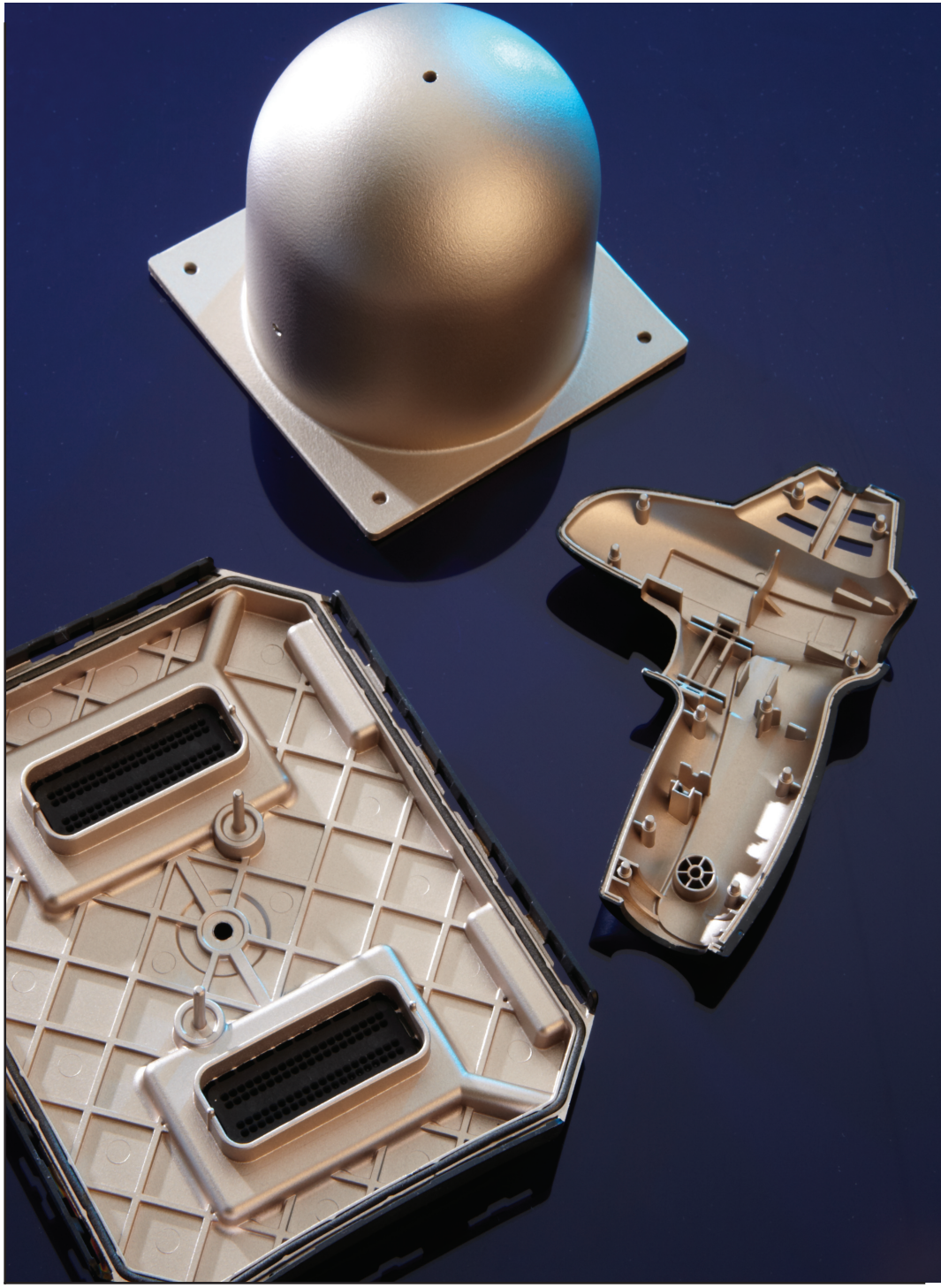
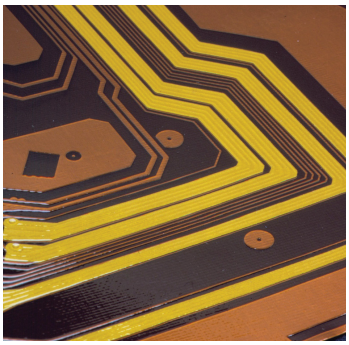
aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Conductive Compounds Selector Guide

Conductive adhesives, conductive sealants/gap fillers, and conductive coatings



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CHO-SHIELD® Conductive Coatings

Product	Filler	Resin Type (Parts) Mix Ratio by Weight A:B or A:B:C	Specific Gravity [4] g/mL	Max. Surface Resistance [4] @ (Rec. Thickness [3]) ohm/sq. (mils)	Min/Max. Use Temp. °F(°C)	Elevated Cure Schedule Time @ °F (°C)	RT Cure Schedule Time	Working Life Minutes	Shelf Life Months [5]	Theoretical Coverage @ (Rec. Thickness [3]) ft²/g (mils) m²/g (µm)	VOC [2] g/L	Typical Application	Comments
2044*	Ni	Acrylic (1)	1.2	1.000 (2)	-40/185 (-40/85)	10-20 min. @ RT+ 0.75 hr. @ 150°F ± 10°F (66°C ± 6°C)	24 hr.	n/a	9	0.027 (2) 0.0082 (51)	755	Plastic enclosure shielding Solvent sensitive	Commercial grade
2056*	Ag/Cu & Ag	Acrylic (1)	1.1	0.030 (1)	-40/212 (-40/100)	10-20 min. @ RT+ 0.5 hr. @ 150°F ± 10°F (66°C ± 6°C)	24 hr.	n/a	12	0.047 (1) 0.0044 (25)	718	Plastic enclosure shielding Solvent sensitive	Commercial grade; black version available
2040*	Ag	Acrylic (1)	1.3	0.025 (1)	-40/185 (-40/85)	10-20 min. @ RT+ 0.5 hr. @ 150°F ± 10°F (66°C ± 6°C)	24 hr.	n/a	12	0.054 (1) 0.0165 (25)	741	Life sciences electronic housings Solvent sensitive	Commercial grade. For an Ag filled aerosol acrylic, use CHO-SHIELD 4900
610*	Ag/Cu	Epoxy (2) A:B 100:28.25	1.2	0.150 (2)	-85/257 (-65/125)	2 hr. @ RT + 4 hr.@ 175°F (79°C)	1 week	480	9	0.060 (2) 0.0056 (51)	591	Corrosion resistance	Corrosion protection
571	Ag	Epoxy (2) A:B 100:10.9	1.58	0.010 (1)	-40/257 (-40/125)	15 min. @ R.T. + 60 min. @ 149°F (65°C)	n/a	720	9	0.094 (1) 0.0087 (25)	308	Board level shielding for semiconductor packages	Replaces stamped metal cans for board level shielding, designed for high volume, precise application in clean rooms
576*	Ag	Epoxy (2) A:B 100:27.5	1.8	0.060 (1)	-40/257 (-40/125)	2 hr. @ RT + 0.75 hr.@ 150°F (66°C) + 0.75 hr. @ 210°F (99°C)	1 week	480	9	0.110 (1) 0.0102 (25)	560	Plating applications	Provides selective platable conductive paths on dielectric plastic substrates
596*	Ag	Epoxy (2) A:B 100:37	1.8	0.060 (1)	-40/302 (-40/150)	1 hr. @ 250°F (121°C)	1 week	480	9	0.110 (1) 0.0102 (25)	585	Protecting EMI flanges by reducing dissimilar metal concerns with EMI gaskets	Solvent, abrasion and high temperature resistant; corrosion resistant CHO-SHIELD 579 is a lower VOC version of CHO-SHIELD 596
579	Ag	Epoxy (2) A:B 100:32.9	1.7	0.060 (1)	-40/302 (-40/150)	30 min. RT + 1 hr. @ 250°F (121°C)	1 week	480	9	0.110 (1) 0.012 (25)	376	Protecting EMI flanges by reducing dissimilar metal concerns with EMI gaskets	Solvent, abrasion and high temperature resistant; corrosion resistant Low VOC version of CHO-SHIELD 596
608	Ag	Polyester (1)	1.4	0.015 (1)	-40/185 (-40/85)	15 min. @ R.T. + 60 min. @ 165°F (74°C)	n/a	unlimited	9	0.148 (1) 0.138 (25)	711	Parts with complex geometries	Flexible coating designed for thin applications < 0.001" (0.0254 mm)
604	Ag	Polyurethane (1)	1.3	0.010 (1)	-40/185 (-40/85)	15 min. @ R.T. + 30 min. @ 257°F (125°C)	n/a	unlimited	9	0.047 (1) 0.0044 (25)	767	Board level shielding for semiconductor packages	Highly conductive, advanced coating developed for high volume, precise spray applications on circuit boards and semiconductor packages
4994*	Ag	Polyurethane (4) A:B:C:D 100:18.33: 1.36:20.91	2.1	0.075 (1)	-40/185 (-40/85)	2 hr. RT & 40-60% RH + 2 hr. @ 130°F (55°C)	1 week	180	6	0.104 (3) 0.0097 (25)	596	Aircraft coatings; grounding	Very smooth and very conductive; long pot life; excellent sprayability
2001*	Cu	Polyurethane (3) A:B:C 100:10.06:41.96	1.6	0.100 (3)	-85/185 (-65/85)	2 hr. @ RT + 0.5 hr.@ 250°F (121°C)	1 week	120	9	0.029 (3) 0.0027 (76)	543	Protecting EMI flanges Corrosion resistant coating for extreme conditions	Corrosion protection; flange protection Requires use of 1091 primer, sold separately.
2002*	Cu	Polyurethane (3) A:B:C 100:10.34:42.18	1.6	0.100 (3)	-85/185 (-65/85)	2 hr. @ RT + 0.5 hr.@ 250°F (121°C)	1 week	120	9	0.029 (3) 0.0027 (76)	540	Protecting EMI flanges Corrosion resistant coating for extreme conditions	Chromate free; flange protection Requires use of 1091 primer, sold separately.
2003*	Cu	Polyurethane (3) A:B:C 100:10.06:41.96	1.6	0.100 (3)	-85/185 (-65/85)	2 hr. @ RT + 0.5 hr.@ 250°F (121°C)	1 week	120	9	0.029 (3) 0.0027 (76)	541	Protecting EMI flanges Corrosion resistant coating for extreme conditions	Darkened version of CHO-SHIELD 2001 Requires use of 1091 primer, included in kit unless otherwise noted.

* Hazardous shipping required. 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.

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.

Product	Filler	Resin Type (Parts) Mix Ratio by Weight A:B	Specific Gravity [4] g/mL	Max. Vol. Resistivity [3] ohm-cm	Min/Max. Use Temp. °F(°C)	Min. Lap Shear [4] psi (kPa)	Elevated Cure Schedule Time @ °F (°C)**	RT Cure Schedule Time	Working Life Minutes [5]	Shelf Life Months	VOC [2] g/L	Typical Application	Comments
CHO-BOND 584-29	Ag	Epoxy (2) 584:29 100:6.3	2.5	0.002	-67/257 (-55/125)	1200 (8274)	0.25 hr. @ 235°F (113°C)	24 hr.	30	9	0	Bonding enclosures; connnector shielding	General purpose; light paste; fast heat or RT cure; 0.025 - 0.127 mm bond lines; available in easy mix CHO-PAKs & SYRINGE-PAKs May be sprayed by thinning with toluene. CHOBOND 584-29/toluene weight mix ratio is 100:150
CHO-BOND 584-208	Ag	Epoxy (2) 584:208 100:100	2.7	0.005	-80/210 (-62/99)	700 (4826)	0.75 hr. @ 212°F (100°C)	24 hr.	60	9	0	Bonding enclosures	General purpose; medium paste; fast heat or RT cure; Easy 1:1 mix ratio (wt.); 0.001" - 0.005" (0.025 - 0.127 mm) bond lines
CHO-BOND 580-208	Ag	Epoxy (2) 580:208 100:100	2.9	0.005	-80/210 (-62/99)	700 (4826)	0.75 hr. @ 212°F (100°C)	24 hr.	60	9	0	Bus bar grounding for shielded windows	May be sprayed by thinning with solvent. Solvent weight mix ratio is 50:30:20, toluene:butanol:propanol, CHOBOND 580-208/solvent weight mix ratio is 100:38
TECKNIT 8116*	Ag	Epoxy (2) A:B 100:100	2.3	0.001	-80/212 (-62/100)	1400 (9653)	0.50 hr. @ 212°F (100°C) + 24 hr. @ RT	1 week [1]	45	15	32	Bonding enclosures	Epoxy solder
CHO-BOND 360-20	Ag/Cu	Epoxy (2) 360:20 100:100	5.0	0.005	-80/212 (-62/100)	1600 (11032)	2.0 hr. @ 150°F (66°C) 20	24 hr.	60	9	0	EMI gasket attachment; bonding enclosures	General purpose; very thick paste; fast heat or RT cure; Minimum bond line is .010" (0.254 mm)
CHO-BOND 1030*	Ag/Cu	Silicone (1)	3.7	0.050	-67/392 (-55/200)	200 (1379)	n/a	1 week [1]	30	6	0	EMI gasket attachment	Recommended bond line thickness: < 0.01" (0.25 mm); Primer promotes adhesion. Recommended primer is 1086
CHO-BOND 1029*	Ag/Cu	Silicone (2) A:B 100:250.3	3.0	0.060	-67/257 (-55/125)	450 (3103)	0.5 hr. @ 250°F (121°C)	1 week [1]	120	6	0	EMI gasket attachment	Recommended bond line thickness: < 0.008" (0.20 mm); Primer promotes adhesion. Recommended primer is 1085

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** For alternate cure schedules contact Chomerics Applications Engineering.

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.

Product	Filler	Resin Type (Parts) Mix Ratio by Weight A:B	Specific Gravity [4] g/mL	Max. Vol. Resistivity [4] ohm-cm	Min/Max. Use Temp. °F(°C)	Min. Lap Shear [4] psi (kPa)	Elevated Cure Schedule Time @ °F (°C)	RT Cure Schedule Time	Working Life Minutes	Shelf Life Months [5]	VOC [2] g/L	Typical Application	Comments
CHO-BOND 4660*	Ag/Cu	Polyisobutylene (1)	2.0	0.080	-67/212 (-55/100)	n/a	n/a	1 week [1]	30	6	306	Sealing enclosure seams	Superior performance in vibration or shear. For vertical seams or longer working life, use CHO-BOND 4669.
TECKNIT 0005*	Ag/ glass	Polyolefin (1)	1.7	0.005	-40/185 (-40/85)	n/a	n/a	24 hr.	30	9	418	Bonding enclosures	Flexible thixotropic cream system
CHO-BOND 2165*	Cu	Polyurethane (2) A:B 100:7.021	2.8	0.007	-80/212 (-62/100)	n/a	4.0 hr. @ RT + 0.5 hr. @ 257°F (125°C)	1 week [1]	60	9	216	Airframe form-in-place sealing	Corrosion resistant; paintable
TECKNIT 0002	Ag	Silicone (1)	3.1	0.010	-74/399 (-59/204)	150 (1034)	n/a	72 hr.[1]	5	5.5	7	Bonding elastomer gaskets	Rec. bond line thickness: 0.005" - 0.25" (- 0.13 mm - 6.35 mm); flexible paste
CHO-BOND 1016*	Ni/C	Silicone (1)	2.2	0.950	-67/257 (-55/125)	150 (1034)	n/a	1 week [1]	9	6	0	Ideal in outdoor applications for EMI shielding and low corrosion	Rec. bond line thickness: > 0.007" (0.18 mm); Primer promotes adhesion. Recommended primer is 1086
CHO-BOND 1038*	Ag/Cu	Silicone (1)	3.6	0.010	-67/257 (-55/125)	150 (1034)	n/a	1 week [1]	30	6	111	Sealing enclosure seams; airframe gap sealing; connector shielding	Rec. bond line thickness: > 0.007" (0.18 mm); Primer promotes adhesion. Recommended primer is 1086 CHO-BOND 1121 is a solvent free version
CHO-BOND 1075*	Ag/Al	Silicone (1)	2.0	0.010	-67/392 (-55/200)	175 (1207)	n/a	1 week [1]	30	6	0	Sealing enclosure seams	Rec. bond line thickness: > 0.010" (0.25 mm) Primer promotes adhesion Recommended primer is 1086
CHO-BOND 1035*	Ag/ glass	Silicone (1)	1.9	0.050	-67/392 (-55/200)	100 (689)	n/a	1 week [1]	30	6	145	Sealing enclosure seams	Rec. bond line thickness: > 0.007" (0.18 mm) Primer promotes adhesion Recommended primer is 1086

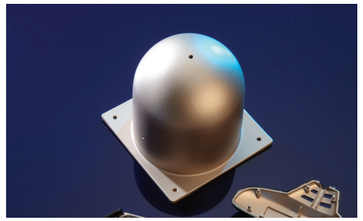
* Hazardous shipping required. All compounds such as these should be packed and shipped by trained professionals. Regulations vary by material type and by quantity. The information provided here is to be used as a general guideline only.

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.

Conductive Coatings - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.	Primer Included
CHO-SHIELD 2044	3920	1 gallon aluminum can	52-03-2044-0000	Not Required
CHO-SHIELD 2056	4050	1 gallon aluminum can	52-03-2056-0000	Not Required
CHO-SHIELD 2040	4238	1 gallon aluminum can	52-03-2040-0000	Not Required
CHO-SHIELD 4900	122	6 fluid ounce aluminum aerosol can	52-02-4900-0000	Not Required
CHO-SHIELD 571	335	2 component, 1/2 pint aluminum can kit	52-01-0571-0000	Not Required
CHO-SHIELD 576	454	2 component, 1 pint aluminum can kit	52-01-0576-0000	Not Required
CHO-SHIELD 596	85	2 component, 1/2 pint aluminum can kit	52-00-0596-0000	Not Required
	454	2 component, 1 pint aluminum can kit	52-01-0596-0000	Not Required
CHO-SHIELD 579	454	2 component, 1 pint aluminum can kit	52-01-0579-0000	Not Required
CHO-SHIELD 610	3750	1 gallon aluminum can	52-03-0610-0000	Not Required
CHO-SHIELD 608	1200	1 quart aluminum can	52-04-0608-0000	Not Required
CHO-SHIELD 4994		4 component, 1 quart aluminum can kit	52-04-4994-1000	Not Required
		4 component, 1 gallon aluminum can kit	52-03-4994-1000	Not Required
CHO-SHIELD 604	295	1/2 pint aluminum can	52-01-0604-0000	Not Required
CHO-SHIELD 2001*	250	3 component, 1/2 pint aluminum can kit	52-00-2001-0000	No
	250	3 component, 1/2 pint aluminum can "touch-up" kit	52-00-2001-1000	No
	700	3 component, 1 pint aluminum can kit	52-01-2001-0000	No
	1378	3 component, 1 quart aluminum can kit	52-04-2001-0000	No
CHO-SHIELD 2002*	250	3 component, 1/2 pint aluminum can kit	52-00-2002-0000	No
	250	3 component, 1/2 pint aluminum can "touch-up" kit	52-00-2002-1000	No
	700	3 component, 1 pint aluminum can kit	52-01-2002-0000	No
	1378	3 component, 1 quart aluminum can kit	52-04-2002-0000	No
CHO-SHIELD 2003*	250	3 component, 1/2 pint aluminum can kit	52-00-2003-0000	1091
	250	3 component, 1/2 pint aluminum can "touch-up" kit	52-00-2003-1000	No
	700	3 component, 1 pint aluminum can kit	52-01-2003-0000	1091
	1378	3 component, 1 quart aluminum can kit	52-04-2003-0000	1091

* Requires the use of 1091 Primer.



Adhesives - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.	Primer Included
CHO-BOND 584-29	1	2 component, premeasured CHO-PAK	50-10-0584-0029	Not Required
	2.5	2 component, premeasured CHO-PAK	50-02-0584-0029	Not Required
	3	2 component, premeasured, 10 syringe kit	50-30-0584-0029	Not Required
	10	2 component, premeasured CHO-PAK	50-03-0584-0029	Not Required
	85	2 component, 4 fluid ounce polypropylene kit	50-00-0584-0029	Not Required
	454	2 component, 8 fluid ounce polypropylene kit	50-01-0584-0029	Not Required
CHO-BOND 584-208	85	2 component, 4 fluid ounce polypropylene kit	50-00-0584-0208	Not Required
	454	2 component, 16 fluid ounce polypropylene kit	50-01-0584-0208	Not Required
CHO-BOND 580-208	227	2 component, 8 fluid ounce polypropylene kit	50-05-0580-0208	Not Required
	454	2 component, 16 fluid ounce polypropylene kit	50-01-0580-0208	Not Required
TECKNIT 8116	57	2 component, 2 fluid ounce polypropylene kit	72-08116	Not Required
CHO-BOND 360-20	85	2 component, 1/2 pint aluminum can kit	50-00-0360-0020	Not Required
	454	2 component, 1 pint aluminum can kit	50-01-0360-0020	Not Required
CHO-BOND 1030	113.4	4 fluid ounce aluminum foil tube	50-02-1030-0000	1086
	113.4	4 fluid ounce aluminum foil tube	50-02-1030-1000	No
	454	6 fluid ounce SEMCO tube	50-01-1030-0000	1086
CHO-BOND 1029	85	4 fluid ounce aluminum foil tube	50-00-1029-0000	1085
	454	6 fluid ounce SEMCO tube	50-01-1029-0000	1085

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Sealants/Gap Fillers - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.	Primer Included
CHO-BOND 4660	113.4	4 fluid ounce aluminum foil tube	51-02-4660-0000	Not Required
	681	0.1 gallon fiber cartridge	51-05-4660-0000	Not Required
CHO-BOND 4669	113.4	4 fluid ounce aluminum foil tube	51-02-4669-0000	Not Required
	681	0.1 gallon fiber cartridge	51-05-4669-0000	Not Required
TECKNIT 0005	227	1 pint aluminum can	72-00005	Not Required
CHO-BOND 2165*	454	2 component, 1/2 pint aluminum can kit	50-01-2165-0000	No
	1135	2 component, 1pint aluminum can kit	50-02-2165-0000	No
	2268	2 component, 1/2 pint aluminum can kit	50-04-2165-0000	No
CHO-BOND 1016	71	4 fluid ounce aluminum foil tube	50-02-1016-0000	1086
	300	6 fluid ounce SEMCO tube	50-01-1016-0000	1086
CHO-BOND 1038	113.4	4 fluid ounce aluminum foil tube	50-02-1038-0000	1086
	113.4	4 fluid ounce aluminum foil tube	50-02-1038-1000	No
	454	6 fluid ounce SEMCO tube	50-01-1038-0000	1086
	227	2.5 fluid ounce SEMCO tube	50-33-1038-0000	No
	454	6 fluid ounce SEMCO tube	50-31-1038-0000	No
CHO-BOND 1121	454	6 fluid ounce SEMCO tube	50-01-1121-0000	No
CHO-BOND 1075	71	4 fluid ounce aluminum foil tube	50-02-1075-0000	1086
	284	6 fluid ounce SEMCO tube	50-01-1075-0000	1086
CHO-BOND 1035	71	4 fluid ounce aluminum foil tube	51-00-1035-0000	1086
	71	4 fluid ounce aluminum foil tube	51-00-1035-1000	No
	284	6 fluid ounce SEMCO tube	51-01-1035-000	1086

* Requires the use of 1091 Primer.

Primer - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.
CHO-BOND 1085	400	1 pint can	50-01-1085-0000
CHO-BOND 1086	10	3 dram glass vial	50-10-1086-0000
	95	4 fluid ounce glass bottle	50-04-1086-0000
	375	1 pint can	50-01-1086-0000
CHO-BOND 1091	95	4 fluid ounce glass bottle	50-00-1091-0000
	375	8 fluid ounce plastic bottle	50-01-1091-0000

NOTES:

1. Material is sufficiently cured after 24 hours for handling purposes. Full specification properties are developed after time given.
2. 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.
3. The recommended thickness may vary from application to application. Please ue the published data as an initial guideline. Contact Chomerics' Application Engineering for assistance.
4. 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.
5. Compound shelf life is set from date of manufacture. All compounds are shipped from Parker Chomerics with a minimum 80% shelf life.

Chomerics Worldwide

Corporate Facilities

To Place an Order Please Contact a Customer Service Representative at the Following Locations

North America
Division Headquarters
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Fax +33 1343 25800

Manufacturing Facilities

Woburn, MA; Cranford, NJ ; Millville, NJ; Fairport, NY; Grantham, UK, Beijing; Shanghai; Shenzhen; Tokyo, Japan.

Additional Facilities:

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