

SIMSON MSR CA

SILYL MODIFIED POLYMER

SMART ADVANTAGES

- Multipurpose
- Excellent adhesion
- Easy tooling

DESCRIPTION

Simson MSR Construction Adhesive is a 1-component, permanently elastic, fast curing construction adhesive, based on Silyl Modified Polymer (SMP) and has been specially developed for bonding and sealing applications in the yacht- and boat building industry. MSR Construction Adhesive has been tested and certified to the International Maritime Organisation Fire Test Procedures for Surface Flammability, resolution A.653 (16) and has been approved for use in wall, ceiling and floor applications.

APPLICATIONS

Bondings/sealings in nautical applications, where adhesion and deformability have to comply to extreme requirements. Typical applications include:

- Bonding push borders.
- Bonding and sealing deck fittings.
- Bonding deck coverings.
- Bonding sheets.
- Bonding and sealing deck/hull connections.
- Bonding deck hatches, portholes and bollards.
- As bedding compound whenever a higher initial strength is required (slow skin forming version is recommended).

FEATURES

- Solvent- and isocyanate free.
- Very good UV-resistance and ageing properties; long time resistance against fresh and salt water.
- Good adhesion on commonly used materials without the use of a primer.
- Elastic in a temperature range of -40°C to +100°C.
- Neutral, odourless and fast curing.
- Paint compatible with most industrial paint or coated systems, both alkyd resin and dispersion based (because of the large number of different types of industrial paints a paint compatibility test is recommended, please contact Bostik for advise).
- Can be sanded after curing.
- MED Certified by Bureau Veritas: IMO Resolution A.653

TECHNICAL DATA		
CHARACTERISTIC		VALUE
Basic material		Silyl Modified Polymer (SMP)
Curing method		Moisture
Specific gravity	[g/ml]	ca. 1.4
Skin forming time * 20°C/50% R.H.	[min]	ca. 10
Open time * 20°C/50% R.H.	[min]	ca.15
Curing speed after 24 hrs 20°C/50% R.H.	[mm]	ca. 3
Shore A hardness DIN 53505		ca. 55
Volume change DIN 52451	[%]	< 3
Green strength ** Physica Rheometer MC100	[Pa]	ca. 300
Tensile stress (100%) DIN 53504/ISO 37	[MPa]	ca. 2.0
Tensile stress at break DIN 53504/ISO 37	[MPa]	ca. 3.0
Elongation at break DIN 53504/ISO 37	[%]	ca. 225
Shear stress *** DIN 53283/ASTM D1002	[MPa]	ca. 2.5
Tear propagation **** DIN 53515/ISO 34	[N/mm]	ca. 15
Solvent content	[%]	0
Isocyanate content	[%]	0
Temperature resistance	[°C]	- 40 to + 100
Application temperature	[°C]	+ 5 to + 35
UV- and weather resistance		Excellent
Colours (standard)		White, grey, black, brown
Packaging		290 ml cartridges and 600 ml sausages

*Also available in slower skin forming time of ca. 20 min and open time of ca. 35 min.

 $^{^{\}star\star}$ Max. load which can be applied per m^2 uncured adhesive without sagging.

^{***} Alu-Alu; adh. thickness 2 mm, test speed 50 mm/min.

^{****} Type C, test speed 500 mm/min.

ADHESION

In general MSR Construction Adhesive adheres well without primer on clean, dry, dust- and grease free substrates of aluminium, stainless steel, galvanised steel, zinc, copper, brass, powder coated metal, most lacquered metal surfaces, glass, PVC, polyester (GRP), painted and lacquered wood, etc. No adhesion on untreated polyethylene, polypropylene and teflon. In case of extreme environmental circumstances, like high thermal or mechanical loads and especially humid conditions, the use of a pre-treatment is recommended.

Use Simson Prep M on metal or other closed substrates. Use Simson Prep P on porous substrates like wood. For more details concerning Prep M and Prep P consult the specific Technical Data Sheets. In case of any uncertainties and for additional information consult Bostik.

METHOD OF USE

MSR Construction Adhesive can be extruded easily with a hand- or air pressure mastic gun. In sealing applications MSR Construction Adhesive should be tooled or smoothened within 10 minutes; in bonding applications the substrates have to be assembled within 15 minutes (at 20°C/50%R.H.). In general an adhesive thickness of 2 mm is recommended. Paint compatibility: MSR Construction Adhesive is compatible with most industrial paints and lacquers. MSR Construction Adhesive can be used for finishing/sealing welded sheets before they are sprayed with lacquers, thus contributing to corrosion protection. Because of its fast skin forming, MSR Construction Adhesive can be painted after 10 minutes (at 20°C/50%R.H.). The applied paint layer has no significant influence on the curing rate of MSR Construction Adhesive. Removing uncured residues of MSR Construction Adhesive or cleaning tools can be done with a clean, colourless cloth, wetted with Simson Liquid 1 or Simson Cleaner E. It is recommended to make a trial first to check possible harmful effects of these cleaners on the substrate.

STORAGE STABILITY

MSR Construction Adhesive can be stored for 18 months in cartridges and 12 months in sausages, in an original, unopened container in a dry place at temperatures between +5°C and +30°C.

FURTHER INFORMATION

The following publications are available on request:

- Material Safety Data Sheets (MSDS)
- Certificate GL elastomeric adhesive, class A and B

This product has been tested and certified to the International Maritime Organisation (IMO) Fire Test Procedures for surface flammability. Not only the fire retarding properties are excellent, but also the production quality is ensured and

regularly audited by Bureau Veritas, which guarantees the constant quality Bostik stands for.



This product has been tested and certified to the DNV-GL structural glazing procedures. Approved as class A and B adhesive for bonding of e.g. insulating glass, single-pane safety

glass, rails for fastening seats, door frames, single-pane polymer glass and wind breakers.

The information given and recommendations made herein are based on Bostik's research only and are not guaranteed to be accurate. The performance of the product, its shelf life, and application characteristics will depend on many variables, including the kind of materials to which the product will be applied, the environment in which the product is stored or applied, and the equipment used for application. Any change in any of these variables can affect the product's performance. It is the buyer's obligation, prior to using the product, to test the suitability of the product for an intended use under the conditions that will exist at the time of the intended use. Bostik does not warrant the product's suitability for any particular application. The product is sold pursuant to Bostik's Terms and Conditions of Sale that accompanies the product at the time of sale. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute permission, inducement, or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

SMART SUPPORT

Please contact your local representative

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