



SAF Ultimate M25

TWO-COMPONENT METHYL METHACRYLATE

KEY FEATURES

- Excellent environmental resistance
- Permanent toughness even after aging
- Minimal surface preparation
- Metal bonding
- High impact

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 SAF Ultimate M25 is recommended for the following substrates:

METALS	COMPOSITES	PLASTICS
Steel	Polyester	PVC
Stainless Steel	Vinylester	PS
Aluminum	Epoxy	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 SAF DX
Appearance	Off-white	White
Density (+/- 0.02)	0.98	1.15
Viscosity @77°F (23°C)	300,000 - 800,000 ¹	100,000 - 400,000 ²
Type	Non-sag	

CURING PROPERTIES

Properties	Result
Open time @77°F (23°C) [min]	12 - 15
Fixture time @77°F (23°C) [min]	20 - 25
Full cure [hours]	24

MECHANICAL PROPERTIES

Properties	Result
Lap shear strength [MPa/psi] ³	14 / 2,030 CF ⁴
Tensile strength at break [MPa/psi] ⁴	8 / 1,160
Tensile modulus [MPa/psi] ⁴	600 - 700 / 87,000 - 101,500
Hardness [Shore D]	60 - 70
Elongation at break ⁴	65%

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) ³ THICKNESS 250µm		
Substrates	Before aging cycles	After aging cycles D3
Aluminum 6061	15.0 / 2,175 CF ⁵	15.0 / 2,175 CF
Stainless steel	13.5 / 1,960 SCF ⁷	13.5 / 1,960 SCF
Steel	16.0 / 2,320 CF	16.0 / 2,320 CF
FPR	8.0 / 1,160 DF ⁶	8.0 / 1,160 DF

NOTE

¹ Brookfield viscosity (mPa.s) mobile T-F @ 10 rpm

² Brookfield viscosity (mPa.s) RV7 @ 10 rpm

³ ISO 4587

⁴ ISO 527-1A

⁵ ACF: Cohesive Failure

⁶ DF: Delamination Failure

⁷ SCF: Special Cohesive 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 qualities are obtained at room temperature, 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 SAF Ultimate M25 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°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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BOSTIK HOTLINE

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