

# SIMSON ISR 70-03 sskf

## SILYL MODIFIED POLYMER

### KEY BENEFITS

- Long open time
- Durable and reliable bonds
- Safe for workers and environment

### DESCRIPTION

Simson ISR 70-03 sskf (version of ISR 70-03 with a longer open time) is a high quality elastic sealant / adhesive based on Silyl Modified Polymers (SMP). It is suitable as adhesive or sealant for structures in industrial applications requiring high strength.

Simson ISR 70-03 sskf has excellent resistance to UV, weather and temperature and is free of solvents, isocyanates and silicone. It exhibits excellent adhesion performance on a wide variety of substrates (minimal or no pre-treatment necessary) and can be over-painted with common industrial paints.

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

### APPLICATIONS

- Elastic bonding and sealing in e.g. bus-, caravan-, train- and truck construction
- Bonding and sealing of sunroof systems
- Bonding of roofs on busses, trains, trucks
- Bonding of corner profiles of aluminium or polyester on trailers
- Bonding of polyester parts on metal frames.
- Bonding of floor systems
- Sealing welded seams

### FEATURES

- Solvent-, isocyanate- and PVC free
- Very good UV-resistance and ageing properties
- In general good adhesion on several substrates without the use of a primer
- Elastic within temperatures from -40°C till +110°C.
- Neutral, odourless and fast curing
- Paint compatible with most industrial paint- or lacquer systems, both alkyd resin and dispersion based (due to the large scale of different types of industrial paints a paint compatibility test is recommended)
- Paintable after skin forming (wet on wet); this will not

influence the curing speed

### TECHNICAL DATA

CHARACTERISTIC	VALUE	
<b>Basic material</b>	Silyl Modified Polymer (SMP)	
<b>Curing method</b>	Moisture	
<b>Specific gravity</b>	[g/ml]	ca. 1.5
<b>Skin forming time</b> 20°C/50% R.H.	[min]	ca. 15
<b>Open time</b> 20°C/50% R.H.	[min]	< 35
<b>Curing speed after 24 hrs</b> 20°C/50% R.H.	[mm]	ca. 3
<b>Shore A hardness</b> DIN 53505	ca. 58	
<b>Volume change</b> DIN 52451	[%]	< 3
<b>Tensile stress (100%)</b> DIN 53504/ISO 37	[MPa]	ca. 2
<b>Tensile stress at break</b> DIN 53504/ISO 37	[MPa]	ca. 2.9
<b>Elongation at break</b> DIN 53504/ISO 37	[%]	ca. 250
<b>Shear stress **</b> DIN 53283/ASTM D1002	[MPa]	ca. 2.5
<b>Tear propagation ***</b> DIN 53515/ISO 34	[N/mm]	ca. 16
<b>E-Modulus (10%)</b> DIN 53504/ISO 37	[MPa]	ca. 3.8
<b>Solvent percentage</b>	[%]	0
<b>Isocyanate percentage</b>	[%]	0
<b>Glass transition (Tg)</b>	[°C]	- 50
<b>Temperature resistance ****</b>	[°C]	- 40 till + 110
<b>Application temperature</b>	[°C]	+ 5 till + 35
<b>UV- and weather resistance</b>	Excellent	
<b>Colours (standard)</b>	White, grey, black,	
<b>Packaging</b>	290 ml cartridges, 400 ml and 600 ml sausages	

\*Max. load which can be applied per m<sup>2</sup> uncured adhesive without sagging

\*\*Alu-Alu; adh. thickness 2 mm, test speed 50 mm/min.

\*\*\* Type C, test speed 500 mm/min.

\*\*\*\*For advice about long exposure to higher temperatures consult Bostik.

## ADHESION

In general Simson ISR 70-03 sskf 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 those cases where, due to great thermal or physical loads and especially under wet conditions, high adhesion demands are needed, the use of Simson Prep M is recommended. Prep M degreases and prepares the surface of the substrate in one step. On plain, untreated wooden surfaces and other porous substrates Simson Prep P is recommended. For more details concerning Prep M and Prep P consult the specific Technical Data Sheets. For not mentioned substrates and additional information consult Bostik.

## METHOD OF USE

Simson ISR 70-03 sskf can easily be extruded with a hand- or air pressure gun at temperatures between +5°C and +35°C. In sealing applications, Simson ISR 70-03 sskf should be tooled or smoothed within 10 minutes (at 20°C/50% R.H.) with a spatula or putty knife, occasionally moistened with a soap solution. Avoid soap solution penetrating between joint sides and sealant, because this will create loss of adhesion. In bonding applications the substrates have to be assembled within 15 minutes (at 20°C/50% R.H.) after applying Simson ISR 70-03 sskf. In general an adhesive thickness of 2 mm is recommended. At a temperature of +20°C and a relative humidity of 50%, Simson ISR 70-03 sskf can be painted with the most industrial paints already 10 minutes after application. Best adhesion of paint coats is generally obtained if painted within 4 hours after applying Simson ISR 70-03 sskf. Cleaning tools or removing uncured residue of ISR 70-03 sskf can be done with a clean colourless cloth, wetted with Simson Liquid 1. It is recommended to make a trial first to check possible attack of the substrate by Liquid 1.

## STORAGE STABILITY

Simson ISR 70-03 sskf 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 publication is available on request:

- Material Safety Data Sheets (MSDS).

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## SMART HELP

Please contact your local representative

