

DESCRIPTION

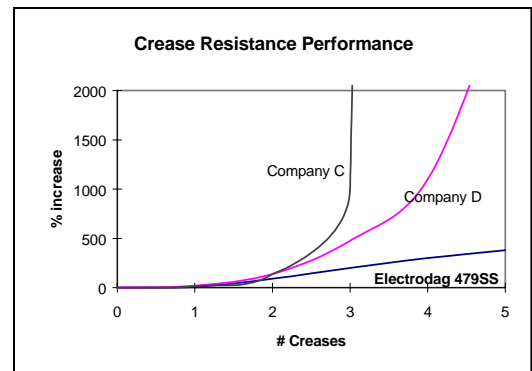
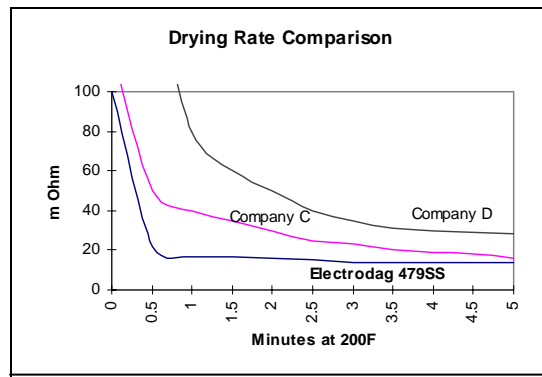
Electrodag 479SS is a conductive, silver-based polymer thick film ink specifically designed to be screen printed on membrane switches.

TYPICAL APPLICATIONS

Membrane Switches Flexible Circuitry Display Devices

TYPICAL ADVANTAGES

- Fast drying
- Excellent abrasion resistance and hardness
- Excellent creasability
- Excellent fine line printing
- Extended screen residence time
- Very low sheet resistance
- Superior adhesion to polyester film



TYPICAL PROPERTIES (of wet product)

- | | |
|--------------------------|---|
| Pigment | : Silver |
| Binder | : Thermoplastic |
| Solvent | : Carbitol acetate |
| Solids content by weight | : 74.6% typical |
| Color | : Silver |
| Density | : 21.4 lbs/gal (2.56 kg/l) |
| Flash point | : 230°F (110°C) Tag closed cup |
| Pencil hardness | : 2H |
| Viscosity | : 12,000 mPa's, RVT 20 rpm, #6 spindle following 5-minute shake 3-hour rest |
| VOC | : 5.45 lbs/gal (653 g/l) |

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.

**TYPICAL
PROPERTIES**
(as cured)

Coverage	: 565 sq ft/gal @ 1 mil (5.87 m ² /kg @ 25 μm)
Sheet Resistivity	: typically <0.02 ohm/sq/mil
Maximum service temperature	: 392°F (200°C)

**APPLICATION
DETAILS**

This product is applied by standard screen printing techniques.

Mixing/Blending/Dilution

Electrodag 479SS is supplied ready for use. Should thinning become necessary, dilute 2% by weight with carbitol acetate. **Electrodag 479SS** should be gently stirred prior to use. The dried film thickness and final resistance is influenced by a number of factors including screen mesh size, squeegee material, screen material, and emulsion thickness.

Application

Recommended thickness	: 0.3-0.5 mil dried (7.5-12.5 μm)
Emulsion thickness	: 0.8-1.5 mils (20-38 μm) solvent-resistant emulsion
Screen type and mesh	: monofilament polyester—157 to 280 mesh stainless steel—165 to 325 mesh
Squeegee type	: polyurethane or other solvent-resistant material— 60-70 durometer for polyester screens 70-80 durometer for stainless steel screens

Curing

Electrodag 479SS can be cured at 200°F (93°C) for 15 minutes to achieve typical properties. Higher temperatures and longer durations improve conductivity and film properties.

Cleanup

To clean screen and equipment, use a 25% carbitol acetate 75% MEK blend.

**STORAGE/SHIPPING
HANDLING**

Store **Electrodag 479SS** at temperatures below 90°F (32°C) Keep from freezing. Keep container tightly closed when not in use. Store in a cool, well-ventilated area. Keep away from heat, sparks, and open flame. Protect material from direct sunlight. Shelf life is 12 months from date of qualification under original seal. Ground and bond containers when transferring materials. 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 479SS**. 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

This product contains carbitol acetate. Harmful if swallowed, inhaled, or absorbed through skin. May cause eye irritation. Wash thoroughly after handling. Keep away from heat, sparks, and open flame. 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.