

XPU 18018 AM/BM

Polyurethane adhesive

KEY BENEFITS

- Suitable for manual and automatic application, horizontal and vertical
- Hardening at ambient temperature or at high temperature
- Quick bonding and short open time

DESCRIPTION

Bostik XPU 18018 AM/BM is a 2-component, polyurethane based adhesive curing at room temperature as well as at higher temperatures and is dedicated for a wide range of applications.

APPLICATIONS

XPU 18018 AM/BM is designed to assemble the following materials:

- Fibre Reinforced Polyester (FRP)
- Different coated steels
- Thermoplastics

FEATURES

- Solventfree
- Easy and fast application on automatic dosing and mixing equipment
- High reactivity
- High strength
- Easy to use with high speed polymerisation process

ADHESION

In general good adhesion on many substrates without the use of a primer. For detailed information, please consult Bostik.

CHARACTERISTICS

PHYSICAL PROPERTIES A-component		
		A-component
CHARACTERISTICS		VALUES
Basic material		Polyols
Consistency		Viscous liquid
Viscosity Brookfield at 23°C	[mPa.s]	Approx. 55000
Specific gravity	[g/cm³]	Approx. 1.67
Colour		Grey
PHYSICAL PROPERTIES B-component		
CHARACTERISTICS		VALUES
Basic material		Modified MDI prepolymer
Consistency		Viscous liquid
Viscosity Brookfield at 23°C	[mPa.s]	Approx. 38000
Specific gravity	[g/cm³]	Approx. 1.18
Colour		Off-white
PHYSICAL PROPERTIES A+B component		
CHARACTERISTICS		VALUES
Basic material		Polyurethane
Consistency		Pasty and thixotropic
Viscosity mixture	[mPa.s]	Approx. 125000
	3.	
Specific gravity mixture	[g/cm³]	Approx. 1.42
Colour	[g/cm³]	Approx. 1.42 Grey
	[g/cm ⁻]	
Colour Room temperature curing profile After 24 hours After 7 days Tensile strength according I	50 527 tes	Grey Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73
Colour Room temperature curing profile After 24 hours After 7 days Tensile strength according I temperature curing (7 days r	SO 527 test	Grey Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73 St sample 1A at room ing speed 100 mm/min
Colour Room temperature curing profile After 24 hours After 7 days Tensile strength according I temperature curing (7 days r Tensile strength at break	50 527 tes	Grey Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73 st sample 1A at room ing speed 100 mm/min Approx. 16.5
Colour Room temperature curing profile After 24 hours After 7 days Tensile strength according Is temperature curing (7 days r Tensile strength at break Elongation at break	SO 527 tes nini.) test [MPa]	Grey Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73 st sample 1A at room ing speed 100 mm/min Approx. 16.5 Approx. 45%
Colour Room temperature curing profile After 24 hours After 7 days Tensile strength according I temperature curing (7 days r Tensile strength at break	SO 527 test	Grey Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73 St sample 1A at room ing speed 100 mm/min Approx. 16.5

METHOD OF USE

Application conditions: Application temperature between +15°C and +25°C and a relative humidity less than 70%.

Substrate: The substrate should be dry, clean and free of dust and grease.

Application method: Automatic dosing equipment or pneumatic gun with 1/1 cartridge.

Mixing ratio A:B in weight: 100A:71B.

Mixing ratio A:B in volume: 100A:100B. **Mixing**: Due to the reactivity, mixing with a static mixer is required.

Pot life 23°C: 7 - 9 minutes. The pot life depends on the amount of product, the temperature and the relative humidity. The indicated pot life is measured with 100 cc mixed product at a temperature of +23°C.

Application: The mixture has to be applied immediately after mixing.

Open time 20°C: 3-5 minutes. The open time depends on the temperature and the relative humidity. The open time is measured after mixing on a 6 mm diameter bead of adhesive, a temperature of +20°C.

Assembling: After applying the adhesive, assemble the parts within the open time and immediately clamp or press.

Pressing time: Approx. 1 hour at +20°C. The pressing time depends on temperature, relative humidity and thickness of the bead of adhesive. The pressing time is measured on a 3 mm diameter bead of adhesive.

Curing time: Complete curing will take at least 2 days at a temperature of +20°C. Depending on higher or lower temperatures the curing time will be shorter or longer.

Consumption: Approx. 1 - 3 mm diameter bead (depends on type of substrate and on the expected differences in thermal expansion).

Cleaning: Uncured XPU 18018 AM/BM can be removed with Cleaner 14.

PACKAGING

30kg tin 2x200ml cartridges

STORAGE

XPU 18018 AM/BM can be stored for 9 months in an original, unopened container in a dry place at temperatures between $+10^{\circ}$ C and $+25^{\circ}$ C.

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SMART HELP

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