

# CHOMERICS CONDUCTIVE COMPOUNDS PRODUCT LINE MATRIX

Table 1 - Typical Properties for Conductive Adhesives and Sealants

Product	Filler	Resin Type (Parts)	Specific Gravity	Max. Volume Resistivity (ohm-cm)	Lap Shear Min. (psi/kPa)	Elevated Temp. Cure Cycle Time @ °F (°C)	RT Cure Time	Working Life	Shelf Life @ RT (mos.)	Recommended Primer	Application	Comments
<b>CONDUCTIVE EPOXY ADHESIVES</b>												
584-29	Ag	epoxy (2)	2.5	0.002	1200/8274	0.25 hr. @ 235°F (113°C)	24 hrs.	30 min.	9	N/A	Bonding enclosures, connector shielding	General purpose, light paste, fast heat/RT cure, 30 min. pot life, 0.025 - 0.127 mm bond lines, available in easy mix packs & syringes
584-208	Ag	epoxy (2)	2.7	0.005	700/4826	0.75 hr. @ 212°F (100°C)	24 hrs.	1 hr.	9	N/A	Bonding enclosures	General purpose, medium paste, fast heat/RT cure, 1 hr. pot life, easy 1:1 mix ratio (wt.), 0.025 - 0.127 mm bond lines
8116	Ag	epoxy (2)	2.3	0.001	1400/9653	30 min. @ 212°F (100°C) & 24 hr. @ RT	N/A	45 min.	15	N/A	Bonding enclosures	Epoxy solder, accelerated heat cure only, 45 min. pot life
592	Ag	epoxy (2)	2.6	0.050	1500/10342	0.50 hr. @ 212°F (100°C)	1 week*	4 hrs.	9	N/A	Bonding enclosures	General purpose, nearly liquid, long 4 hr. pot life, less cond. than 584 series, 0.025 - 0.127 mm bond lines, bonds dissimilar metals
0008	Ag/glass	epoxy (2)	1.9	0.020	1000/6895	30 min. @ 212°F (100°C) & 24 hr. @ RT	N/A	45 min.	15	N/A	Bonding enclosures	General purpose, accelerated cure only, 45 min. pot life, less expensive/less conductive filler
360-20	Ag/Cu	epoxy (2)	5.0	0.005	1600/11032	2.0 hr. @ 150°F (66°C)	24 hrs.	1 hr.	9	N/A	EMI gasket attachment, bonding enclosures	General purpose, very thick paste, fast heat/RT cure, < 0.254 mm bond lines
360-208	Ag, Ag/Cu	epoxy (2)	4.0	0.010	1400/9653	0.75 hr. @ 212°F (100°C)	24 hrs.	1 hr.	9	1086	Bonding enclosures	Similar to 360-20, but requires no contact pressure for cure and is less conductive
<b>CONDUCTIVE SEALANTS</b>												
4660	Ag/Cu	polyisobutylene (1)	2.0	0.080	N/A	N/A	1 week*	30 min.	6	N/A	Sealing enclosure seams	0.5 Hr. pot life, good performance in vibration
4669	Ag/Cu	polyisobutylene (1)	2.0	0.080	N/A	N/A	1 week*	2.5 hrs.	6	N/A	Sealing enclosure seams, airframe gap sealing	2.5 Hr. pot life, good performance in vibration
2165	Cu	polyurethane (2)	N/A	0.007	N/A	4 hr. @ RT + 0.5 hr. @ 257°F (125°C)	24 hrs.	1 hr.	9	N/A	Airframe FIP sealing	Corrosion resistance, paintable applications, 1 hr. pot life
0005	Ag/glass	polyolefin (1)	1.7	0.005	N/A	N/A	3 days	N/A	9	N/A	Bonding enclosures	Flexible thixotropic cream system
<b>CONDUCTIVE SILICONE SEALANTS/ADHESIVES</b>												
0002	Ag	silicone (1)	3.1	0.010	150/1034	N/A	3 days*	5 min.	5.5	N/A	Bonding elastomer gaskets	Flexible paste; 5 min. pot life
1038	Ag/Cu	silicone (1)	3.6	0.010	150/1034	N/A	1 week*	30 min.	6	1086†	Sealing enclosure seams, airframe gap sealing, connector shielding	Primer promotes adhesion
1121	Ag/Cu	silicone (1)	3.6	0.010	150/1034	NA	1 week*	30 min.	6	1086†	Sealing enclosure seams, airframe gap sealing, connector shielding	Xylene-free version of 1038, primer promotes adhesion
1030	Ag/Cu	silicone (1)	3.7	0.050	200/1379	N/A	1 week*	30 min.	6	1086†	EMI gasket attachment	Bond line thickness should not exceed 10 mils Primer promotes adhesion
0192 & 0193***	Ag/Cu	silicone (1)	3.8	0.040	200/1379	N/A	1 week*	N/A	9	1098†	Bonding Ag/Cu elastomer gaskets & thin bond gaps	Flexible, for bond thickness < 0.4 mm
1029	Ag/Cu	silicone (2)	3.0	0.060**	450/3103	0.50 hr. @ 250°F (121°C)	1 week*	2 hrs.	6	1085†	EMI gasket attachment	Bond line thickness should not exceed 8 mils Primer promotes adhesion
0151 & 0152***	Ag/Cu	silicone (1)	3.6	0.010	150/1034	N/A	1 week*	N/A	9	1086†	Bonding enclosures, aerospace & military applications	Primer promotes adhesion
1075	Ag/Al	silicone (1)	2.0	0.010	175/1207	N/A	1 week*	30 min.	6	1086†	Sealing enclosure seams	Primer promotes adhesion
0036	Ag/glass	silicone (2)	2.0	0.010	60/414	24 hr. @ RT & 24 hr. @ 212°F (100°C)	1 week*	4 hrs.	9	N/A	Bonding elastomer gaskets	Flexible paste; 4 hr. pot life
1035	Ag/glass	silicone (1)	1.9	0.050	100/689	N/A	1 week*	30 min.	6	1086†	Sealing enclosure seams	Primer promotes adhesion
0014	Ag/glass	silicone (1)	2.0	0.010	25/172	N/A	1 day	N/A	9	N/A	Bonding enclosures, repair of damaged gaskets	Flexible, fast cure silicone caulk
0350 & 0355***	Ni/C	silicone (1)	2.6	0.500	100/689	N/A	1 week*	N/A	9	1086	Bonding Ni/G elastomers, thin bond gaps	Flexible, for bond thickness < 0.4 mm
0035	Ni	silicone (2)	4.0	0.010	50/345	24 hr. @ RT & 24 hr. @ 212°F (100°C)	1 week*	4 hrs.	9	N/A	Bonding elastomer gaskets and other metals	Thin flexible paste; 4 hr. pot life

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**Table 2 - Typical Properties for Conductive Coatings, Inks and Greases**

Product	Filler	Resin Type (Parts)	Wet Density	Max. Resistivity (ohm/sq.)	Elevated Temp. Cure Cycle Time @ °F (°C)	RT Cure Time	Working Life (hours)	Shelf Life @ RT (mos.)	Recommended Primer	Application	Comments
<b>CONDUCTIVE COATINGS</b>											
2052	Ag/Cu	acrylic (1)	1.1	0.04	20 min. @ RT + 0.3 hr. @ 140° to 167°F (60° to 75°C)	24 hrs.	N/A	12	N/A	Plastic enclosure shielding	Commercial grade
2056	Ag, Ag/Cu	acrylic (1)	1.1	0.03	5 min. @ RT + 0.5 hr. @ 140° to 160°F (60° to 71°C)	24 hrs.	N/A	12	N/A	Plastic enclosure shielding	Black version available
2058	Ag/Cu	acrylic (1)	1.1	TBD	5 min. @ RT + 0.5 hr. @ 140° to 160°F (60° to 71°C)	24 hrs.	N/A	12	N/A	Plastic enclosure shielding	High conductivity version Competes with pure silver paint
4900	Ag	acrylic (1)	1.5	0.05	N/A	24 hrs.	N/A	9	N/A	Plastic enclosure shielding	Anti-static protection and grounding
4914	Ni	acrylic (1)	1.7	2.00	N/A	24 hrs.	N/A	9	N/A	Plastic enclosure shielding	Adheres to ABS, Noryl and polyester
0025 & 0081***	Ag/glass	acrylic (1)	1.7	1.00	N/A	7 days	0.5	6	N/A	Conductive coatings on enclosures	Thinning required for spraying
579	Ag	epoxy (2)	1.8	0.06	1 hr. @ 250°F (121°C)	7 days	8	9	N/A	Protecting EMI flanges	Low VOC version of 596: 357 grams per liter
596	Ag	epoxy (2)	1.8	0.06	1 hr. @ 250°F (121°C)	7 days	8	9	N/A	Protecting EMI flanges	Solvent, abrasion and high temperature resistant, corrosion resistance
576	Ag	epoxy (2)	1.8	0.06	2 hr. @ RT + 0.75 hr. @ 150°F 66°C + 0.75 hr @ 210°F (99°C)	7 days	8	9	N/A	Platable silver epoxy coating	Provides selective platable conductive paths on dielectric plastic substrates
610	Ag/Cu	epoxy (2)	1.6	0.15	2 hr. @ RT + 4 @ 175°F (79°C)	7 days	8	9	N/A	Plastic enclosure shielding	Corrosion protection
601	Ag	polyurethane (1)	1.7	0.06	1.5 hr. @ 360°F (182°C)	N/A	N/A	6	N/A	Round wire cable shielding, flex circuit cable shielding	Screenable flexible circuit
7308 (formerly 73-00008)	Ag	polyurethane (2)	1.8	0.06	N/A	7 days	0.5	9	N/A	Conductive coatings on enclosures	Thinning not required for spraying
4076-50A	Ni	polyurethane (1)	1.1	0.50	N/A	24 hrs.	N/A	12	N/A	Plastic enclosure shielding	Adheres to plaster, wood, glass, concrete, drywall and most metals
2001	Cu	polyurethane (3)	3.1	0.10	2 hr. @ RT + 0.5 hr. @ 250°F (121°C)	7 days	2	9	1091	Protecting EMI flanges	Corrosion protection
2002	Cu	polyurethane (3)	3.1	0.10	2 hr. @ RT + 0.5 hr. @ 250°F (121°C)	7 days	2	9	1091	Protecting EMI flanges	Chromate-free
2003	Cu	polyurethane (3)	3.1	0.10	3 hr. @ RT + 0.5 hr. @ 250°F (121°C)	7 days	2	9	1091	Protecting EMI flanges	Black version of 2001
<b>CONDUCTIVE INK</b>											
4430	Ag	polyester (1)	3.8	0.08	30 min. @ 250°F (121°C)	N/A	N/A	9	N/A	Membrane keyboard and sensor applications	Bonds to Mylar films; can be creased or scratched without affecting performance
<b>CONDUCTIVE GREASE</b>											
4220	Ag	silicone (1)	3.1	0.10	N/A	N/A	1	12	N/A	Grounding	Excellent for surface-to surface contact areas
0015 & 0016***	Ag/glass	silicone (1)	2.6	0.02	N/A	N/A	N/A	N/A	N/A	Electrical grounding and lubricating	Contains no carbon or graphite

\* Cure is sufficient for handling in 24 hrs. Full specification properties are developed after 168 hrs. (1 week).  
 \*\* Value represents DC resistance through a 0.4 sq. in. by 0.008 inch thick sample.  
 \*\*\* Two part numbers are listed which represent the same material in different sized containers.  
 † Primer included with product

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