

CBC: Stronger Cores, Flexible Gel Times

Our Core Bonding Compound (CBC) has become an industry favorite for its high tensile and flexural strength



One of the best things that came from our experience in the boat building industry was the creation of a compound that not only has a strong bond, but can flex under the pressure of a rough sea, and still hold everything together. That compound is our **Core Bonding Compound (aka CBC)**. After years of refining, we've perfected the product to the point where many boat builders won't build without it. It can be used to bed many types of cores, including PVC Foam, Balsa, Honeycomb, and more.

Flexible Gel Times

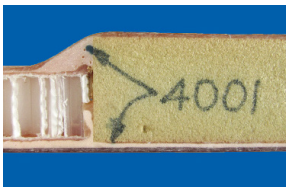
CBC's 40 minute gel time at 1.5% MEKP allows ample working time for nearly any application. Where longer gel times are required, the MEKP level can be reduced to as low as 0.5% when mixed properly.

Increases Flexural Strength as Much as 60%

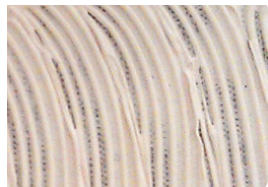
Studies have shown that filling the edges of a cored laminate at a 3:1 slope increased flexural strength as much as 60% over laminates with a step. Arjay's CBC is the perfect high strength, low weight solution for this application.

Performance Benefits

- Flexible gel times
- Works with nearly all types of cores
- Increases flexural strength as much as 60%
- Great for bonding large FRP laminates



Better core transitions increases flexural strength



Compound trowels easily and "Stays Put" on angles



Large FRP laminates: Prepping hull to bond liner

ProTips & Other Resources at ArjayTech.com

- ProTip: 3 Tips for Obtaining Consistent Results with CBC (PDF)
- 4001 TDS (PDF) Available for download any time on our website

TECHNICAL DATA SHEET

4001 CBC

POLYESTER BONDING COMPOUND

RECOMMENDED FOR

Core Bonding

FRP Laminates (Large or Small)

WORKING & TIMES (In Minutes)

Gel Time	Interval	Total	Peak Exo
41	32	73	240° F

TYPICAL PHYSICAL PROPERTIES @75°F (24°C)

Color	White
Odor	Styrene
Texture	Smooth
Weight	6.5 lbs/gallon
Stability	4-5 months

VISCOSITY

RPM	μ Min	μ Max
2	220,000	280,000
20	28,000	62,000

TYPICAL CURED PROPERTIES @75°F (24°C)

Test	Average	Deviation
Tensile Elongation, %	4.0	0.32
Tensile Strength, PSI	2,260	43.2
Flexural Strength, PSI	10,700	856
Flexural Modulus, PSI	562,000	38,600
Compressive Strength, PSI	2,180	129
Lap Shear, PSI	1,260	28.5
Heat Deflection, °F	150	5.0
Linear Shrinkage, %	< 1	
Shore D Hardness	65-70	

PACKAGING & AVAILABILITY

Pails
5 Gal./19 L



ITEM# 4001

Drums
55 Gal./ 189 L



ITEM# 4002

Storage & Handling

STORAGE

To ensure maximum stability and maintain optimum properties, bonding compounds should be stored in the original closed container at temperatures below 24 C/75 F and away from heat ignition sources and sunlight. The product must be warmed up to 18 C/ 65 F prior to use so that timely curing and optimum processing can be maintained.

All storage space and containers should conform to local fire and building codes. The bonding compounds should be stored separately and away from oxidizing materials, peroxides and metal salts. Keep containers closed when not in use. Employ best practices of using first-in, first-out stock rotation.

SHELF LIFE

Shelf life is 3 months from date of shipment. Minimum shelf life performance implies the life of the product in the original, unopened container. For additional information on storage and handling, please contact your sales representative or authorized distributor.

STANDARD PACKAGING

Standard product packages include 55-gallon metal drums and 5 gallon plastic pails.

SAFETY

Read and understand the material safety data sheet before working with the product. Obtain a copy of the material safety data sheet on this product from the Arjay website, or contact your sales representative or authorized distributors.

The bonding compounds contain volatile components that are highly flammable and should be handled with care and used in well ventilated area. The product must be stored in a cool place away from source of heat, open flames or sparks. Keep containers closed when not in use. Prevent contact with skin and eyes. In case of skin contact, wash with soap and water. In case of eye contact flush with water for 15 minutes and seek immediate medical care.

DISPENSING EQUIPMENT

The pumpable versions of the bonding compounds are supplied in drums, to be dispensed with internal metered mix equipment. Most commonly used dispensing equipment is supplied by Magnum Venus Products (www.mvpind.com). GS Manufacturing (www.gsmfg.com) and Glass-Craft (www.glascraft.com) also offer similar dispensing systems.

While all Information contained herein are to the best of our knowledge accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. We suggest that the recommendations be evaluated and validated by the purchaser prior to use. In all cases it is the responsibility of the user and NOT of Arjay Technologies or SCIGRIP to determine the suitability of the bonding product and dispensing systems for its own particular purpose and use environment.

California Proposition 65 Warning: This product contains the following chemicals known to the State of California to cause cancer: Styrene Oxide, Aniline. Styrene, in the presence of air and high temperature or the prolonged exposure to a styrene/air mixture to sunlight can react to form styrene oxide.