

# SAF Ultimate 15

# TWO COMPONENT METHACRYLATE

# **KEY FEATURES**

- High environmental and impact resistance
- Metal Bonding
- Non-sag, application on vertical surfaces
- Minimal surface preparation



# DESCRIPTION

The SAF range is made of patented methacrylate adhesives and shows unmatched performance in term of resistance and flexibility. These adhesives have been designed for bonding a wide range of dissimilar substrates including metals and plastics as well as composite materials for industrial applications. The outstanding properties of the SAF range allow structural bonding while keeping flexibility and fatigue resistance.

The SAF range products have been developed to resist the most aggressive environments and extreme temperatures. It shows unprecedented results facing weathering and ageing.

### **RANGE OF APPLICATION**

The SAF Ultimate 15 is recommended for the followed substrates:

Metal	Composites	Plastics
Steel	Acrylic (Elium)	PMMA
Stainless Steel	Ероху	ABS
Powder coated steel	Polyester	PS
Aluminum	Vinylester	PVC
		PC

### **PRODUCT CHARACTERISTICS**

PRODUCT CHARACTERISTICS		
Characteristics	SAF Ultimate 15	
System	Two component 4:1 Volume Ratio	
Polymerization	Room Temperature	

# ADHESIVE PROPERTIES

PHYSICAL PROPERTIES		
PROPERTIES	RESIN	HARDENER Bostik SAF DU
Appearance	Off White	Grey
<b>Density</b> (+/- 0,02)	0.98	1.23
Viscosity @ 23°C	40 000 - 90 000 <sup>1</sup>	300 000 - 600 000 <sup>2</sup>
Туре	Non-sag	

CURING PROPERTIES		
PROPERTIES	SAF Ultimate 15	
Open time [min]	5 - 7	
Fixture time @ 23°C [min]	10 - 14	
Full Cure [hours]	24	

MECHANICAL PROPERTIES			
PROPERTIES	SAF Ultimate 15		
Lap Shear strength [MPa] <sup>3</sup> Thickness 250µm	10 -13 CF <sup>5</sup>		
Tensile Strength at break [MPa] <sup>4</sup>	6 - 8		
Tensile Modulus [MPa] <sup>4</sup>	150-300		
Hardness [Shore D]	55-60		
Elongation at break <sup>4</sup>	100 -120 %		

#### WEATHERING AND AGEING RESISTANCE

Lap shear strength (MPa) with ISO 4587 after D3 cycle. D3 cycle NF EN ISO 9142 7 ageing cycles (7 days).

LAP SHEAR STRENGTH (MPa) <sup>3</sup> thickness 250 µm		
Substrates	Before ageing cycles	After ageing cycles
Aluminum	12.0 CF <sup>5</sup>	12.0 CF
Stainless Steel	12.0 CF	12.0 SCF <sup>6</sup>
Steel	12.5 CF	12.0 CF
FRP	7.0 DF <sup>7</sup>	7.0 DF

# **NOTES**

- 1. Rheometer viscosity (mPa.s) @1-2s-1
- Brookfield viscosity (mPa.s) mobile T-F @ 10rpm 2.
- 3. ISO 4587
- 4. ISO 527-1A
- 5. CF : Cohesive Failure
- SCE Special Cohesive Failure 6 7
- DF : Delamination Failure

#### SURFACE PREPARATION

Use AEC T700 to remove grease, loose 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 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.

Adhesives contain chemical materials, prevent contact with skin and eyes. In case with skin contact, wash with soap and water. In case of eye contact, flush with water and seek immediate medical attention. Do not swallow and keep away from children.

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

### **APPLICATION**

The optimum qualities are obtained at room temperature, between 18°C and 28°C without post-curing.

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

#### **STORAGE**

The SAF Ultimate 15 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 15°C and 25°C.

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

#### PACKAGING

The SAF Ultimate 15 adhesive is available in 50mL and 415mL side by side cartridges, 20L pails or 200L drums.

SAF Ultimate 15 50mL cartridges require the use of M5.4/16 mixers. SAF Ultimate 15 415mL cartridges require the use of MFX10-18 mixers.

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

#### LIMITED WARRANTY

To the maximum extent allowed by law, Bostik disclaims all other express or implied warranties, including without limitation warranties of merchantability and fitness for a particular purpose. Unless otherwise stated in the limited warranty, the sole remedy for breach of warranty is replacement of the product or refund of the buyer's purchase price. Bostik disclaims any liability for direct, incidental, consequential, or special damages to the maximum extent allowed by law. Disclaimers of implied warranties may not be applicable to certain classes of buyers and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.



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