-E-4957A (ASG), and MIL-STD-285 on 6 inch (15 cm) diameter electric conduit.

Eccoshield VX will not harden in time; it is completely non-reactive, and there are no corrosion problems.



## Application :

Eccoshield VX is specifically designed as an effective caulking and sealing compound used to assure the RF integrity of structures.

When used as a pipe-thread compound in conduit, Eccoshield VX assures a completely water-tight, air tight, and RF-tight joint.

When Eccoshield VX is applied as a coating it will actually protect certain surfaces.

## Physical Properties

	VX
Colour	Silver-black
Volume resistivity (Ohm.cm)	<0.05
Typical Insertion Loss at caulking joints (dB)	>100
Specific Gravity	4.9
Length of adequate seam bead per kg (m)	16
Service Temp (°C)	-60 to +120

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## CONDUIT SHIELDING

Insertion Loss in dB			
	Bare Treads	Treaded with VX compound	Welded
200 kHz (magnetic)	35	>110	>110
1 MHz (magnetic)	46	>130	>130
1 MHz (electric)	>110	>110	>130
10 MHz (magnetic)	54	>120	>130
10 MHz (electric)	>110	>120	>130
450 MHz		>110	110
1000 MHz	60	100	95

Tests show that when Eccoshield VX is used as a thread compound in conduit, shielding effectiveness is comparable to that achieved in all-welded construction

**Availability :**

Eccoshield VX is available in 100g and 400g containers.

**Instructions for use :**

Eccoshield VX is a simple conductive sealer to use.

To assure uniformity, mix Eccoshield VX in the container in which it was received.

Clean the surfaces or threads to which it will be applied using a wire brush.

Apply sufficient material so that a small amount is squeezed out. The excess can be returned to the container and reused.

To caulk an already assembled joint, run a bead along the joint and force the material into the seam with a spatula or putty knife.

For cleanup, any commonly used solvent such as toluene or MEK (methyl ethyl ketone) can be used.



**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.

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