

**CB309 EPOXY**  
STRUCTURAL ADHESIVE

**CLICK BOND**

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**PRODUCT DESCRIPTION**

CB309 structural adhesive is a general purpose, thixotropic, two part, epoxy adhesive that can be used for applications that require gap filling or non-slumping characteristics on a vertical surface. The cured adhesive offers strong, durable, chemically and environmentally resistant bonds. CB309 adhesive has demonstrated excellent adhesion to prepared metals, FRP, wood, rubber, and other materials.

**PRODUCT FEATURES**

- Safe – contains no solvents, is nonflammable, and is virtually odorless.
- High strength – in many instances has load bearing properties equal to or greater than the materials being bonded.
- Chemically/environmentally resistant – resists dilute acids, alkalis, solvents, greases, oils, moisture, sunlight, and weathering. Temperature resistant from -30°F to 250°F.
- Excellent engineering properties – low shrinkage, good creep properties, and low water absorption.

**UNCURED PROPERTIES**

Appearance: Part A: Amber paste. Cure time at 75°F: 8 – 16 hours - handling strength.  
Part B: Blue paste. 24 – 48 hours - full cure.  
Mix Ratio: 1:1 Working time at 75°F: 1.5 – 2 hours (small quantities).

**CURED PROPERTIES**

|                                 |                                |                            |
|---------------------------------|--------------------------------|----------------------------|
| Shear Strength:<br>(ASTM D1002) | Peel Strength:<br>(ASTM D1876) | Service Temperature Range: |
| 1550 psi                        | 2.2 pli                        | -30°F to 250°F             |

**STORAGE AND SHELF LIFE**

CB309 should be stored between 40°F and 80°F. CB309 has a minimum shelf life of one year when stored in the original package at 75°F.

**SURFACE PREPARATION**

The substrates to be bonded must be free of soil, grease, oil, fingerprints, dust, mold release agents, rust, and other contaminants before application of CB309 adhesive. Vapor degrease or wipe the substrates with a clean cloth soaked in an uncontaminated ketone solvent and allow to dry thoroughly. If a solvent cannot be used, substitute a detergent solution or, for metals only, a suitable alkaline degreasing agent following the manufacturer's instruction for use.

Next, use an abrasive material to roughen the substrates or remove tarnish if necessary. Abrasion should always be followed by a second degreasing which will ensure removal of loose particles.

Prepared substrates should be handled carefully to avoid contamination and should be assembled as soon as possible.

**MIXING AND APPLYING ADHESIVE**

Dispense equal parts of components A and B. Mix until a uniform color is obtained (or use a disposable mixing nozzle). Apply to one of the surfaces to be bonded. To assure maximum bond strength, surfaces must be mated within 10 minutes. Use sufficient material to insure 100% joint fill when parts are mated. All adhesive application, part positioning, and clamping should occur before the 1.5 hour working time of the mix has expired. Movement of the parts after working time has expired can result in bond strengths lower than normal. Insure that the assembly remains undisturbed for 16 hours to allow adhesive cure to progress to the handling strength stage where the fixtures or clamps may be removed.

## CLEAN UP OF CB309 ADHESIVE

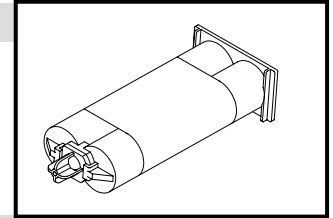
**UNCURED ADHESIVE:** It is important to clean up excess adhesive on the bonded assembly before the adhesive sets up. Use hot water and detergent or an organic solvent; ketones have been shown to work best.

**CURED ADHESIVE:** Removing cured CB309 adhesive is difficult because of its resistance to chemicals, solvents, and cleaning agents. Heating to 400°F or greater will soften the adhesive, allowing the parts to be separated and the adhesive to be more easily removed. Some success may be achieved with commercial epoxy strippers.

## ADHESIVE PACKAGING – 50 ml CARTRIDGES

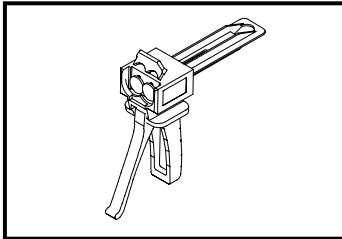
### CB309-50

Standard 50 ml dual pack syringe cartridges improve efficiency by reducing installation time. CLICK BOND® dispensing tools with static mixing tips provide quick and accurate mixing and application of CB309 adhesive.

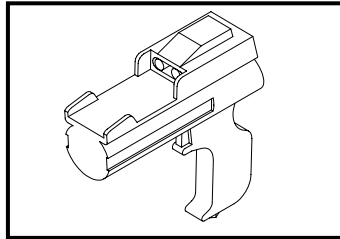


## DISPENSING TOOLS AND MIXING TIPS FOR CB309 ADHESIVE

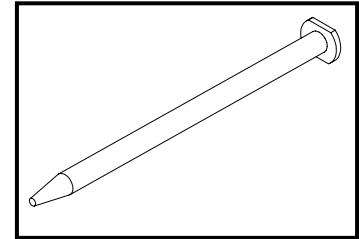
### CB100-11 MANUAL DISPENSER



### CB110 PNEUMATIC DISPENSER



### CB106 MIXING TIP



## DIRECTIONS FOR DISPENSING CB309 DUAL PACK 50 ml CARTRIDGES

1. Place cartridge into retaining lip on CB110 air powered tool or CB100-11 hand actuated tool.
2. Remove end cap by turning counterclockwise.
3. Activate the tool slightly to extrude a small amount of adhesive onto scrap material to insure adequate flow of both components.
4. Attach the mixing tip.
5. Dispense a small line of adhesive onto scrap material to insure adequate mixing.
6. Apply adhesive to part, join surfaces, and hold under pressure for 16 hours minimum at 75°F.
7. When not in use, remove and dispose of tip and replace endcap to preserve remaining adhesive.

## IMPORTANT PRODUCT PERFORMANCE AND CAUTIONARY INFORMATION

Do not get in the eyes, on skin or clothing. May cause eye and skin irritation; may cause allergic skin reaction. In case of skin or eye contact, flood immediately with plenty of water. For eyes, call physician. Remove contaminated clothing. Wash clothing before reuse. Keep out of reach of children. If swallowed, do not induce vomiting. Drink several glasses of water. Call physician or poison control center.

Before using CB309 adhesive, refer to the Material Safety Data Sheet (MSDS) for additional cautionary and safe handling information. Copies are available from the Click Bond Customer Service Department upon request. For industrial use only.

Values stated in this bulletin represent typical values as not all tests are run on each lot of material produced. For formalized product specification for specific product end uses, contact the Customer Service Department. Information provided herein is based upon tests believed to be reliable. Inasmuch as Click Bond has no control over the exact manner in which others may use this information, it does not guarantee the results to be obtained. Nor does the Company make any express or implied warranty of merchantability, or fitness for a particular purpose concerning the effects or results of such use.

## ORDERING AND FURTHER TECHNICAL INFORMATION

Contact the Click Bond Customer Service Department:

**PHONE (775) 885-8000      FAX (775) 883-0191**

**CB309 Data Sheet – Effective FEB99**

**Click Bond, Inc.**

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