

ADHESIVE DESCRIPTION

ACRALOCK SC 901 is an Ethyl Acetate/Cyclohexane based two component, room temperature curing, chloroprene based, liquid rubber adhesive that, when catalysed with the appropriate amount of SC 500 Hardener, yields high strength adhesion when bonding rubber to rubber, rubber to fabric, rubber to steel, rubber to concrete, fiberglass, PVC and urethane. SC 901 contains no Trichloroethylene.

Packaging options include 1 l manual mix kits and 200 l drum containers for hand mix or application with meter-mix dispensing equipment.

PERFORMANCE HIGHLIGHTS

Working time 2 – 4 hours
 Black
 Gap fill 0,1 to 1 mm
 Low Sagging
 Stable formulations

BENEFITS

enough time for big assembly applications
 Colour fits to most rubbers
 Thin film to low gap application possible
 Vertical surface applications possible
 Shelf-life 1 year

PRODUCT PROPERTIES @ 22° C

Product	Adhesive/Activator	Working Time (Minutes)	Fixture Time (Minutes)
SC 901	SC 901 A / SC 500 B	240 - 460	> 400

TYPICAL ADHESIVE WET PROPERTIES

Property	Component A	Component B	A + B mixed
Colour	Black	Clear	Black
Mix Ratio (Volume)	20	1	
Mix Ratio (Weight)	20	1	
Viscosity kps (Pa.s)	2,5 – 3,5	0,5 – 0,7	
Density (g/cm ³)	0,97	0,97	1,02

TYPICAL ADHESIVE CURED PHYSICAL PROPERTIES

Tensile strength: 1000 PSI(7 MPa)
 Elongation: 100 - 150 %
 Lap Shear strength, ASTM D1002: 1000 psi (7 MPa)
 Operating Temperature: - 40 – 120°C
 Max Temperature resistance: 160°C, 1h

Cured Adhesive is generally resistant to salt solutions, hydrocarbons and acid and bases with a PH from 3 to 10.

Cured Adhesive is not recommended for exposures to polar solvents and stronger acids or bases (see note b).

Operating Temperature range for this product is from - 40 to 120° C with intermittent exposure of -55 to 160° C (see note c)

RECOMMENDED SUBSTRATES (See important notes below)

Polyesters	Acrylics	PVC/FPVC/CPVC	Vinyl Esters
PMMA	ABS	Styrenics	Rubbers
PET	Wood	Aluminium	Carbon Steel

NOT RECOMMENDED FOR BONDING

Polyolefins	Polyacetals	PTFE	Glas
Stainless Steel			

ADHESIVE APPLICATION

For uniform mixing, cement containers should be agitated or drums rotated before the addition of hardener. Thoroughly mix the appropriate amount of hardener (5% by weight in amount) to the cement at 21°C. This mixture will give you an application life of 2-4 hours before cross-linking.

Rubber to Steel: Metallic surfaces must be free of oils, grease or other contaminants. Rust and mill-scale should be removed by sand blasting to NACE #2. A profile of 2-3 mils is preferred. The rubber, if cured should have all mould release agents removed and buffed with 24 grit or stiff bristled wire brush at a speed as not to burn the rubber surface. Apply a first coat to each surface with a scrubbing-like motion. Allow this coat to dry for at least 1 hour at 21°C. Should the ambient temperature be lower, allow a 50% increase in drying time for every 3°C drop in temperature. After the required drying time a second coat is applied to each surface in a manner as not to disturb the primary coat. Let dry until past tacky, adhere both surfaces and stitch down or apply pressure. The maximum bond strength will develop to its optimum in 21 days, however, initial bond strengths will be sufficiently high after 6 hours and are ready for most services.

Rubber to Rubber: The rubber, if cured in sheet form should be solvent cleaned and buffed as described above before the first coat of adhesive is applied. Allow the first coat to dry for at least 1 hour or longer. Should the temperature be lower, better adhesion will be achieved by increasing the first coat's drying time by 50% for every 3°C drop below ambient. After the required drying time a second coat is applied and when still tacky, stitch the two components together or apply pressure.

Rubber to Other Substrates: for adhering other elastomeric materials or special environmental conditions, please contact our main office. Trials, if possible are recommended before production to determine the suitability of this compound with individual materials and to determine the preferred method of application.

Coverage: 5 m² per kg. (54 ft.² per kg.) theoretical coverage.

Thinner: Ethyl Acetate or MEK

IMPORTANT NOTES

- a.) Surface Preparation: The need for surface preparation must be determined by the user based on comparative testing of unprepared and prepared substrates to determine if strengths are adequate for application. Clean adhesive failure is not desired for long-term durable performance. In all cases initial shear strength tests must be followed up with simulated or actual durability tests to assure that surface conditions do not lead to degradation of the bond over time under service conditions. Subsequent changes in substrates or bonding conditions will require re-testing.
- b.) It is the user's responsibility to determine the suitability of each adhesive for its intended use on substrates and application. EBS strongly recommends laboratory and end-use testing representative of the environmental conditions and how the bonded assembly will be used. Read and understand TDS and MSDS before using. Bonds are generally resistant to the effects of heat, water and moisture, aqueous chemicals and most petroleum hydrocarbons, including gasoline, motor oil and diesel fuel. Not recommended for immersion or long term exposure to concentrated acids or bases, or aggressive organic solvents such as toluene, ketones, and esters. It is the user's responsibility to determine the suitability of each adhesive for its intended use and application. Please contact EBS for technical assistance.
- c.) Bonds are resistant to intermittent exposures from -40 to 120° C, provided bonding assembly is in a fixture and not under shear load. User must determine suitability for continuous exposures beyond operating temperature range.
- d.) The shelf life of Components A and B in unopened containers is approximately 12 months from the date the product is manufactured from EBS facilities. Shelf life is based on steady state storage between 55°F and 80°F (13°C and 27°C). Exposure, intermittent or prolonged, above 80°F/27°C will result in a reduction of the stated shelf life. Shelf life of both components can be extended by air-conditioned or refrigerated storage between 55°F and 65°F (13°C and 18°C).

Product recommendations contained herein are based on information we believe to be reliable. All values presented above are typical properties obtained under controlled conditions at the EBS, LLC. laboratory or an outside certified laboratory. The values are intended to be used only as a guide for selection and further end-use evaluations. The ultimate suitability for any intended application must be verified by the END USER under their anticipated test conditions. This product is intended for use by skilled individuals at their own risk. Since specific use, materials and product handling are not controlled by EBS, our warranty is only limited to the replacement of defective EBS products.

SAFETY, HANDLING AND APPLICATION

VERY IMPORTANT: Read Material Safety Data Sheet before handling or using this product. Please contact your EBS representative for questions about dispensing equipment. Larger curing masses should be carefully moved to a well-ventilated area where the chance of personal contact is minimized.

EBS recommends the use of alcohol or industrial solvents for cleaning excess adhesive. This should be done when the adhesive is still wet or soft and care must be taken to prevent the cleaning solvent or alcohol from coming in contact with the adhesive as this could lead to an under-cure of the exposed edges. The use of tape and a sharp edge to remove excess adhesive is best practice. Also, partially cured adhesive can be carefully removed with a sharp knife. Removal of cured adhesive should be scraped or cut with a sharp blade which is preferred to sanding or grinding. High speed sanding or grinding of large areas will produce heat and produce noxious fumes and should be avoided or only be done with protective breathing apparatus.