



# SIMSON ISR 70-12 AP

## SILYL MODIFIED POLYMER

### KEY FEATURES

- Sort drive away time
- Primerless adhesion
- Safe for workers and the environment

### DESCRIPTION

Simson ISR 70-12 AP is a high quality elastic sealant / adhesive based on Silyl Modified Polymers (SMP). It is suitable for bonding windscreens and windows e.g. in buses, trains and trucks.

Simson ISR 70-12 AP provides a rapid and efficient way to bond many different materials for OEM, coach works, mobile units etc.

Due to its very high green strength, ISR 70-12 AP is especially suitable where, immediately or shortly after installation, objects need to be moved during the manufacturing process.

Simson ISR 70-12 AP conforms to FMVSS212.

Simson ISR 70-12 is free from solvents, isocyanates and silicone making it safer for workers and the environment

### APPLICATIONS

- Window bonding in trains, trucks and buses
- Elastic bonding in e.g. bus, train and trucks
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### FEATURES

- Solvent, isocyanate and PVC free
- Very high green strength whilst maintaining good workability
- Very good UV resistance and ageing properties
- In general good adhesion without the use of a primer
- Elastic within the temperature range -40°C to +110°C
- Neutral, odourless and fast curing
- Low shrinkage during curing
- Low electrical conductivity
- Paint compatible with most industrial paint and lacquer systems, both alkyd resin and dispersion based (due to the numerous different types of industrial paint a compatibility test is recommended before use, please consult the paint supplier).

### TECHNICAL DATA

CHARACTERISTIC		VALUE
Basic material		Silyl Modified Polymer (SMP)
Curing method		Moisture
Specific gravity	[g/ml]	ca. 1.36
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. 2.5
Shore A hardness		ca. 65
Volume change	[%]	< 3
Electrical volume resistivity	[Ω.cm]	>10 <sup>11</sup>
Tensile stress (100%) ISO 37 (dumbbells)	[MPa]	ca. 3.0
Tensile stress at break ISO 37 (dumbbells)	[MPa]	ca. 4.0
Elongation at break ISO 37 (dumbbells)	[%]	ca. 300
E-Modulus (10%) ISO 37 (dumbbells)	[MPa]	ca. 7.0
Shear stress ISO 4587	[MPa]	ca. 2.8
Tear propagation ISO 34 (with knife)	[N/mm]	ca. 19
Solvent percentage	[%]	0
Isocyanate percentage	[%]	0
Temperature resistance	[°C]	-40 to +110
Application temperature	[°C]	+5 to +35
UV and weather resistance		Excellent
Colours (standard)		Black
Packaging		290ml cartridges 600 ml sausages

## ADHESION

In general, ISR 70-12 AP adheres well without primer on clean, dry, dust and grease free substrates. Due to the 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.

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

For window bonding where a ceramic coating is present the surface should be thoroughly cleaned with Cleaner I prior to the application of ISR 70-12 AP. If there is no ceramic coating present or the coating provides insufficient protection from UV the use of Prep G (after cleaning with cleaner I) is required to provide adequate UV protection, for full details of the use of Prep G please refer to the relevant technical data sheet.

For other substrates and additional information, consult Bostik.

## METHOD OF USE

SIMSON ISR 70-12 AP can easily be extruded with a hand or air pressure gun at temperatures between +5°C and +35°C. The speed of application can be increased by heating up to a maximum 70°C.

For bonding applications, the substrates need to be assembled within 15 minutes (at 23°C/50% RH) of applying the ISR 70-12 AP

Simson ISR 70-12 AP 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 70-012 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).

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 HELP

Please contact your local representative

