



# ISR 70-03 FR

## SILYL MODIFIED POLYMER

### KEY BENEFITS

- Fire Rated sealant; Complies with EN 45545, Hazard Level 3
- Good adhesion to many substrates
- Permanently elastic within temperature range of -40°C to +100°C

### PRODUCT DESCRIPTION

Bostik ISR 70-03 FR SMP based adhesive/sealant complies with the latest fire protection legislation, meeting the highest hazard level according to the European standard EN 45545. Bostik ISR 70-03 FR is developed for usage in the mass-transportation industry, it complies with the interior & exterior sealing requirements for all design and operation categories as described in EN 45545. Bostik ISR 70-03 FR has very good resistance to UV, weather and temperature, and exhibits excellent adhesion performance on a wide variety of substrates (minimal or no pre-treatment necessary) while it can be overpainted with most common industrial paints.

### APPLICATIONS

- Interior and exterior sealing in railway constructions where fire retardancy is required
- Elastic bonding in mass-transport constructions
- Sealing of welded joints

### FEATURES

- Non-halogenated
- Solvent, isocyanate and silicone free
- Very good UV resistance and ageing properties
- Good adhesion to many substrates without the use of a primer.

### METHOD OF USE

Bostik ISR 70-03 FR can easily be extruded with a hand or air pressure applicator at temperatures between +5°C and +40°C. In bonding applications, the substrates need to be assembled within 10 minutes (at 23°C/50% R.H.) of applying ISR 70-03 FR. A minimum adhesive thickness of 2 mm is recommended. Bostik ISR 70-03 FR should be tooled off or smoothed within 10 minutes (at 23°C/50% R.H.) using a spatula or putty knife, occasionally moistened with a watery soap solution (avoid soap containing limonene as these can cause discoloration of the sealant). 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 FR can be done with a clean colourless cloth, wetted with Bostik Liquid 1.

TECHNICAL DATA		
<b>Basic Material</b>		Silyl Modified Polymer (SMP)
<b>Specific Gravity</b>	[g/ml]	ca. 1.4
<b>Skin Forming Time</b> 23°C/50% R.H.	[min]	ca. 10
<b>Curing Mechanism</b>		Moisture
<b>Curing Speed</b> 23°C/50% R.H.	[mm]	ca. 3
<b>Shore A Hardness</b>		ca. 50
<b>Colour</b>		Black
<b>Volume Change</b>	[%]	ca. < 3
<b>Tensile Stress At 100%</b> ISO 37 (dumbbells)	[MPa]	ca. 1.8
<b>Tensile Stress At Break</b> ISO 37 (dumbbells)	[MPa]	ca. 3.0
<b>Elongation At Break</b> ISO 37 (dumbbells)	[%]	ca. 200
<b>E-Modulus</b> ISO 37 (dumbbells)	[MPa]	ca. 3.0
<b>Shear Stress</b> ISO 4587	[MPa]	ca. 2.0
<b>Glass Transition</b>	[°C]	ca. -50
<b>Temperature Resistance</b>	[°C]	-40 to +100*
<b>Application Temperature</b>	[°C]	+ 5 to +40
<b>UV And Weather Resistance</b>		Excellent

## PACKAGING DESCRIPTION

290ml cartridge  
600ml sausage  
20l pail

## ADHESION

Bostik ISR 70-03 FR adheres well without primer on most clean, dry, dust and grease free substrates. Due to the wide variety of substrates available Bostik recommends adhesion testing prior to use. No adhesion will be obtained on untreated polyethylene, polypropylene and Teflon. Where, due to great thermal or physical loads, high adhesion demands are required, the use of Bostik Prep CS or Prep M is recommended, especially under wet conditions. Prep CS and Prep M degrease and prepare the surface of the substrate for bonding in one single step. On plain, untreated wooden surfaces and porous substrates, Bostik Prep P is recommended to prepare the surface for bonding. For more details on Prep CS, Prep M and Prep P consult the concerned Technical Data Sheet.

## STORAGE STABILITY

ISR 70-03 FR can be stored for up to 12 months in the 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)
- EN 45545 for interior & exterior sealing applications
- Oxygen index EN ISO 4589-2 Hazard level 3
- Smoke density EN ISO 5659-2 Hazard level 3
- Smoke toxicity NF X70-100-1/-2 Hazard level 3.

## DISCLAIMER

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