

# SAF30 120 SA

# **TWO-COMPONENT METHYL METHACRYLATE**

# **KEY FEATURES**

- Long open and fixture times, cure time of approximately 120 minutes
- Non-sag application on vertical surfaces
- Excellent environmental resistance

# DESCRIPTION

Designed with patented methyl methacrylate technology, Bostik's SAF structural adhesive product line offers unmatched chemical, environmental, mechanical and fatigue resistance for many industrial applications. Able to bond a wide range of dissimilar substrates, including composites, metals and plastics, the SAF product line features high elongation from 30-250%, smart viscosity formulation, minimal surface preparation and a wide range of open and curing times.

## **RANGE OF APPLICATION**

The SAF30 120 SA is recommended for the following substrates:

METALS	COMPOSITES	PLASTICS
Steel	Polyester	PVC
Stainless Steel	Vinyl ester	PS
Aluminum	Ероху	ABS
	Acrylic (Elium)	PC
		PMMA

# PRODUCT CHARACTERISTICS

CURING PROPERTIES		
Properties	Result	
System	Two-component 10:1 volume ratio	
Polymerization	Room temperature	



# TYPICAL PHYSICAL PROPERTIES

Properties	Resin	Hardener Bostik SAF D
Appearance	Off-White	White
<b>Density</b> (+/- 0.02)	1.17	1.16
Viscosity @77°F (23°C)	90,000 - 150,000 <sup>1</sup>	90,000 - 140,000²
Туре	Non-sag	

CURING PROPERTIES		
Properties	Result	
Open time [min]	80 - 100	
Fixture time @77°F (23°C) [min]	105 - 150	
Full cure [hours]	24	

MECHANICAL PROPERTIES		
Properties	Result	
Lap shear strength [MPa/ psi] <sup>3</sup> thickness 250µm	11 / 1,160	
Tensile strength at break [MPa/psi] <sup>3</sup>	12 - 14 / 1,740 - 2,031	
Tensile modulus [MPa/psi] <sup>3</sup>	800 - 900 / 116,030 - 130,534	
Hardness [Shore D]	65 - 70	
Elongation at break <sup>4</sup>	30%	

## WEATHERING AND AGING RESISTANCE

Lap shear strength (MPa/psi) with ISO 4587 after D3 cycle. D3 cycle: NF EN ISO 9142, 7 aging cycles (7 days).

LAP SHEAR STRENGTH (MPa/psi) <sup>3</sup> THICKNESS 250µm			
Substrates	Before aging cycles	After aging cycles D3	
Aluminum 6060	11.2 / 1,624 CF	11.5 / 1,668 CF	
Stainless steel	7.6 / 1,102 AF	9.8 / 1,421 CF/AF	
FPR	8.3 / 1,204 DF	9.0 / 1,305 DF	

#### NOTE

<sup>1</sup>Rheometer viscosity (mPa.s) @20s<sup>-1</sup> <sup>2</sup>Brookfield viscosity (mPa.s) mobile RV7 @ 10 rpm <sup>3</sup>ISO 4587 <sup>4</sup>ISO 527-1A <sup>5</sup>DF : Delamination Failure

# SURFACE PREPARATION

Use an appropriate cleaning agent, such as isopropyl alcohol, to remove grease, contamination or poorly adhering oxides from metal surfaces. Most plastics require a simple cleaning before bonding. Some may require sanding for better performances.

## PRECAUTIONS

Adhesive contains methacrylate monomers and is flammable. Materials must be stored in cool place away from sources of heat. During the polymerization, the chemical reaction causes a typical smell; please use the product in a well-ventilated area.

When the adhesive's two components are mixed, an exothermic reaction can occur and generates heat. The amount of heat is dependent on the mass and thickness of the mixed product.

Read material Safety Data Sheet before handling or using this product.

## APPLICATION

The optimum quality is obtained at room temperature, ideally between 64 - 82°F (18 - 28°C) without post-curing.

Follow the instructions on the product operating guide or contact your Bostik representative for any information concerning product use or dispensing equipment.

#### **STORAGE AND SHELF LIFE**

The SAF30 120 SA shelf life is 9 months in unopened original packaging. The product may be stored in a closed container in a dry place at temperature between  $59 - 77^{\circ}$ F (15 - 25°C).

Exposure to higher or lower temperature will result in a reduction of the stated shelf life.

# PACKAGING

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

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