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
CHARACTERISTICS		**VALUES**
Basic material		Polyols
Consistency		Viscous liquid
Viscosity Brookfield at 23°C	**[mPa.s]**	Approx. 55000
Specific gravity	**[g/cm^3]**	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/cm^3]**	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
Specific gravity mixture	**[g/cm^3]**	Approx. 1.42
Colour		Grey
Room temperature curing profile **After 24 hours** **After 7 days**		Approx. Shore A:94 Shore D:54 Shore A:97 Shore D:73
Tensile strength according ISO 527 test sample 1A at room temperature curing (7 days mini.) testing speed 100 mm/min		
Tensile strength at break	**[MPa]**	Approx. 16.5
Elongation at break		Approx. 45%
E-modulus	**[MPa]**	Approx. 480
Shear strength		Delaminating on FRP samples cohesive failure on steel

METHOD OF USE

Application conditions: Application temperature between +15ºC and +25ºC 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 23ºC: 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 +23ºC.

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

Open time 20ºC: 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 +20ºC. 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 +20ºC. 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 +10ºC and +25ºC.

SMART HELP

Please contact your local representative

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