

SIMSON ISR 70-03

SILYL MODIFIED POLYMER

KEY FEATURES

- Elastic bonding adhesive
- Durable and reliable bonds
- Safe for workers and the environment

DESCRIPTION

Simson ISR 70-03 is a high quality elastic bonding adhesive based on Silyl Modified Polymers (SMP). It is suitable for use as an adhesive on structures in industrial applications requiring high strength.

Simson ISR 70-03 has excellent resistance to UV, weather and temperature, and exhibits excellent adhesion performance on a wide variety of substrates (minimal or no pre-treatment necessary) it can be overpainted with most common industrial paints.

Simson ISR 70-03 is free from solvents, isocyanates and silicone making it safer for workers and the environment

Simson ISR 70-03 used with Dual SMP® technology, guarantees an increased/controlled cure speed and reliability in the production process, extending application possibilities.

APPLICATIONS

- Elastic bonding in e.g. bus, caravan, train, and truck construction
- Bonding of sunroof systems
- Bonding of roofs on buses, trains and trucks
- Bonding of corner profiles of aluminium or polyester on trailers
- Bonding of flooring systems

FEATURES

- Solvent, isocyanate and PVC free
- Excellent UV resistance and ageing properties
- In general good adhesion on many substrates without the use of a primer
- Elastic within the temperature range -40°C to +110°C
- Neutral, odourless and fast curing
- Paint compatible with most industrial paint and lacquer systems, both alkyd resin and dispersion (due to the numerous different types of industrial paint a compatibility test is recommended before use, please consult with the paint supplier).

TECHNICAL DATA

CHARACTERISTIC	VALUE	
Basic material		Silyl Modified Polymer (SMP)
Curing method		Moisture
Specific gravity	[g/ml]	ca. 1.5
Skin forming time 23°C/50% R.H.	[min]	ca. 10
Open time * 23°C/50% R.H.	[min]	< 15
Curing speed after 24hrs 23°C/50% R.H.	[mm]	ca. 3
Shore A hardness		ca. 58
Volume change	[%]	< 3
Tensile stress (100%) ISO 37 (dumbbells)	[MPa]	ca. 2.5
Tensile stress at break ISO 37 (dumbbells)	[MPa]	ca. 3.5
Elongation at break ISO 37 (dumbbells)	[%]	ca. 200
E-Modulus (10%) ISO 37 (dumbbells)	[MPa]	ca. 4.5
Shear stress ISO 4587	[MPa]	ca. 2.5
Tear propagation ISO 34 (with knife)	[N/mm]	ca. 13
Solvent percentage	[%]	0
Isocyanate percentage	[%]	0
Glass transition (Tg)	[°C]	ca. - 50
Temperature resistance	[°C]	-40 to +110
Application temperature	[°C]	+5 to +35
UV and weather resistance		Excellent
Colours (standard)		White, grey, black
Packaging		290ml cartridges 400ml & 600 ml sausages 20L & 200L drums

* Also available in a longer open time - ISR 70-03sskf

** For advice on exposure at higher temperatures, please consult Bostik

ADHESION

In general, ISR 70-03 adheres well without primer on clean, dry, dust and grease free substrates. Due to the wide variety of substrates available Bostik recommends adhesion testing prior to use (please contact your local representative for more information)

No adhesion on untreated polyethylene, polypropylene and Teflon.

In instances where, due to great thermal or physical loads and especially under wet conditions where high adhesion demands are required, the use of Simson Prep CS or Prep M is recommended. Prep CS and Prep M degrease and prepare the surface of the substrate in one-step.

On plain, untreated wooden surfaces and other porous substrates, Prep P is recommended.

For more details on Prep CS, Prep M and Prep P consult the specific Technical Data Sheets.

For other substrates and additional information, consult Bostik.

METHOD OF USE

Simson ISR 70-03 can easily be extruded with a hand or air pressure gun at temperatures between +5°C and +35°C.

In bonding applications, the substrates need to be assembled within 15 minutes (at 23°C/50% R.H.) of applying ISR 70-03. In general, a minimum adhesive thickness of 2 mm is recommended.

Simson ISR 70-03 should be tooled or smoothed within 10 minutes (at 23°C/50% R.H.) using a spatula or putty knife, occasionally moistened with a soap solution (avoid soaps containing limonene as these can discolour the adhesive). Avoid soap solution penetrating between joint sides and adhesive, as this will cause loss of adhesion.

Cleaning tools or removing uncured residue of ISR 70- 03 can be done with a clean colourless cloth, wetted with Simson Liquid 1. It is recommended to check for possible attack of the substrate by Liquid 1 before use.

STORAGE STABILITY

ISR 70-03 can be stored for up to 18 months in cartridges and 12 months in sausages, in original, unopened containers in a dry place at temperatures between +5°C and +30°C.

FURTHER INFORMATION

The following publication is available on request:

- Material Safety Data Sheets (MSDS).

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SMART HELP

Please contact your local representative

