

SIMSON ISR 70-05 AP

SILYL MODIFIED POLYMER

KEY FEATURES

- Fast strength build up
- Primerless adhesion
- Safe for workers and the environment

DESCRIPTION

Simson ISR 70-05 AP is a high quality elastic bonding adhesives based on Silyl Modified Polymers (SMP). With good initial tack and high mechanical strength, it is suitable for use as an adhesive for structures in industrial applications requiring high strength.

Simson ISR 70-05 AP 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 70-05 AP conforms to FMVSS212

Simson ISR 70-05 AP is free from solvents, isocyanates and silicone making it safer for workers and the environment.

Simson ISR 70-05 AP 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 and train construction
- Bonding of roofs on buses and trains
- Bonding of corner profiles of aluminium or polyester on buses and trains
- Bonding of polyester parts on metal frames
- Bonding of flooring systems

FEATURES

- Solvent, isocyanate and PVC free
- Very good 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 based (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. 15
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. 60
Volume change	[%]	ca. < 3
Tensile stress (100%) ISO 37 (dumbbells)	[MPa]	ca. 2.4
Tensile stress at break ISO 37 (dumbbells)	[MPa]	ca. 2.9
Elongation at break ISO 37 (dumbbells)	[%]	ca. 200
E-Modulus (10%) ISO 37 (dumbbells)	[MPa]	ca. 5.5
Shear stress ISO 4587	[MPa]	ca. 2.3
Tear propagation ISO 34 (with knife)	[N/mm]	ca. 13
Solvent percentage	[%]	0
Isocyanate percentage	[%]	0
Glass transition (Tg)	[°C]	ca. -59
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 & 600ml sausages 20L & 200L drums

ADHESION

In general, ISR 70-05 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.

On plain, untreated wooden surfaces and other porous substrates, Simson 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 70-05 AP 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 70-05 AP. In general, a minimum adhesive thickness of 2 mm is recommended.

Simson ISR 70-05 AP should be tooled or smoothed within 15 minutes (at 23°C/50% R.H.) using a spatula or putty knife, occasionally moistened with a soap solution (avoid soap containing limonene as these can discolour the adhesive). Avoid soap solution penetrating between joint sides and sealant, as this will cause loss of adhesion.

Cleaning tools or removing uncured residue of ISR 70-05 AP 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 70-05 AP can be stored for up to 18 months in cartridges and 12 months 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

