CHO-BOND® 1018 & CHO-BOND® 1019

Application Guide

1. This application procedure applies to Parker Chomerics CHO-BOND® 1018 and CHO-BOND® 1019. CHO-BOND 1018, is a two-part nickel-plated aluminum polythioether and CHO-BOND 1019, is a two-part silver-plated aluminum polythioether, each of which are typically used as gap fillers, fillets, and seam sealants.
2. **For New Applications:** In a well-ventilated area, clean the surfaces with isopropyl alcohol (IPA) and let the solvent flash off. Other harsher solvents, such as methyl-ethyl-ketone (MEK), toluene, or acetone can be used to clean more difficult to remove contaminants.

   For Rework Applications: remove the existing compound and prepare the surfaces same as above guidance.
3. Once the surfaces are prepared, CHO-BOND 1018 or CHO-BOND 1019 can be mixed. Refer to the Mixing Instructions in this document as presented on Page 2.
4. CHO-BOND 1018 or CHO-BOND 1019 material is now ready to be applied. CHO-BOND material is typically packaged in a 6-ounce (by volume) SEMCO® cartridge. CHO-BOND 1018 is also available in a 2.5-ounce (by volume) SEMCO cartridge.

   Note: The 6-ounce SEMCO cartridge will require an application gun to dispense the product. There are manual guns as well as pneumatic guns. A commonly used pneumatic gun is the SEMCO model 250A. (Application guns are not available from Parker Chomerics). A typical illustration of the 250A dispensing gun is shown in the next column:

   To initially select the proper pressure to dispense CHO-BOND products from the SEMCO cartridge, set the line pressure at 10 psi and then activate the dispensing gun. While the gun remains activated, slowly increase the pressure to the gun steadily until the CHO-BOND material flows out of the gun at the desired rate. Avoid having high pressure in the line to limit unexpected excess material.

   Care should be taken during the application of the CHO-BOND mate- rial so that any protective coating on the substrate is not damaged. A non-stick plastic applicator is a better choice than a metal one. Limiting the bead width to less than a ½-inch in cross-section is recommended, as the center of the bead may not properly cure within the typical full-cure time period.
5. When out of its container, and exposed to air, CHO-BOND 1018 / CHO-BOND 1019 material will start to cure with- in a few minutes. As the product starts to cure, it will become difficult to work with and may compromise adhesion to the mating surfaces. It is recommended to dispense in short sections, approximately 3 feet of working length at a time.

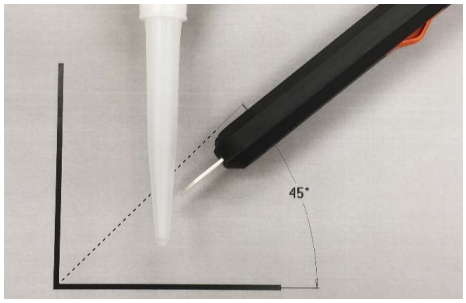
   Try to avoid applying a long bead of material where the beginning of the bead may start to cure before optional forming and shaping can take place.

   If forming or shaping of the material is required, the forming tool should be wet using Toluene (or other similar slow evaporating solvents). Non-stick, inert, and chemically resistant plastic tools may be a better choice than a metal forming tool to avoid inadvertent damage to the substrate or finish. CHO-BOND 1018 and CHO-BOND 1019 will feel gritty during application and forming, due to the large particle size of the conductive filler.
6. Handling time will vary by application. Typically, the assembly can be handled after 24 hours of cure time. The assembly will continue to cure as long as there is access to the ambient atmosphere. Ideal conditions for full cure are room temperature 21± 11°C (70± 20°F). Cure is independent of relative humidity levels.

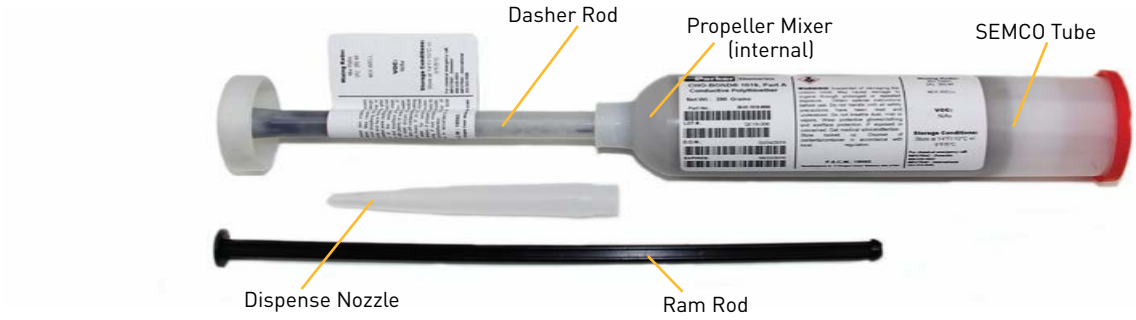
Mixing Instructions - Injection Style Cartridge Package

1. Always read and understand the process specification and the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations.
2. Remove red nozzle cap and screw in dasher rod (clockwise) into propeller mixer located inside the nose of cartridge.
3. Hold cartridge, grasp dasher rod, and push forward approximately one inch.
4. Insert ram rod into hollow of dasher rod, break piston loose, and inject about one-third of the contents into the front third of the cartridge.

   Note: Use even pressure; do not use force, tap, pound, or jolt ram rod if piston does not break loose readily.
5. Push forward dasher rod and inject one-third of the rod's contents at the middle of cartridge, then push dasher rod and inject the last third one inch from the end of the cartridge. Remove ram rod.
6. To mix, hold cartridge and push dasher rod to the plunger end. Begin stroking the dasher rod turning in a spiral clockwise motion from the end of the cartridge to the plunger. Rotate the dasher rod approximately 90 degrees each stroke. A stroke is one complete in and out cycle. Mix material to 60-120 strokes (approximately 1-2 minutes), or until well mixed.
7. After mixing, remove red bottom/end cap.
8. Pull dasher rod back to the nose of the cartridge. Grasp cartridge firmly at the neck, unscrew dasher rod and remove.
9. Screw dispense nozzle into cartridge. The dispense nozzle can be cut at an angle to help form the desired bead size and shape, reducing the amount of shaping and forming of the dispensed bead.



10. Insert mixed and prepared tube into the dispensing gun, and use as required.



CHO-BOND® 1018 (Ni/Al filler) and CHO-BOND® 1019 (Ag/Al filler) caulking compound kit consists of a (part-A binder), charged in a HPE SEMCO tube, with a mixing dasher rod filled with part-B. The cartridge contains a propeller mixer inside the nose of the SEMCO tube. The mixing dasher rod is screwed on to the propeller mixer, and the contents of the dasher rod are "charged" into the SEMCO tube for mixing.

PAINT-OVER-TIME		
Curing Conditions	**Material Observations**	**Results**
22°C (72°F) for 3 days*	No surface tack, bead core firm (almost cured)	90% cured core, No blisters. Full cure in 7 days
22°C (72°F) for 6 hours	Material was tacky, bead core was soft (uncured)	Not fully cured, No blisters. Still achieved full cure in 7 days

* Parker recommended paint-over-time. Paint-over-times less than 3 days need to be qualified by the customer

Cure - Application life and cure times are dependent upon ambient environmental conditions. For epoxy cured polythioether relative humidity does not affect tack free time and cure time.

CHO-BOND 1018 and CHO-BOND® 1019 material is shipped frozen and must be immediately stored frozen upon receipt on-site at –40°F (-40°C), or below for optimal retention of material properties and certified shelf life.

Thawing of CHO-BOND 1018 and CHO-BOND® 1019 prior to use can be accomplished in two ways:

Ambient Thaw: Place the entire kit (unopened pouch) to be used on a level surface in a vertical position. Let stand at 70-80°F (21- 27°C) for approximately 30 minutes. Dry any condensation from the exterior of the pouch and mixing tubes prior to use. Actual thawing times may vary.

Water Bath Thaw: Place the CHO-BOND 1018 and CHO-BOND 1019 kit (pouch) upright in a 120°F (49°C) water bath for approximately 5-7 minutes. Upon removal from the bath, carefully dry the exterior of the pouch (same as above) before using. Actual thawing times may vary.

Technical Bulletins for CHO-BOND materials, along with Safety Data Sheets (SDS) are available at our website: parker.com/chomerics. For additional technical support, please contact Parker Chomerics Applications Engineering at (781) 935-4850.

CHO-BOND® 1018 & CHO-BOND® 1019 Ordering Information

Product	Weight (grams)	Packaging	Part Number	Primer Included
CHO-BOND 1018	120	2.5 fluid ounce SEMCO cartridge with dasher rod	50-02-1018-0000	Not Required
CHO-BOND 1018	280	6 fluid ounce SEMCO cartridge with dasher rod	50-01-1018-0000	Not Required
CHO-BOND 1019	280	6 fluid ounce SEMCO cartridge with dasher rod	50-01-1019-0000	Not required