



# ECCOCOAT<sup>®</sup> CC 40 A

## Elastomeric, One Component, Silver Filled, Conductive Coating

Key Feature:	Benefit:
<ul style="list-style-type: none"> <li>Elastomeric</li> </ul>	<ul style="list-style-type: none"> <li>Provides conductive coating for substrates subjected to flexing or stretching</li> </ul>
<ul style="list-style-type: none"> <li>One component</li> </ul>	<ul style="list-style-type: none"> <li>Ease of use</li> </ul>
<ul style="list-style-type: none"> <li>Silver filled</li> </ul>	<ul style="list-style-type: none"> <li>Ultimate electrical conductivity</li> </ul>

### Product Description:

ECCOCOAT CC 40 A is an elastomeric, silver filled, one component surface coating. A film of ECCOCOAT CC 40 A will stretch over 100% thus making it particularly useful when the substrate to which it is applied is subjected to flexing or stretching.

### Applications:

ECCOCOAT CC 40 A is designed for use in a variety of electrical and electronic applications including RFI shielding, radar reflection, formation of ground planes and heat sinks.

### Instructions For Use:

Thoroughly read the information concerning health and safety contained in this bulletin before using. Observe all precautionary

### Properties of Material As Supplied:

Property	Test Method	Unit	Value
Chemical Type			Solvent based elastomer
Appearance	Visual		Silver liquid
Density	ASTM-D-792	g/cm <sup>3</sup>	2.1
Flash Point	ASTM D 93	°C °F	5 40
Coverage		cm <sup>2</sup> /gm/mil	170

### Dry Schedule:

Dry at the recommended cure schedule. Allow the wet film to air dry or force dry for 30 minutes at 66 to 95°C. If additional coats are required, allow 30 minutes drying time between coats.

Temperature	Dry Time
°C	Time (hours)
25	4

statements that appear on the product label and/or contained in individual Material Safety Data Sheets (MSDS).

To ensure the long term performance of the coated assembly, complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt, and oils which can cause poor adhesion or corrosion in a coated part. For information on proper substrate preparation, refer to the reprint "Good Adhesive Bonding Starts With Surface Preparation" available from Emerson & Cuming.

Some filler settling is common during shipping and storage. For this reason, it is recommended that the contents of the shipping container be thoroughly mixed prior to use.

ECCOCOAT CC 40 A may be applied by brushing, spraying, dipping, screen printing, or roll coating. A thin coat on non-porous surfaces is usually adequate. Air dry is customary but oven cure is fast and results in slightly lower resistivity. As the film of coating is stretched, resistance increases.

Adjustment to proper consistency is achieved by the addition of toluene or xylene.

"Our service engineers are available to help purchasers obtain best results from our products, and recommendations are based on tests and information believed to be reliable. However, we have no control over the conditions under which our products are transported to, stored, handled, or used by purchasers and, in any event, all recommendations and sales are made on condition that we will not be held liable for any damages resulting from their use. No representative of ours has any authority to waive or change this provision. We also expect purchasers to use our products in accordance with the guiding principles of the Chemical Manufacturers Association's Responsible Care<sup>®</sup> program."

**Properties of Material After Application:**

Property	Test Method	Unit	Value
Temperature Range of Use		°C	-55 to +95
Sheet Resistivity @ 25°C	TP 238	Ohm/square/mil	0.05

\*\*TP"s are internal test procedures, typically derived from ASTM or other norms. Copies of these test procedures can be obtained upon request.

**Storage and Handling:**

The shelf life of ECCOCOAT CC 40 A is 6 months at 25°C. For best results, store in original, tightly covered containers. Storage in cool, clean and dry areas is recommended. Usable shelf life may vary depending on method of application and storage conditions.

**Health and Safety:**

The ECCOCOAT CC 40 A is considered a flammable material. Like most industrial compounds, this product possesses the ability to cause skin and eye irritation upon contact. Handling this product at elevated temperatures may also generate vapors irritating to the respiratory system. This product should be kept away from all flame, spark and heat sources, and must be used only with proper exhaust ventilation. Overexposure to vapors may result in central nervous system effects; symptoms may include headache, dizziness, or in extreme cases, loss of consciousness.

Good industrial hygiene, ventilation and safety practices should be followed when handling this product. Proper eye protection and appropriate chemical resistant clothing should be worn to minimize direct contact. Consult the Material Safety Data Sheet (MSDS) for detailed recommendations on the use of engineering controls, flammability precautions and personal protective equipment.

*This information is only a brief summary of the available safety and health data. Thoroughly review the MSDS for more complete information before using this product.*

**Attention Specification Writers:**

The values contained herein are considered typical properties only and are not intended to be used as specification limits. For assistance in preparing specifications, please contact Emerson & Cuming Quality Assurance for further details.

**Medical Implantable Disclaimer**

"In the event this product is intended by you for use in implantation in the human body, you are hereby advised that National Starch (or Emerson & Cuming) has not performed clinical testing of these materials for implantation in the human body nor has National Starch (Emerson & Cuming) sought, nor received, approval from the FDA for the use of these material in implantation in the human body. It is YOUR responsibility, as a manufacturer of any such device, to ensure that all materials and processes relating to the manufacture of any medical device fully comply with all applicable federal, state and local laws, rules, regulations and requirements as well as any such laws, rules, regulations, directives or other orders of any foreign country where such product is sold. If you have not undertaken the necessary investigations to ensure compliance you are advised NOT TO USE this product in the manufacture of any device which is to be implanted in the human body. No representative of ours has any authority to change the foregoing provisions."



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