

SG230: Works the Way You Do

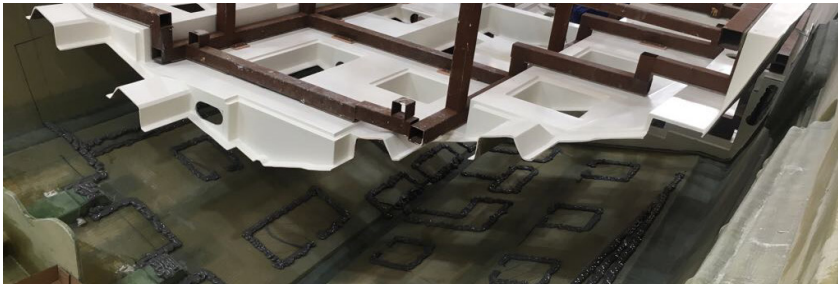
SG230's Flexible Working Times and Reduced Emissions Mean a Tough, Nearly Odorless Bond on **Your** Terms



SCIGRIP® / ARJAY's SG230 Adhesive is the flexible solution that combines just one adhesive with a choice of 5 different activators to create custom working times that will match just about any marine bonding workflow. This innovative compound has lower emissions and requires almost no surface preparation. Best of all, it leaves a smooth, tack free cure with little or no residual odor. You get the tough, permanent bond you expect, a cleaner workplace, and a dependable adhesive that works the way you do.

Performance Benefits

- Unique high viscosity formula "stays put" on vertical surfaces
- Reduced emissions, less offensive odor
- Minimal surface preparation
- Improved tack free cure with little to no residual odor
- Excellent environmental resistance
- Bonds range of substrates: Acrylic, PVC, ABS, Thermoset Composites (Vinyl Ester, Polyester, Gelcoats, and Epoxy), Primed Metals, Coated Metals, and other Thermoplastics



Thanks to its application characteristics and excellent mechanical performance it was a perfect match for the hull manufacturing process used in the Ferretti assembly lines.

Additional Resources

- Try SG100 for topside applications that require UV resistance

NOTES:
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. 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.

TECHNICAL DATA SHEET

SG230 HV

METHACRYLATE ADHESIVES

RECOMMENDED FOR BONDING

Composites	Metals ²	Thermoplastics ¹
Epoxy	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
SG230-30	SG230 HV A	SG605 B	25-35	45-55
SG230-40	SG230 HV A	SG214 B	25-45	60-75
SG230-60	SG230 HV A	SG216 B	50-70	140-170
Bulk Only	SG230 HV A	SG218 B	70-90	180-210
Bulk Only	SG230 HV A	SG220 B	100-130	260-312

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

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

SG230 SERIES Uncured	Part A Adhesive	Part B Activator	A+B Mix
Color	Off White	Gray	Gray
Mix ratio/volume	10	1	-
Mix ratio/weight	8.4	1	-
Density, g/cc	0.97	1.15	0.99
Density, lb/gallon	8.09	9.60	8.25
Viscosity, cps	900,000-1,400,000	120,000-180,000	-

TYPICAL CURED PROPERTIES @75°F (24°C)

Tensile Strength PSI (MPa)	3,000-3,500 (21-24)
Maximum Tensile Elongation	100-150%
Tensile Modulus ³ PSI (MPa)	80,000-103,000 (552-710)
Lap Shear Strength ⁴ PSI (MPa)	2,000-2,500 (15-17)
Service Temperatures °F (°C)	-40 to 180 (-40 to 82)

PACKAGING & AVAILABILITY

Cartridges
490 ML



Pails
5 Gal./19 L



Drums
55 Gal./ 189 L



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, 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.