

# CHO-BOND® 1018

## Two Component Electrically Conductive Nickel-Plated Aluminum Polythioether Sealant



Parker Chomerics CHO-BOND 1018 is a nickel-plated aluminum filled, two-component electrically conductive polythioether designed for use as a fillet, gap filler and seam sealant on electrical enclosures for EMI shielding. Its nickel-plated aluminum filler provides excellent corrosion resistance against MIL-DTL-5541 Type I & Type II coated aluminum substrates which reduces maintenance costs and increases aircraft availability with minimal downtime.

Because of this, CHO-BOND 1018 is galvanically compatible with Parker Chomerics CHO-SEAL® 6502 nickel-aluminum filled silicone and CHO-SEAL 6503 nickel-aluminum filled fluorosilicone gaskets.

CHO-BOND 1018's custom formulated polythioether polymer system offers excellent fluid and fuel resistance to jet fuels, de-icing solutions, hydraulic fuels and more. It is also silicone-free, removing any silicone contamination concerns while also being easily paintable – eliminating the need and cost of an additional primer application.

Overcoat adhesion qualified with MIL-PRF-23377 Type II Class N and MIL-DTL-53022 Type II epoxy primers.

### Contact Information

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### Product Features

- Good EMI shielding
- Excellent galvanic corrosion resistance against aluminum substrates
- Silicone free, easily paintable
- Packaged in a pre-measured kit
- No weighing required, mix and dispense in same package, minimizes process scrap
- Lightweight
- More coverage per gram of material, minimal weight added to assembly or vehicle
- For overhead or vertical surfaces

### Typical Applications

- Ballistics and guided weaponry
- Ground/transport vehicles
- Military shelters and containers
- Planes, drones, helicopters
- Defense radar systems
- Applications where corrosion resistance is necessary combined with exposure to fuels and fluids

# CHO-BOND® 1018 Product Information

Typical Properties	CHO-BOND 1018	Test Method	
Polymer	Polythioether	N/A	
Filler	Nickel-Plated Aluminum	N/A	
Mix Ratio, A / B (by weight)	2-part prepackaged kit	N/A	
Color	A: Gray, B: Black	N/A	(Q)
Consistency	Medium Paste	N/A	(Q)
Maximum DC Volume Resistivity	0.200 ohm-cm	CHO-95-40-5555*	(Q/C)
Minimum Lap Shear Strength**	100 psi (689 kPa)	CHO-95-40-5300*	(Q/C)
Tensile	125 psi (862 kPa)	MAT-1014	(Q/C)
Elongation	30%	MAT-1014	
Specific Gravity	2.1	ASTM D792	(Q/C)
Hardness Shore A	73	ASTM D2240	(Q/C)
Continuous Use Temperature	-45C to 125C (-49F to 257F)	N/A	(Q)
Elevated Temperature Cure Cycle	3 days @ 70C (160F)	N/A	
Room Temperature Cure	1 week**	N/A	(Q)
Working Life	2 hours	N/A	(Q)
Tack Free Time	8 hours	N/A	(Q)
50% Cure Time	16 hours	N/A	(Q)
Time to Paint Over	3 days***	N/A	(Q)
Shelf life, months from date of manufacture, <b>frozen (-40°C)</b> unopened	6 months	N/A	(Q)
Minimum thickness recommended	0.010 in (0.25 mm)	N/A	
Maximum thickness recommended	0.250 in (6.35 mm)	N/A	
Volatile Organic Content (VOC)	128 g/l	Calculated	
Theoretical Coverage - Area at 0.010" Thick per Pound (454 grams)	1310 in <sup>2</sup> (8451 cm <sup>2</sup> )	N/A	
Theoretical Coverage - Length of an 1/8" Diameter Bead per Pound (454 grams)	89 feet (27.1 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.

\*\* Cure is sufficient for handling in 24 hours. Full specification properties are developed after 1 week (168 hours) at room temperature.

\*\*\* Chomerics' recommend minimum time to wait before applying paint over CHO-BOND 1018. Material will continue to cure after painting.

## CHO-BOND® 1018 Ordering Information

Product	Weight (grams)	Packaging	Part Number	Primer Included
CHO-BOND 1018	280	6 fluid ounce SEMCO cartridge with dasher rod	50-01-1018-0000	Not Required
CHO-BOND 1018	120	2.5 fluid ounce SEMCO cartridge with dasher rod	50-02-1018-0000	Not Required

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

### Request a Sample

[Get a sample here](#)

### Where to Buy

[Find a sales rep or distributor near you](#)

[parker.com/chomerics](http://parker.com/chomerics)

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