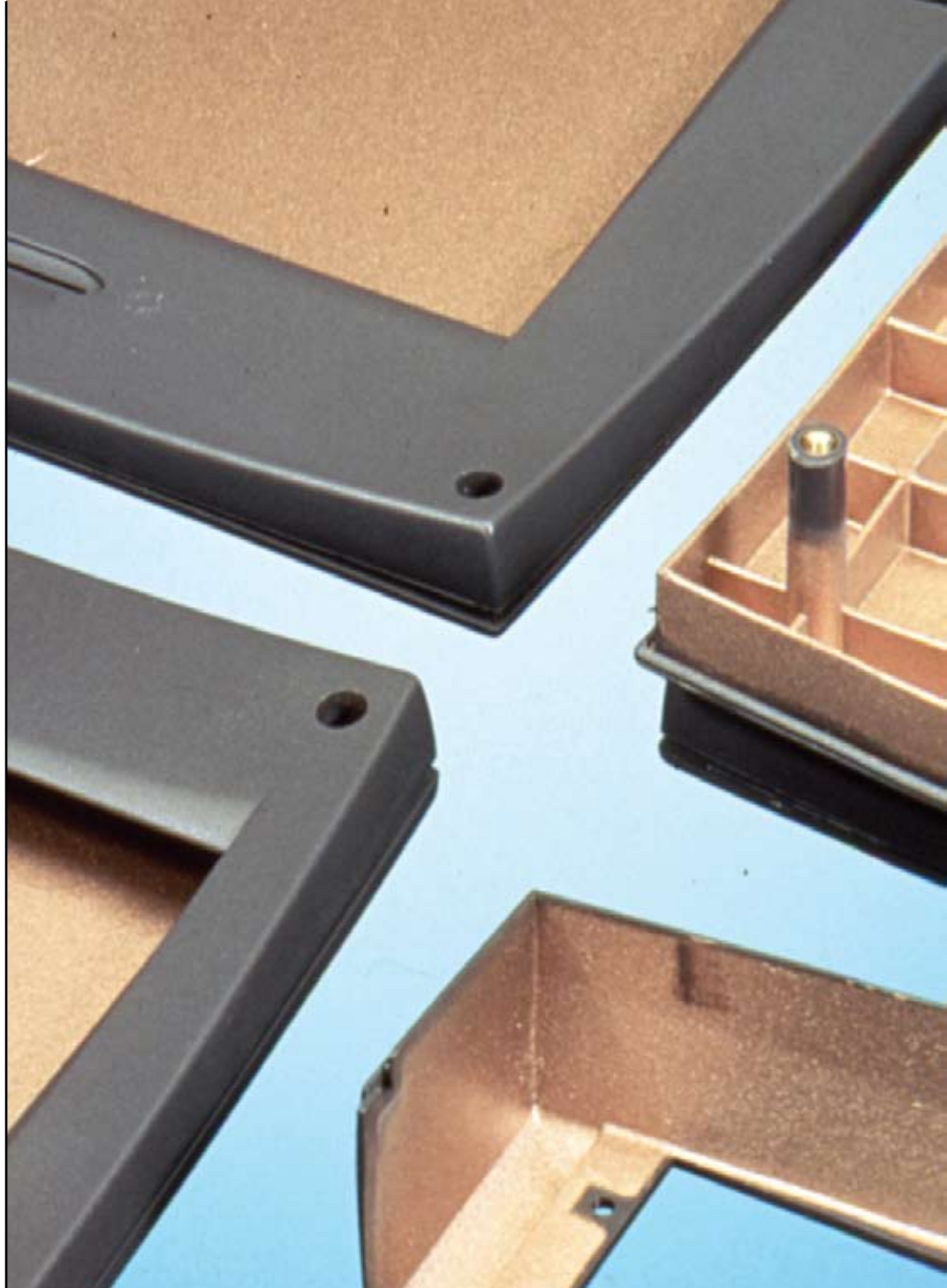


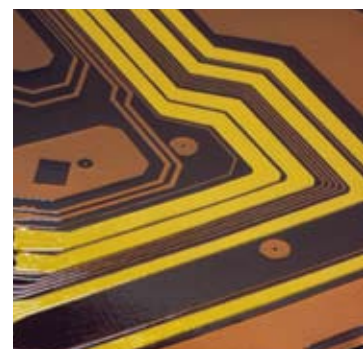


aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



# Conductive Compounds

## Premium Materials Selector Guide



# Conductive Compounds Selector Guide - Premium Materials

	Family	Product	Filler	Resin Type (Parts)	Specific Gravity <sup>18</sup>	Max. Vol. Resistivity <sup>18</sup>	Max. Surface Resistance <sup>18</sup> @ (Rec. Thickness <sup>17</sup> )	Min. Lap Shear <sup>18</sup>	Elevated Cure Schedule	RT Cure Schedule	Working Life	Shelf Life	Suggested Primer <sup>12</sup>	Packing Size		Theoretical Coverage @ (Rec. Thickness <sup>17</sup> )		VOC <sup>7</sup>	Hazardous Shipping Required <sup>8</sup>	Samples Availability	Typical Application	Comments	
					g/mL	ohm-cm	ohm/sq. (mils)	psi		kPa	Time @ °F [°C]	Time		Minutes	Months	U.S. <sup>21</sup>	Metric	ft <sup>2</sup> /g (mils)	m <sup>2</sup> /g (μ)	g/L			Note 9
Conductive Adhesives	CHO-BOND	584-29	✓ Ag	Epoxy [2] [584]:[29] 100:6.3	2.5	0.002	n/a	1200	8274	0.25 hr. @ 235°F [113°C] <sup>19</sup>	24 hr.	30	9	n/a	0.035 oz. to 1 lb. <sup>10</sup>	1 to 454 g <sup>10</sup>	n/a (1)	n/a (25)	0	No	+++	Bonding enclosures; connector shielding	General purpose; light paste; fast heat or RT cure; 0.025 - 0.127 mm bond lines; available in easy mix packs & syringes
	CHO-BOND	584-208	Ag	Epoxy [2] [584]:[208] 100:100	2.7	0.005	n/a	700	4826	0.75 hr. @ 212°F [100°C]	24 hr.	60	9	n/a	3 oz. & 1 lb.	85 & 454 g	n/a (1)	n/a (25)	0	No	+	Bonding enclosures	General purpose; medium paste; fast heat or RT cure; easy 1:1 mix ratio (wt.); 0.025 - 0.127 mm bond lines
	TECKNIT	8116	Ag	Epoxy [2] [A]:[B] 100:100	2.3	0.001	n/a	1400	9653	0.50 hr. @ 212°F [100°C] & 24 hr. @ RT	n/a	45	15	n/a	2 oz.	56.7 g	n/a (1)	n/a (25)	32	Yes	+	Bonding enclosures	Epoxy solder; accelerated heat cure only
	CHO-BOND	360-20	Ag/Cu	Epoxy [2] [360]:[20] 100:100	5.0	0.005	n/a	1600	11032	2.0 hr. @ 150°F [66°C] <sup>20</sup>	24 hr.	60	9 <sup>11</sup>	n/a	3 oz. & 1 lb.	85 & 454 g	n/a (10)	n/a (254)	0	No	+	EMI gasket attachment; bonding enclosures	General purpose; very thick paste; fast heat or RT cure; less than 0.254 mm bond lines
Conductive Sealants	CHO-BOND	4660	✓ Ag/Cu	Polyisobutylene (1)	2.0	0.080	n/a	n/a	n/a	n/a	1 week <sup>4</sup>	30	6 <sup>11</sup>	n/a	4 oz. & 1.5 lb. <sup>15</sup>	113.4 & 681 g	n/a (15)	n/a (381)	306	Yes	+	Sealing enclosure seams	Good performance in vibration or shear
	CHO-BOND	2165	✓ Cu	Polyurethane [2] [A]:[B] 100:7.021	2.8	0.007	n/a	n/a	n/a	4.0 hr. @ RT & 0.5 hr. @ 257°F [125°C]	1 hr.	60	9	n/a	0.5 pt., 1 pt. & 1 qt.	454, 1135 & 2268 g	n/a (variable)	n/a (variable)	216	Yes	+	Airframe form-in-place sealing	Corrosion resistant; paintable
	TECKNIT	0005	Ag/glass	Polyolefin (1)	1.7	0.005	n/a	n/a	n/a	n/a	24 hr.	n/a	9	n/a	1 lb.	454 g	n/a (variable)	n/a (variable)	418	Yes	+	Bonding enclosures	Flexible thixotropic cream system
Conductive Silicone Sealants/Adhesives	TECKNIT	0002	✓ Ag	Silicone (1)	3.1	0.010	n/a	150	1034	n/a	72 hr. <sup>4</sup>	5	5.5	n/a	2 oz. <sup>13</sup>	56.7 g	n/a (7)	n/a (178)	9	No	+++	Bonding elastomer gaskets	Rec. bond line thickness: 0.13 mm - 6.35 mm; flexible paste
	CHO-BOND	1038	✓ Ag/Cu	Silicone (1)	3.6	0.010	n/a	150	1034	n/a	1 week <sup>4</sup>	30	6 <sup>11</sup>	1086 <sup>5</sup>	4 oz. & 1 lb. <sup>14</sup>	113.4 & 454 g	n/a (7)	n/a (178)	111	Yes	+++	Sealing enclosure seams; airframe gap sealing; connector shielding	Rec. bond line thickness: > 0.18 mm; primer promotes adhesion
	CHO-BOND	1030	Ag/Cu	Silicone (1)	3.7	0.050	n/a	200	1379	n/a	1 week <sup>4</sup>	30	6 <sup>11</sup>	1086 <sup>5</sup>	4 oz. & 1 lb. <sup>14</sup>	113.4 & 454 g	n/a (10)	n/a (254)	0	Yes	+++	EMI gasket attachment	Rec. bond line thickness: < 0.25 mm; primer promotes adhesion
	CHO-BOND	1029	✓ Ag/Cu	Silicone [2] [A]:[B] 100:250.3	3.0	0.060 <sup>3</sup>	n/a	450	3103	0.5 hr. @ 250°F [121°C]	1 week <sup>4</sup>	120	6 <sup>11</sup>	1085 <sup>5</sup>	3 oz. & 1 lb.	85 & 454 g	n/a (8)	n/a (203)	0	Yes	+	EMI gasket attachment	Rec. bond line thickness: < 0.20 mm; primer promotes adhesion
	TECKNIT	0151 & 0152 <sup>1</sup>	Ag/Cu	Silicone (1)	3.6	0.010	n/a	150	1034	n/a	1 week <sup>4</sup>	n/a	9	1086 <sup>5</sup>	2 oz. & 1 lb. <sup>14</sup>	56.7 & 454 g	n/a (10)	n/a (254)	77	Yes	+	Bonding enclosures; aerospace & military applications	Primer promotes adhesion
	CHO-BOND	1075	✓ Ag/Al	Silicone (1)	2.0	0.010	n/a	175	1207	n/a	1 week <sup>4</sup>	30	6 <sup>11</sup>	1086 <sup>5</sup>	2.5 oz. & 10 oz. <sup>14</sup>	70.9 & 283.5 g	n/a (10)	n/a (254)	0	Yes	+++	Sealing enclosure seams	Rec. bond line thickness: 0.12 mm - 0.25mm; primer promotes adhesion
	TECKNIT	0036	✓ Ag/glass	Silicone [2] [A]:[B] 100:2.53	2.0	0.010	n/a	60	414	24 hr. @ RT & 24 hr. @ 212°F [100°C]	1 week <sup>4</sup>	240	9	n/a	1 lb.	454 g	n/a (10)	n/a (254)	257	Yes	+	Bonding elastomer gaskets	Rec. bond line thickness; 0.50 mm - 0.76 mm; flexible paste
	CHO-BOND	1035	✓ Ag/glass	Silicone (1)	1.9	0.050	n/a	100	689	n/a	1 week <sup>4</sup>	30	6 <sup>11</sup>	1086 <sup>5</sup>	2.5 oz. & 10 oz. <sup>14</sup>	70.9 & 283.5 g	n/a (7)	n/a (178)	145	Yes	+++	Sealing enclosure seams	Rec. bond line thickness: > 0.18 mm; primer promotes adhesion
Conductive Coatings	CHO-SHIELD	2052	Ag/Cu	Acrylic (1)	1.1	n/a	0.040 (2)	n/a	n/a	0.33 hr. @ RT+ 0.33 hr. @ 140-167°F [60-75°C]	24 hr.	n/a	12	n/a	1 gal.	3600 g	0.027 (2)	0.0025 (51)	719	Yes	+++	Plastic enclosure shielding	Commercial grade
	CHO-SHIELD	2056	✓ Ag/Cu & Ag	Acrylic (1)	1.1	n/a	0.030 (1)	n/a	n/a	5 min. @ RT+ 0.5 hr. @ 140-167°F [60-75°C]	24 hr.	n/a	12	n/a	1 gal.	4050 g	0.047 (1)	0.0044 (25)	718	Yes	+++	Plastic enclosure shielding	Commercial grade; black version available
	CHO-SHIELD	579	Ag	Epoxy [2] [A]:[B] 100:32	1.8	n/a	0.060 (1)	n/a	n/a	1 hr. @ 250°F [121°C]	1 week	480	9	n/a	1 lb.	454 g	0.110 (1)	0.0102 (25)	357	Yes	-	Protecting EMI flanges	Low VOC version of CHO-SHIELD 596
	CHO-SHIELD	596	✓ Ag	Epoxy [2] [A]:[B] 100:37	1.8	n/a	0.060 (1)	n/a	n/a	1 hr. @ 250°F [121°C]	1 week	480	9 <sup>11</sup>	n/a	1 lb.	454 g	0.110 (1)	0.0102 (25)	585	Yes	-	Protecting EMI flanges	Solvent, abrasion and high temperature resistant; corrosion resistant
	CHO-SHIELD	576	Ag	Epoxy [2] [A]:[B] 100:27.5	1.8	n/a	0.060 (1)	n/a	n/a	2 hr. @ RT + 0.75 hr. @ 150°F [66°C] + 0.75 hr. @ 210°F [99°C]	1 week	480	9	n/a	1 lb.	454 g	0.110 (1)	0.0102 (25)	560	Yes	-	Platable silver epoxy coating	Provides selective platable conductive paths on dielectric plastic substrates
	CHO-SHIELD	4994	✓ Ag	Polyurethane [3] [A]:[B]:[C] 100:17.18:14.54	2.1	n/a	0.075 (1)	n/a	n/a	2 hr. RT & 40-60% RH + 2 hr. @ 130°F [55°C]	1 week	180	6	n/a	1 gal.	7200 g	0.104 (1)	0.0097 (25)	596	Yes	+	Aircraft coatings; grounding	Very smooth and very conductive; long pot life; excellent sprayability
	CHO-SHIELD	2001	✓ Cu	Polyurethane [3] [A]:[B]:[C] 100:10.06:41.96	1.6	n/a	0.100 (3)	n/a	n/a	2 hr. @ RT + 0.5 hr. @ 250°F [121°C]	1 week	120	9	1091	0.5 pt., 1 pt. & 1 qt.	250, 700 & 1378 g	0.029 (3)	0.0027 (76)	543	Yes	+	Protecting EMI flanges	Corrosion protection; flange protection
	CHO-SHIELD	2002	✓ Cu	Polyurethane [3] [A]:[B]:[C] 100:10.34:42.18	1.6	n/a	0.100 (3)	n/a	n/a	2 hr. @ RT + 0.5 hr. @ 250°F [121°C]	1 week	120	9	1091	0.5 pt., 1 pt. & 1 qt.	250, 700 & 1378 g	0.029 (3)	0.0027 (76)	540	Yes	+	Protecting EMI flanges	Chromate free; flange protection
CHO-SHIELD	2003	Cu	Polyurethane [3] [A]:[B]:[C] 100:10.06:41.96	1.6	n/a	0.100 (3)	n/a	n/a	2 hr. @ RT + 0.5 hr. @ 250°F [121°C]	1 week	120	9	1091	Note 6	Note 6	0.029 (3)	0.0027 (76)	541	Yes	+	Protecting EMI flanges	Darkened version of CHO-SHIELD 2001	

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

✓ Please refer to CS 1004 EN Materials Selection matrix for material composition information.

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## Additional facilities:

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## NOTES:

- Two part numbers are listed which represent the same material in a different sized containers.
- Formerly known as 73-00008.
- Value represents DC resistance through a 0.4 square inch by 0.008 inch thick sample.
- Material is sufficiently cured after 24 hours for handling purposes. Full specification properties are developed after time given.
- Primer included with product.
- CHO-SHIELD 2003 packaging is irregular. The "-00-" size contains 250 g of CHO-SHIELD 2003 and includes 94 g of CHO-BOND 1091 primer.  
The "-01-" size contains 524 g coating and includes 94 g primer.  
The "-04-" size contains 700 g coating and includes 188 g primer.
- Volatile Organic Content (VOC) values are theoretical approximations calculated from the characteristics of the components in the product as we know them at this time.
- All compounds such as these should be packed and shipped by trained professionals. Regulations vary by material type and by quantity. The information provided here is to be used as a general guideline only.
- Samples availability scale: +++ represents high sample availability with short lead times; + represents samples available for qualified applicants or with potentially long lead times; - represents that samples are generally not available unless in very specific instances.
- CHO-BOND 584-29 is sold in 1, 2 & 10 gram ChoPaks; a 3 gram dual syringe package, bundle of 10; plus 3 oz. (85 g) & 1 lb. (454 g) bulk kits.
- The shelf life of this product may be extended with testing, generally 3 additional months from the original expiration date. Contact Chomerics for details. Customer will need to submit an unused container or kit for testing and a fee will apply.
- Primers are applied to the substrate prior to application of the conductive material. In no instance is the primer to be mixed into the conductive material.
- Packed in a small aluminum tube.
- Small size packed in a small aluminum tube; large size packed in a 6 fluid ounce Semco tube.
- Small size packed in a small aluminum tube; large size packed in a 12 fluid ounce cartridge.
- Packed in a 6 fluid ounce Semco tube.
- The recommended thickness may vary from application to application. Please use the published data as an initial guideline. Contact Chomerics' Application Engineering for assistance.
- Properties listed are for products prepared at the elevated cure schedule. Test Methods: Specific Gravity, 95-40-5504, 95-40-5502; Volume Resistivity, 95-40-5102, 95-40-5101, 95-40-6007, 95-40-6017; Surface Resistance, 95-40-5104; Lap Shear, 95-40-5300.
- Alternative cure: 2 hrs. @ 150°F (65°C) or 0.75 hr. @ 210°F (99°C).
- Alternative cure: 0.25 hr. @ 235°F (115°C); 1 hr. @ 200°F (95°C) or 2 hrs. @ 150°F (65°C).
- Ounces [oz.] are weight-based, i.e., 0.0625 pound or 28.4 grams. Some conductive coatings are in volume-based units of gallons, quarts and pints.

[www.chomerics.com](http://www.chomerics.com)

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SG 1003 EN October 2008 Rev B

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