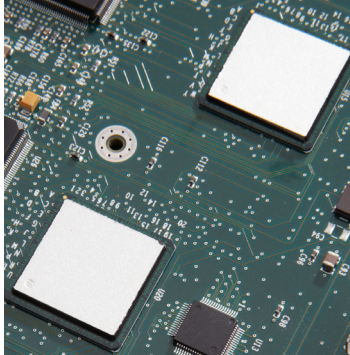
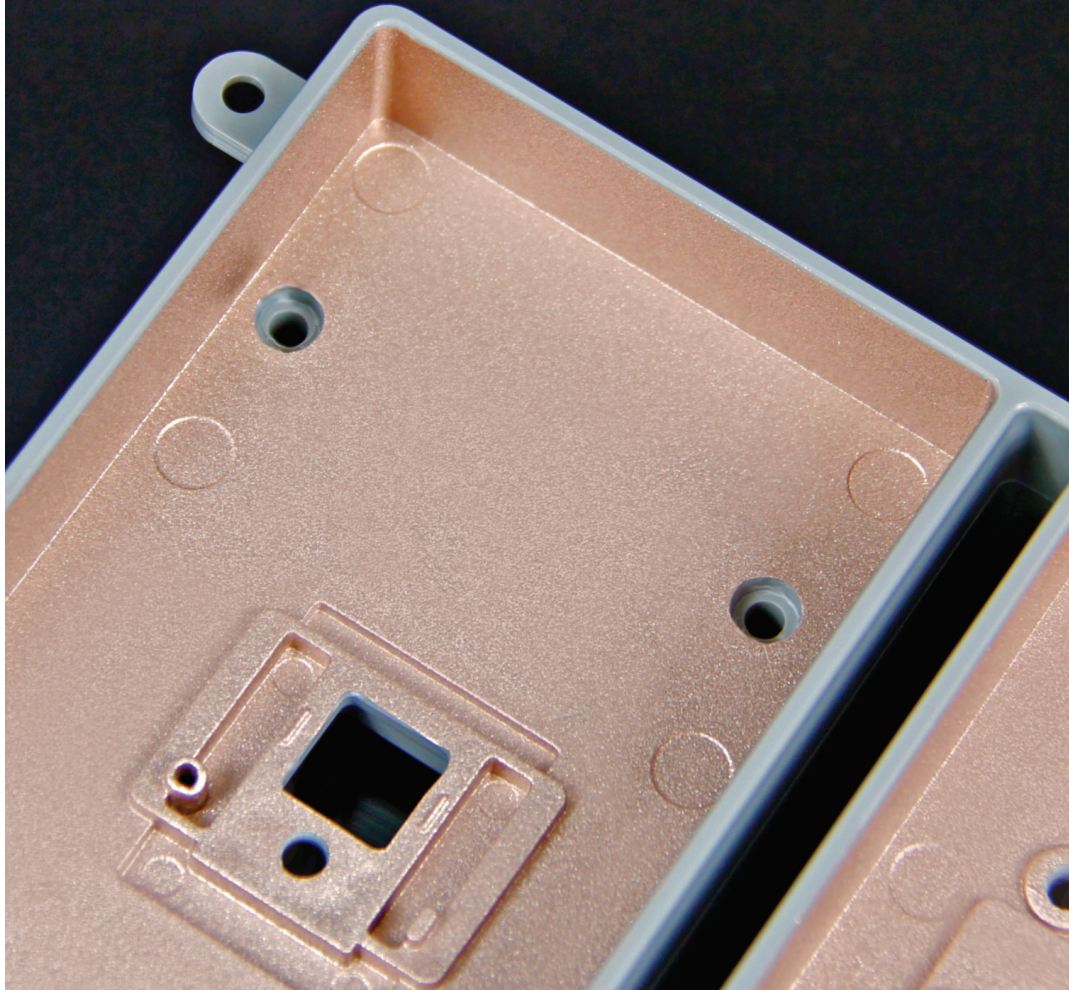


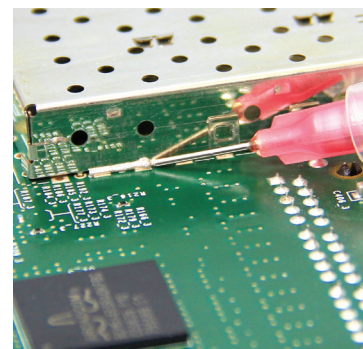


aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Electrically Conductive Compounds Selector Guide

Coatings, Adhesives, Sealants, Gap Fillers, and Greases



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Product	Filler	Resin Type (Parts) Mix Ratio by Weight	Specific Gravity ¹	Max. Surface Resistance ¹ @ (Rec. Thickness ²) ohm/sq. (mils)	Min/Max. Use Temp. °C (°F)	Elevated Cure Schedule Time @ °C (°F)	RT Cure Schedule Time	Working Life Hours	Shelf Life Months ³	Theoretical Coverage @ (Rec. Thickness ²) ft ² /gram m ² /gram	VOC ⁴ g/L	Typical Application	Comments
2044*	Ni	Acrylic (1)	1.2	1.000 (2)	-40/85 (-40/185)	0.25 hr. @ 21°C (70°F) + 0.75 hr. @ 66°C (150°F)	24 hr.	unlimited	9	0.034 ft ² /gram 0.0032 m ² /gram	755	EMI shielding of electronic enclosures and assemblies	Durable coating. Nickel filler provides some H-field shielding
2056*	Ag/Cu & Ag	Acrylic (1)	1.1	0.030 (1)	-40/85 (-40/185)	0.25 hr. @ 21°C (70°F) + 0.5 hr. @ 66°C (150°F)	24 hr.	unlimited	12	0.062 ft ² /gram 0.0058 m ² /gram	718	EMI shielding of electronic enclosures and assemblies	Most cost effective EMI shielding solution for electronic enclosures
2040*	Ag	Acrylic (1)	1.2	0.025 (1)	-40/85 (-40/185)	0.25 hr. @ 21°C (70°F) + 0.5 hr. @ 66°C (150°F)	24 hr.	unlimited	12	0.065 ft ² /gram 0.0060 m ² /gram	741	EMI shielding of electronic enclosures and assemblies	Silver filler provides antimicrobial resistance and excellent EMI shielding
610*	Ag/Cu	Epoxy (2) A:B 100:28.3	1.2	0.150 (2)	-65/125 (-85/257)	2 hr. @ 21°C (70°F) + 1 hr. @ 66°C (150°F) + 1 hr. @ 121°C (250°F)	1 week	8.0	9	0.051 ft ² /gram 0.0047 m ² /gram	591	Man portable electronics, radar systems, missile cannisters	Maintains electrical and mechanical stability in harsh environments
571*	Ag	Epoxy (2) A:B 100:8.3	1.3	0.010 (1)	-40/125 (-40/257)	15 min. @ 21°C (70°F) + 1 hr. @ 121°C (250°F)	none	12.0	9	0.060 ft ² /gram 0.0056 m ² /gram	308	Component level EMI shielding of semiconductor devices	Good adhesion to semiconductor packages. Withstands wave solder temperatures
576*	Ag	Epoxy (2) A:B 100:27.5	1.7	0.060 (1)	-40/150 (-40/302)	1 hr. @ 21°C (70°F) + 1 hr. @ 121°C (250°F)	1 week	8.0	9	0.092 ft ² /gram 0.0085 m ² /gram	560	Electroplating over plastics and graphite composites	Provides a conductive seed layer for electro- plating
596*	Ag	Epoxy (2) A:B 100:37.2	1.8	0.060 (1)	-40/150 (-40/302)	1 hr. @ 21°C (70°F) + 1 hr. @ 121°C (250°F)	1 week	8.0	9	0.098 ft ² /gram 0.0091 m ² /gram	585	Man portable electronics, radar systems, missile cannisters	Meets military specification MIL-C-22750, CHO-SHIELD 579 is a low VOC version of CHO-SHIELD 596
608*	Ag	Polyester (1)	1.4	0.015 (0.5)	-40/125 (-40/257)	0.25 hr. @ 21°C (70°F) + 0.5 hr. @ 121°C (250°F)	none	unlimited	9	0.099 ft ² /gram 0.0092 m ² /gram	711	EMI shielding of electronic enclosures and assemblies	Flexible coating, great for covering parts with difficult geometries
604*	Ag	Polyurethane (1)	1.2	0.010 (1)	-40/125 (-40/257)	0.25 hr. @ 21°C (70°F) + 0.25 hr. @ 150°C (302°F)	none	unlimited	9	0.034 ft ² /gram 0.0032 m ² /gram	767	Component level EMI shielding of semiconductor devices	Advanced coating developed for high volume, precise spray application on semiconductor packages
4994*	Ag	Polyurethane (4) A:B:C:D 100:18.3: 1.4:20.9	2.3	0.075 (3)	-40/85 (-40/185)	2 hr. RT & 40-60% RH + 2 hr. @ 54°C (130°F)	1 week	3.0	6	0.030 ft ² /gram 0.0028m ² /gram	596	Airframes	Very smooth and very coinductive; long pot life, excellent sprayability
2001*	Cu	Polyurethane (3) A:B:C 100:10.1:42.0	1.6	0.100 (3)	-65/85 (-85/185)	2 hr. @ 21°C (70°F) + 0.5 hr. @ 121°C (250°F)	1 week	2.0	9	0.035 ft ² /gram 0.0033 m ² /gram	543	Corrosion protection for air- frames	Requires use of CHO-SHIELD 1091 primer
2002*	Cu	Polyurethane (3) A:B:C 100:10.3:42.2	1.6	0.100 (3)	-65/85 (-85/185)	2 hr. @ 21°C (70°F) + 0.5 hr. @ 121°C (250°F)	1 week	2.0	9	0.035 ft ² /gram 0.0033 m ² /gram	540	Corrosion protection for air- frames	Chromate free. Requires use of CHO-SHIELD 1091 primer
2003*	Cu	Polyurethane (3) A:B:C 100:10.1:42.0	1.6	0.100 (3)	-65/85 (-85/185)	2 hr. @ 21°C (70°F) + 0.5 hr. @ 121°C (250°F)	1 week	2.0	9	0.036 ft ² /gram 0.0033 m ² /gram	541	Corrosion protection for air- frames	Requires use of CHO-SHIELD 1091 primer

* 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.

Note: 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.
For additional information consult Chomerics' Technical Data Sheet.

Product	Filler	Resin Type (Parts) Mix Ratio by Weight	Specific Gravity ¹	Max. Vol. Resistivity ¹ ohm-cm	Min/Max. Use Temp. °C (°F)	Min. Lap Shear ¹ psi (kPa)	Elevated Cure Schedule Time @ °C (°F)	RT Cure Schedule Time	Working Life Hours	Shelf Life Months ³	VOC ⁴ g/L	Typical Application	Comments
CHO-BOND 4660*	Ag/Cu	Polyisobutylene (1)	2.0**	0.080	-55/100 (-67/212)	n/a	None	1 week ⁵	0.5	6	305	Sealing enclosure seams	Superior performance in vibration or shear. For vertical seams or longer (120 minutes) working life, use CHO-BOND 4669 VOC = 340.
TECKNIT 0005*	Ag/glass	Polyolefin (1)	1.7	0.005	-54/94 (-65/200)	4 (28)	None	24 hr.	5 min	9	419	Bonding enclosures	Flexible thixotropic cream system
CHO-BOND 2165*	Cu	Polyurethane (2) A:B 100:7	2.9	0.010	-65/85 (-85/185)	120 (827)	2 hours @ 21°C (70°F) + 0.25 hr. @ 113°C (235°F)	1 week ⁵	1.0	9	207	Airframe form-in-place sealing	Corrosion resistant; paintable
TECKNIT 0002	Ag	Silicone (1)	3.1	0.010	-59/204 (-75/400)	150 (1034)	None	72 hr.	5 min	5.5	31	Bonding elastomer gaskets	Rec. bond line thickness: 0.005" - 0.25" (- 0.13 mm - 6.35 mm); flexible paste; Handling time 24 hours.
CHO-BOND 1016*	Ni/C	Silicone (1)	2.4	0.500	-55/125 (-67/257)	150 (1034)	None	1 week ⁵	0.5	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	-55/125 (-67/257)	150 (1034)	None	1 week ⁵	0.5	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 with a 12 month shelf life
CHO-BOND 1075*	Ag/Al	Silicone (1)	2.0	0.010	-55/200 (-67/392)	100 (689)	None	1 week ⁵	0.25	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	-55/200 (-67/392)	100 (689)	None	1 week ⁵	0.5	6	160	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.

** Wet density

Note: 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.

For additional information consult Chomerics' Technical Data Sheet.

Adhesives - Typical Properties

Conductive Compounds Selector Guide

Product	Filler	Resin Type (Parts) Mix Ratio by Weight	Specific Gravity ¹	Max. Vol. Resistivity ² ohm-cm	Min/Max. Use Temp. °C (°F)	Min. Lap Shear ¹ psi (kPa)	Elevated Cure Schedule Time @ °C (°F)**	RT Cure Schedule Time	Working Life Hours	Shelf Life Months ³	VOC ⁴ g/L	Typical Application	Comments
CHO-BOND 584-29	Ag	Epoxy (2) 584:29 100:6.3	2.5	0.002	-55/125 (-67/257)	1200 (8274)	0.25 hr. @ 113°C (235°F)	24 hr.	0.5	12	3	Bonding enclosures; connector shielding	General purpose; light paste; fast heat or RT cure; available in easy mix CHO-PAKs & SYRINGE-PAKs May be sprayed by thinning with toluene. CHO-BOND 584-29/toluene weight mix ratio is 100:150
CHO-BOND 584-208	Ag	Epoxy (2) 584:208 1:1	2.6	0.002	-62/100 (-80/212)	1000 (6895)	0.75 hr. @ 100°C (212°F)	24 hr.	1.0	9	0	Bonding enclosures	General purpose; medium paste; fast heat or RT cure; Easy 1:1 mix ratio (wt.)
CHO-BOND 580-208	Ag	Epoxy (2) 580:208 1:1	2.9	0.003	-62/100 (-80/212)	700 (4826)	0.75 hr. @ 100°C (212°F)	24 hr.	1.0	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, CHO-BOND 580-208/solvent weight mix ratio is 100:38
TECKNIT 8116*	Ag	Epoxy (2) A:B 1:1	2.5	0.002	-62/100 (-80/212)	1400 (9653)	0.50 hr. @ 100°C (212°F)	24 hr.	0.75	15	81	Bonding enclosures	Epoxy solder
CHO-BOND 360-20	Ag/Cu	Epoxy (2) 360:20 1:1	5.0	0.005	-62/100 (-80/212)	1600 (11032)	0.25 hr. @ 115°C (239°F)	24 hr.	1.0	9	0	EMI gasket attachment; bonding enclosures	General purpose; very thick paste; fast heat or RT cure; Minimum bond line is 0.010” (0.25 mm)
CHO-BOND 1030*	Ag/Cu	Silicone (1)	3.8	0.050	-55/200 (-67/392)	200 (1379)	None	1 week ⁵	0.5	6	0	EMI gasket attachment	Recommended bond line thickness: < 0.010” (0.25 mm); Primer promotes adhesion. Recommended primer is 1086
CHO-BOND 1029*	Ag/Cu	Silicone (2) A:B 1:2.5	3.1	0.060	-55/125 (-67/257)	450 (3103)	0.5 hr. @ 121°C (250°F)	1 week ⁵	2.0	6	14	EMI gasket attachment	Recommended bond line thickness: < 0.008” (0.20 mm); Primer promotes adhesion. Recommended primer is 1085

* 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.

** For alternate cure schedules csee Technical Bulletin.

Note: 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.

For additional information consult Chomerics' Technical Data Sheet.

Conductive Grease - Typical Properties

Product	Filler	Resin Type (Parts)	Specific Gravity ¹	Max. Vol. Resistivity ¹ ohm-cm	Min/Max. Use Temp. °C(°F)	Shelf Life Months ³	VOC ⁴ g/L	Typical Application	Comments
CHO-LUBE® 4220	Ag	Silicone (1)	3.1**	0.100***	-40/204 (-40/400)	12	0	Surface-to-surface particularly metal-to-metal sliding contact areas requiring continuous electrically conductive paths, such as a switch.	Can also be used for grounding of enclosures, equipment or components which require lubrication to overcome friction as well as EMI control. It may be supplied by standard caulking or grease guns.

** Wet density

*** Per CHO-MAT 1002

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	281	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	2 component, 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	1802	4 component, 1 quart aluminum can kit	52-04-4994-1000	Not Required
	7210	4 component, 1 gallon aluminum can kit	52-03-4994-1000	Not Required
CHO-SHIELD 604	290	10 fluid ounce aluminum bottle	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
	524	3 component, 1 pint aluminum can kit	52-01-2003-0000	1091
	700	3 component, 1 quart aluminum can kit	52-04-2003-0000	1091

Note: See Technical Data Sheet for packaging details
*** 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
	10x 3	2 component, premeasured, 10x 3 gram syringe kits	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	1.5 fluid ounce aluminum foil tube	50-02-1030-0000	1086
	113.4	1.5 fluid ounce aluminum foil tube	50-02-1030-1000	No
	454	6 fluid ounce SEMCO cartridge	50-01-1030-0000	1086
CHO-BOND 1029	85	2 component, 4 ounce polypropylene kit	50-00-1029-0000	1085
	454	2 component, 8 ounce polypropylene kit	50-01-1029-0000	1085

Note: See Technical Data Sheet for packaging details



continued on next page...

Sealants/Gap Fillers - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.	Primer Included
CHO-BOND 4660	113.4	2 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	2 fluid ounce aluminum foil tube	51-02-4669-0000	Not Required
	681	0.1 gallon fiber cartridge	51-05-4669-0000	Not Required
TECKNIT 0002	56	0.75 fluid ounce aluminum foil tube	72-00002	Not Required
TECKNIT 0005	227	1 pint aluminum can	72-00005	Not Required
CHO-BOND 2165*	454	2 component, .5 pint aluminum can kit	50-01-2165-0000	No
	1135	2 component, 1 pint aluminum can kit	50-02-2165-0000	No
	2268	2 component, 1 quart aluminum can kit	50-04-2165-0000	No
CHO-BOND 1016	71	1.5 fluid ounce aluminum foil tube	50-02-1016-0000	1086
	300	6 fluid ounce SEMCO cartridge	50-01-1016-0000	1086
CHO-BOND 1038	113.4	1.5 fluid ounce aluminum foil tube	50-02-1038-0000	1086
	113.4	1.5 fluid ounce aluminum foil tube	50-02-1038-1000	No
	227	2.5 fluid ounce SEMCO cartridge	50-33-1038-0000	No
	454	6 fluid ounce SEMCO cartridge	50-01-1038-0000	1086
	454	6 fluid ounce SEMCO cartridge	50-31-1038-0000	No
CHO-BOND 1121	454	6 fluid ounce SEMCO cartridge	50-01-1121-0000	1086
CHO-BOND 1075	71	1.5 fluid ounce aluminum foil tube	50-02-1075-0000	1086
	71	1.5 fluid ounce aluminum foil tube	50-02-1075-1000	No
	284	6 fluid ounce SEMCO cartridge	50-01-1075-0000	1086
CHO-BOND 1035	71	1.5 fluid ounce aluminum foil tube	51-00-1035-0000	1086
	71	1.5 fluid ounce aluminum foil tube	51-00-1035-1000	No
	284	6 fluid ounce SEMCO cartridge	51-01-1035-000	1086

Note: See Technical Data Sheet for packaging details

* 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-SHIELD 1091	95	4 fluid ounce glass bottle	50-00-1091-0000
	375	8 fluid ounce plastic bottle	50-01-1091-0000

Note: 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 Grease - Ordering Information

Product	Weight (grams)	Packaging	Chomerics Part No.
CHO-LUBE 4220	113.4	1.5 fluid ounce foil tube	54-02-4220-0000
	283.5	6 fluid ounce SEMCO cartridge	54-01-4220-0000

Note: See Technical Data Sheet for packaging details



NOTES:

1. Properties listed are for products prepared at the elevated cure schedule. Test Methods: Specific Gravity, 95-40-5504, 95-40-5502, QAP-1101F; Volume Resistivity, 95-40-5102, 95-40-5101, 95-40-6007, 95-40-6017; Surface Resistance, 95-40-5104; Lap Shear, 95-40-5300. These specifications are available from Chomerics. Copies are available upon request.
2. The recommended thickness may vary from application to application. Please use the published data a preliminary guideline. Contact Chomerics' Application Engineering for assistance.
3. Compound shelf life is established at storage conditions from date of manufacture. All compounds are shipped from Parker Chomerics with a minimum 80% shelf life.
4. Volatile Organic Content (VOC) values are theoretical approximations calculated from the characteristics of the individual components of the product formulation.
5. Material is sufficiently cured after 24 hours for handling purposes. Full specification properties are developed after time given.

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