



Features

- No Solvents Or Water, Will Not Shrink
- 100% Solids, VOC Compliant
- Offers Immediate Green Strength
- Adheres To A Wide Variety Of Substrates
- Remains Easy To Dispense From 0-150F
- Will Cure To Wet Substrates Or When Moisture Is Present
- Remains Flexible, Allows For Vibration & Movement

Conforms, Meets & Exceeds

- Conforms to California Proposition 65
- Conforms to USDA Requirements For Non-Food Contact
- Meets Requirements of CARB & SCAQMD
- VOC Compliant (9.55 grams/liter ASTM D2369)

Description

CarbonBond 1C adhesive uses Chemical Concept's innovative hybrid technology to develop immediate green strength to fixture substrates while the adhesive cures and provides a long-term, durable bond. **CarbonBond 1C** is 100% solids. It will not shrink and is free of isocyanates and solvents which make it easy and friendly to work with at a variety of temperatures. **CarbonBond 1C** adhesive will remain consistent to dispense and tool whether it is cold or hot outside unlike many solvent-based adhesives. It will bond to wet substrates and is able to be applied when water or moisture is present without washing off (water-based adhesives) or out-gassing and bulging (polyurethanes). CarbonBond 1C has a very broad adhesion range and can be used for a variety of industrial or construction applications.

Why Use CarbonBond 1C vs. Your Current Adhesive?

- The solvent in solvent-based adhesives flashes off during curing and water-based adhesives also have water loss during cure. This can often leave behind just 60% of what you applied. With the **CarbonBond 1C**, what you apply stays. Therefore, you can often reduce adhesive usage just by using our technology alone.
- **CarbonBond 1C** adhesive has excellent green strength and fixture properties. It not only bonds well to a variety of substrates but it also grabs and holds which helps reduce assembly time, brace usages, fastener usage, etc.
- A lot of adhesives that are eco-friendly do not have the strength required for the job. **CarbonBond 1C** offers an eco-friendly option that is made to perform.

Physical Properties	Test Method	Result
Viscosity	CC Test Method	1,800,000 cps (Spindle 7, 4rpm)
Skin Formation Time	CC Test Method	10 minutes (70°F, 50% RH)
Density	ASTM D1475	14.8 lbs./gal
Hardness	ASTM C661	45 (Shore A)
Modulus 100%	ASTM D412	1.42 MPa
Tensile Strength	ASTM D412	1.58 MPa
Elongation at Break	ASTM D412	150 %
Lap Shear	ASTM D412	2.15 MPa
Gun Grade	CC Test Method	Pass (Non-Slump)
QUV Testing	ASTM G26	Pass (2,000 hrs)
Service Temperature	CC Test Method	-50°F to 220°F
Cure In Depth After 7 Days	CC Test Method	13mm (70°F, 50% RH)

Strength will start to develop immediately and continue increasing for 7 days after application. CC recommends testing strength and adhesion on the 7th day. CarbonBond 1C adhesive suggested application temperature range: 32°F to 150°F, can be applied lower than 32°F. However, it will slow down the curing speed. In general lower temperature & humidity will slow skin and cure times.

Information on this data sheet can change without notice and it is, therefore, not recommended that these figures be used in spec writing. If you have any questions contact manufacturer's sales and technical service department.



Common Applications:

CarbonBond 1C adhesive is an excellent adhesive for many Commercial, Industrial and Construction applications. Such applications include:

- Roof Bow Adhesive
- Trailer & RV Manufacturing
- Shower Panels & Installation
- Panel Assembly Adhesive
- Subfloor Adhesive
- Roofing Applications
- Landscape Block Applications
- Mirror Installations
- Countertop & Solid Surface Installation
- Wall Stone Applications
- HVAC Applications
- General Construction Applications
- Industrial Manufacturing Applications
- **Can be used for additional applications not listed. CC recommends testing prior to use.**

Directions

CarbonBond 1C adhesive is ready to use and requires no mixing or additives. Tooling, if necessary, should be done before skinning takes place. In applications where partial or total confinement of sealant is prevalent, the time required for proper cure is generally lengthened by the degree of confinement. Higher temperature and higher humidity will accelerate skin & cure time. Cold temperatures and low humidity will slow down skin & cure time.

Clean Up

Wet adhesive can be cleaned with alcohol.

Colors

CarbonBond 1C adhesive is available in white. Colors can be purchased in batch volumes. Inquire to Chemical Concepts sales staff for additional information.

Packaging

CarbonBond 1C adhesive can be packaged into caulking cartridges, sausage packs, pails and drums. Inquire to Chemical Concepts product experts for additional information.

Caution/Safety

Please refer to the SDS for the corresponding product for information regarding safety and handling.

Limitations

Do not store at elevated temperatures. Use only on clean surfaces free of contaminants. Cold temperature and low humidity will slow curing (32°F and below will be most significant). Do not use on olefins such as polyethylene, polypropylene or TPO prior to testing. Test all paints before application. Allow treated wood & asphalt to cure 6 months before application. Long-term submersion under water can cause loss of adhesion on some substrates.

Common Bonding Substrates:

CarbonBond 1C adhesive can be used on a variety of sub-strates. Please inquire or test your substrates before use. Substrates may vary with manufacturer. We have listed some common substrates:

- Ceramics
- Fiberglass
- Glass
- Granite
- Marble
- Aluminum & Galvanized Metal
- Wood
- Stone
- EPDM
- EPS or Styrofoam Insulation
- Porcelain
- PVC & Other Plastics
- Porous Surfaces (Concrete, Brick, Etc.)
- **Can be used on additional substrates not listed. CC recommends testing prior to use.**

Surface Preparation

All surfaces should be clean. Alcohol can be used to clean the surface. DO NOT USE petroleum-based solvents. Priming for **CarbonBond 1C** adhesive is not normally required for applications to nonporous surfaces. Unprimed adhesion can be easily tested by applying a small trial bead and allowing 7 days for maximum adhesion to occur. If primer is required, contact CC.

Testing

Test per application requirement. Allow 7 days for maximum strength to develop before testing adhesion or strength.

Storage

When stored at 70°F and 50% RH, ASI 5900 has a shelf-life of 12 months in cartridges. When stored at 70°F and 50% RH, Chemical Concepts has shelf-life of 6 months in pails and drums. High temperature and high humidity can significantly reduce shelflife.

Warranty Limitations

The information and data contained herein is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since the supplier cannot know all the uses, or the conditions of use to which these products may be exposed, no warranties concerning the fitness or suitability for a particular use or purpose are made. It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application. Likewise, if the application, product specifications or manner in which our products are used requires government approval or clearance, it is the sole responsibility of the user to obtain such authorization. Because the storage, handling and application of the material is beyond Chemical Concepts' control, we can accept no liability for the results obtained. Chemical Concepts' sole limited warranty is that the product meets the manufacturing specifications in effect at time of shipment. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. Chemical Concepts will not be liable for incidental or consequential damages of any kind. The exclusive remedy for breach of such limited warranty is a refund of purchase price or replacement of any product shown to be other than as warranted. Suggestions of uses should not be taken as inducements to infringe upon any patents.