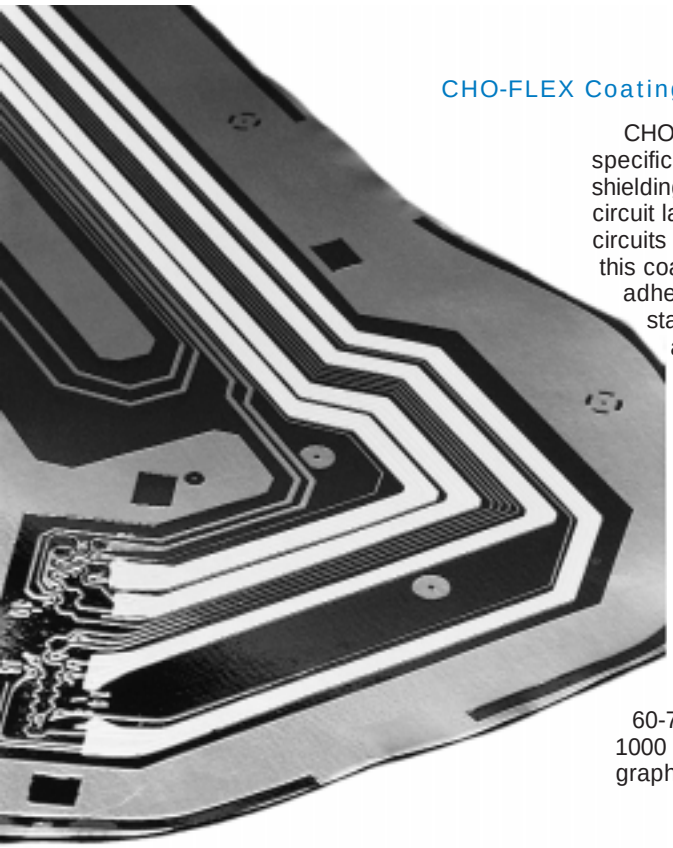
CHO-FLEX™ Conductive Coatings and Inks



CHO-FLEX Coatings and Flexible Inks

CHO-FLEX 601 coating is specifically designed for EMI shielding of copper/Kapton† flexible circuit laminates and for printing circuits on Kapton film. Upon cure, this coating exhibits excellent adhesion and flexibility, thermal stability, high conductivity, and superior peel strength. CHO-FLEX 601 coating can be sprayed or silkscreened, and will withstand wave solder temperatures above 500°F (260°C) without losing any of its exceptional properties.

CHO-FLEX 602 is a two-component silver-filled polyurethane coating designed for room temperature or oven cure. This flexible coating provides 60-70 dB of shielding from 100 to 1000 MHz on epoxy/glass or epoxy/graphite composites with surface resistance of 0.060 ohm/square. CHO-FLEX 602 coating can be sprayed on large panels, cured at room temperature and coated with most military grade urethane or epoxy top coats. It can also be sprayed on most thermoplastic enclosures such as PPO, ABS, polystyrene and polycarbonate.

CHO-FLEX Polyester Inks

CHO-FLEX polyester inks were developed for the membrane keyboard and sensor industries. The inks bond to Mylar† films, and can be creased, heat-formed or scratched without affecting their performance. Pure silver-filled CHO-FLEX 4430 ink offers surface resistivity of 0.08 ohm/square at 0.0005 inch (0.001 cm) thickness. Silver-tin CHO-FLEX 4432 exhibits a surface resistivity of 0.25 ohm/square at 0.0005 inch (0.001 cm). Both coatings cure at moderate temperature 250°F/121°C for 30 minutes, which eliminates the need for stabilized Mylar.

† Trademark of DuPont Company, Wilmington, DE.

Ordering Information

Product	Ordering Part Number	Unit/Size
CHO-FLEX 601	52-01-0601-0000	1 pound (0.5 kg)
CHO-FLEX 602	52-01-0602-0000	1 pound (0.5 kg)
CHO-FLEX 4430	55-01-4430-0000	1 pound (0.5 kg)
CHO-FLEX 4432	55-01-4432-0000	1 pound (0.5 kg)

Note: Custom packaging can be accommodated. Please inquire.

Every shipment of Chomerics' conductive compounds is accompanied by a *Certificate of Conformance* to Chomerics specifications. Additional test reports can be obtained for a service charge. Quality control procedures conform to MIL-I-45208.

Specifications and Product Characteristics
(Contact Chomerics for complete specifications and test procedures)

CHO-FLEX Inks	601	602*	4430	4432
Binder	poly-urethane	poly-urethane	polyester	polyester
Filler	Ag	Ag	Ag	Ag, Sn
Consistency	Thixotropic paste	Thixotropic paste	Thixotropic paste	Thixotropic paste
Typical Density	1.67	2.10	3.80	3.80
Maximum Surface Resistivity, ohm/sq.	0.05	0.06	0.08	0.25
Use Temperature	>225°F (>107°C)	–65 to 225°F (–54 to 107°C)	–65 to 185°F (–54 to 85°C)	–65 to 185°F (–54 to 85°C)
Cure Cycle	1.5 hrs. @ 360°F (182°C)**	1 wk. @ 77°F (25°C)	0.5 hr. @ 250°F (121°C)	0.5 hr. @ 250°F (121°C)
Shelf Life, mos.	6	6	9	9
Coverage, $in.^2$ (m^2)***	4320/lb (401.33)	4320/lb (401.33)	3000/lb (278.71)	3000/lb (278.71)

* Two-part system; mix ratio by weight 100:13.

** Flexible circuit cure cycle: 4-5 min. @ 325°F (163°C) initial cure; 90 min. @ 360°F (182°C), 400 psi (2.76 MPa) press cycle; 3-4 sec. @ 500°F (260°C) wave solder.

*** Theoretical coverage. Actual coverage will be 50-100% of this value, depending on part geometry, operator skill, etc.

CHOMERICS **Tel:** 781-935-4850 **FAX**: 781-933-4318 Parker Seals