Electrodag® 112

Conductive Graphite Anti-Static Shield Coating

DESCRIPTION

Electrodag 112 is one of a series of Electrodag coatings designed to provide controlled electrical properties.

Electrodag 112 is an air-drying graphite coating of unusually high conductivity. It provides excellent static bleed properties and acts as a protective energy absorbing layer. It also offers good shielding performance (30 to 50 db over 50 to 450 Mhz) at a coating thickness of 2 mils.

Electrodag 112 is water-based and particularly useful in solvent-prohibited areas.

TYPICAL APPLICATIONS

- EMI shielding of plastic cabinetry for:
  - Matrix printers
  - Computers
  - Sensitive electronic instruments
- Control of electrostatic discharge
- Conductive protective coating on metals and plastics

TYPICAL PROPERTIES

(as supplied)

- Pigment: graphite
- Binder: acrylic
- Diluent: none
- Color: black
- Density: 9.7 lb/gal (1.2 kg/l)
- Solids content by weight: 32%
- Theoretical coverage: 380 sq ft/gal @ 1 mil (8.03 m²/kg @ 25 µm)
- VOC: 0.92 lb/gal (110 g/l)
- Viscosity: 1,000 mPa·s (#3 Brookfield spindle, 20 rpm)

TYPICAL PROPERTIES

(when dry)

- Color: black
- Service temperature: 350°F (177°C)
- Sheet resistance: < 50 ohms/square @ 1 mil
- Pencil hardness: 2H

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guaranty of their accuracy is made. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the American Chemistry Council® program.
APPLICATION DETAILS

Surface Preparation
Make sure substrate is clean, dry, and free from dust.

Mixing/Dilution
Do not dilute. **Electrodag 112** is supplied ready for use. Before using, stir product thoroughly or use a slow speed propeller to mix until product is uniform. Do not use a paint shaker or other high-shear mixer as this could flocculate the product.

Application
To apply, use standard product spray equipment. For small areas, use a suction cup gun. Production runs are best handled with propeller-agitated pressure pot systems.

A coating thickness of 2 mils is recommended for optimum electrical properties.

Drying
Air dry until all water has flashed off. **Electrodag 112** air dries to touch in 20 minutes, to handle in 25 minutes, depending on humidity. It will continue to toughen for a 24-hour period after application. **Electrodag 112** can also be force dried at temperatures up to 160°F (71°C).

STORAGE/SHIPPING HANDLING
Shelf life for this product is 24 months from date of qualification under original seal. Keep from freezing. Keep container tightly closed when not in use. Store in a cool, well ventilated area. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even after container is emptied.

APPLICATION ASSISTANCE
Acheson’s **Application Specialists** are available to assist you in production start-up with **Electrodag 112**. For more information, contact Acheson Colloids Company, (800) 255-1908, or visit our website at www.achesonindustries.com for the Acheson global location nearest you.

HEALTH & SAFETY
Harmful if swallowed, inhaled, or absorbed through skin. May cause eye irritation. Wash thoroughly after handling. Keep container tightly closed when not in use. Use with adequate ventilation. Avoid breathing vapor. See Acheson’s Material Safety Data Sheet for proper first aid instructions.

NOTE
Electrodag is a registered trademark of Acheson Industries, Inc.