

Celebrating Over 40 Years of Marine Innovation

## **Taking Hardtops Beyond Light Weight**

4501's ultra-light weight makes it the perfect compound for bonding hardtops and small part "sandwich" bonds



Weighing in at the incredible light weight of less than 5 pounds per gallon, you will almost wonder how one of our most popular bonding compounds can possibly be as strong as it is. The secret to J-Core's success is its unique blend of physical properties. It

allows for aggressive material substitutions that can save material and labor costs in almost any application.

#### **Reduces Overall Hardtop Weight**

J-Core has been shown to reduce overall hardtop weight by as much as 25%, which can improve stability when used in today's high performance power boats.

### Perfect for Small Part "Sandwich" Bonds

The use of J-Core in small parts with hand laid skins is surprisingly efficient and results in light weight, superb cosmetics and an extremely low number of costly defects requiring repair.

### **Performance Benefits**

- Pumps great, and trowels easily
- Flows well under moderate clamping pressure
- Stays put when mold is flipped
- Cures with low exotherm for better cosmetics
- Available in higher viscosities for damming and more





Applying J-Core to the hardtop shell

Marrying inner liner to the top shell after application

#### Great for other "sandwich" style bonds

## ProTips & Other Resources at ArjayTech.com

- ProTip: Managing Material Flow with J-Core (PDF)
- ProTip: Beyond Light Weight with J-Core (PDF)
- ProTip: Avoiding Print in Mold Making (PDF)
- ProTip: Shedding Light on Light Weight Catalyzation (PDF)

4501 TDS (PDF) Available for download any time on our website
4501 HV & XHV (PDF) Available for download any time on our

TECHNICAL DATA SHEET

# 4501 J-Core

POLYESTER BONDING COMPOUND

#### **RECOMMENDED FOR**

Hard Tops

Other "Sandwich Bonds"

WORKING & TIMES (In Minutes)					
Gel Time	Interval	Total	Peak Exo		
28	45	73	150° F		

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

Color		White		
Odor		Styrene		
Texture		Smooth		
Weight	4.8-5.1 lbs/gallon			
Stability	3 months			
VISCOSITY				
RPM	μ Min		μ Max	
2	50,000		65,000	
20	18,	000	28,000	

### TYPICAL CURED PROPERTIES @75°F (24°C)

Test	Average	Deviation
Tensile Elongation, %	8.2	0.32
Tensile Strength, PSI	1,060	108
Flexural Strength, PSI	6,960	314
Flexural Modulus, PSI	357,000	14,100
Compressive Strength, PSI	1,910	52.5
Lap Shear, PSI	1,100	11.0
Heat Deflection, °F	150	5.0
Linear Shrinkage, %	< 1	
Shore D Hardness	40-45	

#### PACKAGING & AVAILABILITY



**Drums** 55 Gal./ 189 L





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# **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.

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**California Proposition 65 Warning:** This product contains the following chemicals known to the State of California to cause cancer: Styrene Oxide, Analine. 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.