STRUCTURAL ADHESIVES

PRODUCT GUIDE



ACRA LOCK ENGINEERED BONDING SOLUTIONS

ACRALOCK by Engineered Bonding Solutions, LLC, are advanced two-component methacrylate structural adhesives designed to bond chemically to most surfaces providing a permanently locked or integrated assembly of steel, aluminum, engineered plastics, high-performance composites, and other materials.



MARINE-WIND-LARGE COMPOSITE ASSEMBLY

SA10 and SA10-UV White | SA1-500

- Bonding Stringers
- liners
- hull to deck joints
- small parts
- skid plates
- aluminum
- rub rails
- spars

- flanged webs
- nacelle internal components
- metal brackets
- Polyesters
- Epoxies
- PU
- polycarbonates
- acrylics

- styrenics
- ABS
- PVC
- CPVC
- cold rolled steel
- galvanized
- e-coated metals

BUS-HEAVY TRUCK-RAIL

FA10 | SF10 | SA10 | SA | HS1 | SA1-500 | SA1-700 | M4 | M10 | M1 | GB10

- Composite panels
- flanged webs
- roof
- storage doors
- metal extrusions
- fenders
- brackets
- flat head studs
- front and back caps

- cab assemblies
- Polyesters
- epoxies
- PUPVC
- ABS
- PC
- acrylics
- Nylon

- Telene
- SMC
- pultrusions
- aluminum
- stainless
- cold rolled steel
- galvanized
- e-coated metals

TRAILER BODY-SPECIALTY VEHICLE-WORK TRUCK-RV

FA10 | SF10 | SA10 | SA1 | HS1 | SA1-500 | SA1-700 | M4 | M10 | M1 | GB10

- Composite panels
- fenders
- hoods
- flanged webs
- roof
- frames
- doors

- extrusions
- Aluminum
- cold rolled steel
- stainless
- zinc chromated
- galvanized
- e-coated

- ABS
- polycarbonate
- Nylon
- Telene
- SMC
- pultrusions

SIGNAGE-ARCHITECTURAL-INDUSTRIAL-CONSTRUCTION

C10 | SF10 | FA10 | SA1 | SA1-500 | SA1-700 | M4 | M10 | M1 | GB10

- Composite panels
- flanged webs
- tanks
- extrusions
- plastics
- frames
- granite

- Aluminum
- stainless
- cold rolled steel
- galvanized
 - zinc chromated
 - solid surfaces
 - engineered stone
- e-coated
- acrylics
- ABS
- polycarbonate
- PVC
- CPVC



10 TO 1 MIX RATIO PRODUCTS

Cartridge Products	Available Working Time Versions	Color	Mix Ratio (vol)	Tensile Elongation (%) Postcured	Single Lap Shear Strength psi (Mpa)	Primary Use Applications SA10 products are all RINA Certified SA10, SF10 are EN 45545-2 Certified
C10	12,12HV	Clear	10 to 1	1-3	1,750 (12)	Water-clear, fast-curing, low- and HV- (high viscosity) versions for acrylic bonding. Ideal for signage, granite, engineered stone, and solid surfaces.
SA10 (White)	7, 15, 40	WHT	10 to 1	140	3,100 (21)	Bright white and UV-resistant for use with metals, plastics, and composites. Ideal for marine and transportation.
GB10	5, 30	BLK, GRY	10 to 1	>300	900 (6)	Best for cosmetic sensitive parts, very fast curing, low readthrough, highly flexible, low modulus to bond metals, plastics and composites, side wall bonding, Transportation
FA10	5, 20, 30	BLK GRY OWT	10 to 1	250	1,200 (9)	Very flexible, fast-curing nylon bonding w/ sanding, low exotherm and readthrough on metals, plastics, and composites. Ideal for transportation.
SF10	5, 20, 30	BLK GRY OWT	10 to 1	170	2000 (14)	Medium-strength, flexible adhesive with high-fatigue performance for metal, plastics, and composites. Ideal for transportation.
SA10	5, 10, 20	BLK/GRY OWT	10 to 1	80	3,000 (20)	High-strength, moderate flexibility for metals, plastics, and composites. Ideal for transportation.
SA10	35,45,60 75,100	BLK GRY	10 to 1	80	2,800 (19)	High-strength, moderate flexibility, thick gap bonding for metals, plastics, and composites. Ideal for wind, marine, and transportation.

1 TO 1 MIX RATIO PRODUCTS

Cartridge Products	Available Working Time Versions	Color	Mix Ratio (vol)	Tensile Elongation (%) Postcured	Single Lap Shear Strength psi (Mpa)	Primary Use Applications SA1 products are EN 45545-2 Certified
SA1-300	3, 5, 15	NAT	1 to 1	50	3,300 (22)	High-strength, moderate flexibility, and general purpose for metals, plastics, and composites. Ideal for composites assembly.
SA1-500	10, 30, 60, 90	GRY	1 to 1	120	3,300 (22)	High-strength, moderate flexibility, and thick gap filling for metals, plastics, and composites. Ideal for marine, transportation, and wind.
SA1	5, 15	GRY NAT	1 to 1	75	3,700 (25)	Very high strength with moderate flexibility for better adhesion to pultrusions and SMC for metals, plastics, and composites. Ideal for transportation.
HS1	5,15	BLK	1 to 1	75	3,700 (25)	A modified SA1 for better adhesion to telene (PDCPD) for metals, plastics, and composites. Ideal for transportation.
SA1-700	5, 15, 30	GRY	1 to 1	50	4,000 (31)	Highest strength adhesive for metals and hot/cold performances with better adhesion to pultrusions and SMC for metals, plastics, and composites. Ideal for transportation.



Cartridge Products	Available Working Time Versions	Color	Mix Ratio (vol)	Tensile Elongation (%) Postcured	Single Lap Shear Strength psi (Mpa)	Primary Use Applications
E10	3, 6	GRY NAT	10 to 1	15	2,900 (20)	An ultra-fast, non-halogenated curing system designed to bond metal, composites, and plastics. Ideal for electronics assembly.
M10	6, 18, 35	GRY NAT	10 to 1	15	3,050 (21)	Metal bonding adhesive for most bare metals with good retention of properties after post bake oven exposure ≤ 30 minutes @ 380°F. Bond to metals, plastics and composites used in Transportation and Signage.
M1	6, 18, 35	GRY NAT	1 to 1	30	2,800 (19)	Metal bonding adhesive that replaces welding, riveting, and brazing on most bare metal substrates, especially galvanized metals including G90. Also works on plastics and composites used in the transportation.
M4	6,18	GRY	4 to 1	30	2800 (19)	Preferred Metal bonding adhesive that replaces welding, riveting, and brazing on most bare metal surfaces including most galvanized metals, when subjected to high temperature post bake oven applications ≤ 30minutes @ 400°F. Bonds to metals, plastics and composites used in Transportation and Signage.













ACRALOCK ADHESIVES ARE THE VEHICLE FOR CHANGING TRANSPORTATION:

Faster, Stronger, and Lighter Vehicles

All of our exclusive formulations are rapid-curing and substantially increase the throughput of assemblies of similar or dissimilar materials. ACRALOCK and ACRAMAXX adhesives form high-performance, durable, electrostatic bonds to bare metals which reduce under-film corrosion and provide the best combination of properties to ensure long-term durable strength and shock-load resistance. Please consider the various ACRALOCK adhesives that have been used for years in the transportation market, such as the SA10-, FA10-, and SA1-series, or the latest ACRAMAXX products for your vehicular assembly needs.

ACRAMAXX M10, M1 and M4 are our latest innovations designed to be used without primer on clean, bare metals. M10 is high strength 10 to 1 mix ratio product for bonding AL, SS, CRS to replace rivets, welding and can withstand short duration oven bake cycle ≤ 30 minutes @ 380°F. M1 was developed as a high strength 1 to 1 mix ratio product for bonding most bare metals AL, SS, CRS and most galvanized metals without primer for general applications that are not subjected to high temperature bake cycles. M4 is the latest innovation, developed as a 4 to 1 mix ratio adhesive, for bonding most bare metals AL, SS, CRS and most galvanized metals without primer for general applications and is able to withstand short duration oven bake cycle ≤ 30 minutes @ 400°F.





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