CHO-BOND® 1016

ONE COMPONENT CORROSION RESISTANT ELECTRICALLY CONDUCTIVE SILICONE SEALANT



Customer Value Proposition:

CHO-BOND 1016 is a nickel-plated graphite filled, one-component conductive silicone specifically designed for use as a fillet, gap filler and seam sealant on electrical enclosures for EMI shielding or electrical grounding. Minimum recommended bond line for CHO-BOND 1016 is 0.007 inches. In addition. CHO-BOND 1016 may be used for EMI gasket repair, bonding, and attachment in applications where moderate lap shear strength (150 psi) is required. The nickel-plated graphite filler provides good galvanic corrosion resistance for applications with aluminum as the mating substrate. CHO-BOND 1016's moisture cure silicone polymer system allows it to cure to the touch in 24hrs and provides a flexible and resilient conductive and environmental seal over a wide range of application temperatures. CHO-BOND 1016's nickel-plated graphite filler offers good EMI shielding for enclosures where both RF fields must be excluded and internal radiated emissions attenuated.

For best adhesion results, CHO-BOND 1016 should be used in conjunction with CHO-SHIELD 1086 primer. Typical applications include man portable electronics, radar and communication systems, EMI vents, military ground vehicles, and shelters.

Contact Information:

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Features and Benefits:

- One component
- Nickel plated graphite filler
- No VOCs
- Moisture cure silicone
- Light weight
- Non corrosive cure mechanism
- Medium paste

- Easy to use, no weighing or mixing required.
- Moderate conductivity 0.500 ohm-cm, low cost (\$/cc), good galvanic corrosion resistance against aluminum substrates.
- Minimal shrinkage.
- 30 minute working life, rapid skin formation, 24 hr handling time, requires no pressure during curing, wide range of application temperatures. 1 week for full cure.
- More coverage per gram of material, minimal weight added to assembly or vehicle.
- No corrosive by-products generated during curing to damage substrate.
- Easy to dispense, apply and spread, can be used on overhead or vertical surfaces.



CHO-BOND 1016 - Product Information

Table 1 Typical Properties

CHO-BOND 1016							
Typical Properties	Typical Values	Test Method					
Polymer	Silicone	N/A					
Filler	Nickel-Plated Graphite	N/A					
Mix Ratio, A : B (by weight)	1-part	N/A					
Color	Dark Gray	N/A	(Q)				
Consistency	Medium Paste	N/A	(Q)				
Maximum DC Volume Resistivity	0.500 ohm-cm	CHO-95-40-5555*	(Q/C)				
Minimum Lap Shear Strength**	150 psi (1034 kPa)	CHO-95-40-5300*	(Q/C)				
Minimum Peel Strength**	8.0 lb./inch (1401 N/m)	CHO-95-40-5302*	(Q/C)				
Specific Gravity	2.4	ASTM D792	(Q/C)				
Hardness	80 Shore A	ASTM-D2240	(Q/C)				
Continuous Use Temperature	- 55°C to 125°C (-67 °F to 257 °F)	N/A	(Q)				
Elevated Temperature Cure Cycle	None	N/A					
Room Temperature Cure	1 week***	N/A	(Q)				
Working Life	0.5 hour	N/A	(Q)				
Shelf Life, unopened	6 months @ 25°C (77°F)	N/A	(Q)				
Minimum thickness recommended	0.010 in (0.25 mm)	N/A					
Maximum thickness recommended	0.040 in (1.02 mm)	N/A					
Volatile Organic Content (VOC)	0 g/l	Calculated					
Theoretical Coverage Area at 0.010" Thick per Pound (454 grams)	1250 in² (8065 cm²)	N/A					
Theoretical Coverage - Length of an 1/8" Diameter Bead per Pound (454 grams)	80 feet (24.4 m)	N/A					

 $\textbf{Note:} \ \text{N/A-Not Applicable, } \ (\text{Q/C}) - \text{Qualification and Conformance Test, } \ (\text{Q}) - \text{Qualification Test}$

- * This test Method is available from Parker Chomerics.
- ** Minimum values listed are based on using the CHO-SHIELD 1086 primer that typically comes bundled with the CHO-BOND.
- *** Cure is sufficient for handling in 24 hours. Full specification properties are developed after 1 week (168 hours) at room temperature.

Table 2 Ordering Information

Product	Weight (grams)	Packaging	Part Number	Primer Included
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

Table 3 Primer Ordering Information

Product	Weight (grams)	Packaging	Part Number
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

Please refer to Parker Chomerics Surface Preparation and CHO-BOND Application documents for information regarding the proper surface preparation, primer application (if required), and use of these compounds.

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