

Celebrating Over 40 Years of Marine Innovation

TECHNICAL DATA SHEET

SG100 SERIES

METHACRYLATE ADHESIVES

SG100: Bring On The Sun

SG100's Enhanced UV Resistance and Strong Bond Means Performance and Protection can Start at the Top



SCIGRIP® / ARJAY's SG100 Adhesive provides the ultraviolet and impact protection you need for topside applications, like deck exteriors and hardtops. But this performance story doesn't stop there. SG100 also provides the strength and flexibility needed for critical bonds too, like deck to hull. Plus, it has the impact resistance required for items like hatches, doors and other items built in 2-part molds. We created formulas for both 15 and 40 minute working times, so it's designed to work the way you do, regardless of application.

Performance Benefits

- UV stabilized, bright white color for color critical applications
- Excellent choice for bonding FRP composites, gel coated surfaces and thermoplastics with little or no surface preparation
- Outstanding fatigue, impact and shock load resistance
- Excellent environmental and chemical resistance
- Bonds range of substrates: Acrylic, PVC, ABS, Thermoset Composites (Vinyl Ester, Polyester, Gelcoats, and Epoxy), Primed Metals, Coated Metals, and other Thermoplastics

RECOMMENDED FOR BONDING

Composites	Metals ²	Thermoplastics ¹
Ероху	Aluminum	ABS
Polyester/DCPD	Carbon Steel	Acrylics
Vinyl Ester	Stainless Steel	PVC/CPVC
Gelcoats	Coated Metals	Styrenics

WORKING & FIXTURE TIMES (In Minutes)

Cartridge	Adhesive	Activator	Working Time	Fixture Time
SG100-15	SG115A	SG115B	12-18	30-45
SG100-40	SG140A	SG115B	25-45	80-100

Time to reach 70% of ultimate strength in lap shear @75°F (24°C)4

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

SG100 SERIES Uncured	Part A Adhesive	Part B Activator	A+B Mix
Color	Off White	White	White
Mix ratio/volume	10	1	•
Mix ratio/weight	6.42	1	-
Density, g/cc	0.95	1.48	1.00
Density, lb/gallon	7.90	12.35	8.33
Viscosity, cps	150,000-220,000	70,000-180,000	-

TYPICAL CURED PROPERTIES @75°F (24°C)

Tensile Strength PSI (MPa)	2,500-2,900 (17.2-20)	
Maximum Tensile Elongation	15-30%	
Tensile Modulus ³ PSI (MPa)	90,000-110,000 (620-758)	
Lap Shear Strength ⁴ PSI (MPa)	2,000-2,400 (14-16)	
Service Temperatures °F (°C)	-40 to 180 (-40 to 82)	

Additional Resources

Try SG230HV for higher viscosity and more working time options

NOIS:

1. Polyolefins, thermoplastic polyesters, fluorocarbon plastics and other low surface energy plastics are generally not bondable.

2. Prepare metal for bonding by removing all dust, loose scale, rust, and other surface residue including oil and grease. Use of MP100 Metal Primer is a necessity and strongly recommended for stainless steel and aluminum bonding. Heavy grinding or sanding may interfere with the chemical action of MP100 and is not recommended, especially with aluminum and stainless steel. For maximum bond strength on steel, abrade the mating surfaces prior to bonding. See notes a, b and c on reverse side.

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Value will depend on strength and stiffness of substrate.

3. Tensile modulus as measured in the linear portion of the stress strain curve.

4. Lap shear strength of aluminum to aluminum bond pretreated with MP100 Metal Primer and based on ASTM D1002 method.

PACKAGING & AVAILABILITY

Cartridges 490 ML



30191 SG100-15 30194 SG100-40



Pails

5 Gal./19 L

30189 SG115A 30190 SG115B-W 30193 SG140A



Drums



30188 SG115A 30192 SG140A

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.