

CHO-BOND® 1077

ONE COMPONENT ELECTRICALLY CONDUCTIVE NICKEL ALUMINUM SILICONE SEALANT



Customer Value Proposition:

CHO-BOND 1077 is a nickel plated aluminum filled, one-component conductive silicone designed for use as a fillet, gap filler and seam sealant on electrical enclosures for EMI shielding. Maximum recommended bond line thickness for CHO-BOND 1077 is 0.020 inches (0.51 mm). In addition, CHO-BOND 1077 may be used for EMI gasket repair, bonding, and attachment in applications where high strength (250 lbs/in²) is required.

The nickel aluminum filler of CHO-BOND 1077 provides excellent galvanic corrosion resistance when applied to aluminum substrates. CHO-BOND 1077 has moderate electrical conductivity but maintains stable EMI shielding in salt spray/salt fog environments.

No volatile organic compounds (VOCs) and minimal shrinkage upon curing make CHO-BOND 1077 a good choice for a variety of commercial and military applications. CHO-BOND 1077's moisture cure silicone polymer system allows it to cure to the touch within 24hrs and provides a robust conductive and environmental seal over a wide range of application temperatures.

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Features and Benefits:

- One component, no weighing or mixing required
- Nickel/aluminum filler
- Superior galvanic corrosion resistance against aluminum substrates
- No VOCs
- Minimal shrinkage, no permits or ventilation required.
- Moisture cure silicone
- No primer required
- 30 minute working life, rapid skin formation
- 24 hr handling time, requires no pressure during curing
- Provides greater than 250psi lap shear strength without primer step
- Light weight



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CHO-BOND 1077 - Product Information

Table 1 Typical Properties

CHO-BOND 1077		
Typical Properties	Typical Values	Test Method
Polymer	Silicone	N/A
Filler	Nickel-Plated Aluminum	N/A
Mix Ratio, A : B (by weight)	1-part	N/A
Color	Gray	N/A (Q)
Consistency	Medium Paste	N/A (Q)
Maximum DC Volume Resistivity	0.600 ohm-cm	CHO-95-40-5555* (Q/C)
Minimum Lap Shear Strength**	250 psi (1724 kPa)	CHO-95-40-5300* (Q/C)
Minimum Peel Strength**	20 lb./inch (3502 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 200°C (-67 °F to 392 °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	None	N/A
Maximum thickness recommended	0.020 in (0.51 mm)	N/A
Volatile Organic Content (VOC)	0 g/l	Calculated
Theoretical Coverage Area at 0.010" Thick per Pound (454 grams)	1250 in ² (8065 cm ²)	N/A
Theoretical Coverage - Length of an 1/8" Diameter Bead per Pound (454 grams)	80 feet (27.4 m)	N/A

Notes: N/A - Not Applicable, (Q/C) - Qualification and Conformance Test, (Q) - 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 1077	95	1.5 fluid ounce foil tube	50-02-1077-0000	Not required
	325	6 fluid ounce SEMCO cartridge	50-01-1077-0000	Not required

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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