



CHO-BOND® 360 Conductive Epoxy Adhesive Caulk

CHO-BOND® 360 compound is a relatively low cost, electrically conductive epoxy adhesive that combines the good adhesive characteristics as epoxy, and the superior electrical conductivity of silver. It is recommended as a thermo-setting EMI/RFI shielding compound and is effective even for designs requiring the use of a fillet as opposed to a flanged bead (with hardener 208). CHO-BOND 360 compound is excellent for poorly tolerated, non-flat surfaces which have been coated with a thin dielectric layer, such as Class 1 irridite or alodine. (Chomerics recommends MIL-C-5541 B, Class 3 when low electrical resistance and corrosion resistance are required). Its coarse granular silver-plated copper filler will abrade thin oxides from aluminum, copper and galvanized steel, especially when applied between flanges under modest contact pressure.

APPLICATIONS

Applications typically include sealing EMI/RFI leaks around vents, windows, and machined surfaces; the bonding, environmental sealing, and EMI shielding of cast aluminum housings; the bonding and shielding of conduit bulkhead passthroughs. When vertical and overhead fillets are filled (use only CHO-BOND 360-208 for this application due to low flow properties) the compound should be room-temperature cured for 24 hours to prevent undesired flow.

CHO-BOND 360 conductive epoxy is supplied as a two-part heavy consistency paste which is mixed together just before application. It can be cured at room temperature, although it reaches its peak properties when heat cured.

Where galvanic potential with the substrates exists, such as with aluminum or zinc, be sure to overcoat the cured fillet with an electrically insulating epoxy, silicone, polyurethane or polysulfide moisture vapor barrier.

CHO-BOND 360 compound has excellent adhesion to dissimilar substrates. Because of its excellent adhesive properties, it should not be used if it is anticipated that the seam will be "broken" at a future date. Because of the size of its conductive particles, 360 compounds should not be used if the anticipated bond line will be thinner than 10 mils.

CHO-BOND 360-20

CHO-BOND 360-20 conductive adhesive is the lowest cost version, easiest to mix with a 1:1 mix ratio, is most conductive, has the highest lap shear bond strength, may be room-temperature cured, fills large gaps, and has good thermal shock resistance. It is the more versatile of the two CHO-BOND 360 systems and has a one hour pot life. CHO-BOND 360-20

continued

SPECIFICATIONS

	CHO-BOND 360-20	CHO-BOND 360-208
Resin	Epoxy	Epoxy
Filler	Silver/Copper	Silver, Silver/Copper
Consistency	Med. Paste	Heavy Paste
Volume Resistivity, ohm-cm, max.	0.005 2 hrs. @ 150°F (65.6°C)	0.01 45 min. @ 212°F (100°C)
Lap Shear, psi (MPa)	1600 (11.04) 2 hrs. @ 150°F (65.6°C)	1400 (9.66) 45 min. @ 212°F (100°C)
Specific Gravity	5.0 ± 0.30	4.0 ± 0.40
Continuous Use Temp.	-80 to 212°F (-62 to 100°C)	-80 to 212°F (-62 to 100°C)
Cure Cycles, 24 hours 2 hours 1 hour 45 minutes 15 minutes	75°F (24°C) 150°F (66°C) 200°F (95°C) 212°F (100°C) 235°F (115°C)	75°F (24°C) 150°F (66°C) 200°F (95°C) 212°F (100°C) 235°F (115°C)
Pot Life, hours	1	1
Mix Ratio (Parts hardener to 100 parts resin by weight)	100	33
Shelf Life, months, RT	9	9
VOC, g/l	0	0

