

# 70-03A FR

## FIRE RETARDANT ADHESIVE AND SEALANT

## **KEY FEATURES**

- Meets flame, smoke and toxicity requirement of NFPA 130
- Primerless adhesion
- Durable performance

#### **DESCRIPTION**

Bostik 70-03A FR adhesive/sealant is the first SMP based technology that is tested to the flame, smoke and toxicity requirements in accordance to the NFPA 130 standard. Bostik 70-03A FR is specially developed for mass transit industry to comply with the interior and exterior sealing requirements of vehicles. This product demonstrates the mechanical properties necessary for elastic bonding, suitable for elastic constructions in industrial applications. SMP based Bostik products are solvent, isocyanate and silicone free and have an excellent UV, weather and temperature resistance. These products exhibit a very good adhesion performance on a wide variety of substrates (limited or no pre-treatment necessary).

### **FEATURES**

- Compliant with NFPA 130 standard for flame, smoke and toxicity
- · Non-Halogenated
- · Solvent, isocyanate and PVC-free
- Very good UV-resistance and aging properties
- In general, good adhesion on several substrates without the use of a primer
- Permanent elastic within temperatures from -40°C till 100°C
- · Neutral, odorless and fast curing

## **BASIC USES**

Bostik 70-03A FR can easily be extruded with a handor air pressure gun at temperatures between 5°C and 35°C. Bostik 70-03A FR should be tooled or smoothened within 20 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, which will create loss of adhesion.

Cleaning tools or removing uncured residue of 70-03A FR



TYPICAL PHYSICAL PROPERTIES	
Description	Results
Basic Material	Silyl Modified Polymer
Curing Method	Moisture
Specific Gravity	Approx. 1.5 g/ml
Skin Forming Time	Approx. 5 min. (20°C/50% R.H.)
Open Time	< 3 min. (20°C/50% R.H.)
Curing Speed After 24 hrs.	Approx. 3 mm (20°C/50% R.H.)
Shore A Hardness	Approx 65 (DIN 53505)
Volume Change	< 3 % (DIN 52451)
Tensile Stress (100%)	Approx. 2.5 MPa (DIN 53504/ISO 37)
Tensile Stress at Break	Approx. 3.2 MPa (DIN 53504/ISO 37)
Elongation at Break	Approx. 160% (DIN 53504/ISO 37)
E-Modulus (10%)	Approx. 6 MPa (DIN 53504/ISO 37)
Shear Stress	Approx. 1.8 MPa (DIN 53283/ASTM D1002) (Alu-Alu; adh. thickness 2 mm, test speed 50 mm/min.)
Tear Propagation	Approx. 10 N/mm (DIN 53515/ISO 34) (Type C, test speed 500 mm/min.)
Solvent Percentage	0%
Isocyanate Percentage	0%
Temperature Resistance	-40°C till 100°C
Application Temperature	5°C till 35°C
UV- and Weather Resistance	Excellent
Colors (Standard)	White
Packaging	20 oz (600ml) sausages, 5 gal pail

can be done with a clean white/colorless cloth, moistened with isopropyl alcohol (IPA). Check substrate compatibility with IPA before proceeding.

#### **APPLICATIONS**

- Interior and exterior sealing in train constructions that require fire retardancy
- Elastic bonding in mass transit constructions (e.g. train, bus & coach)
- · Interior sealing in aerospace applications
- Sealing welded seams

#### **ADHESION**

In general, Bostik 70-03A FR adheres well without primer on clean, dry, dust and grease free substrates of glass, (anodized) aluminum, stainless steel, glass fiber reinforced polyester (GRP), 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, the use of Prep M is recommended. Continuous water immersion should be avoided. Prep M degreases and prepares the surface of the substrate in one step. For more details concerning Prep M consult the specific Technical Data Sheets. For substrates not mentioned and additional information, consult Bostik.

#### **PACKAGING**

For packaging options please call your Bostik sales or technical representative.

## **SHELF LIFE**

Bostik 70-03A FR can be stored for 12 months in an original unopened container in a dry place at temperatures between 5°C and 30°C

## **HEALTH AND SAFETY PRECAUTIONS**

Please refer to the SDS for complete details.

#### **LIMITED WARRANTY**

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