XPU 16505 A/B – Two-component Polyurethane Adhesive

Product Features

- Solvent-free
- Stable open time
- Excellent adhesion to various substrates
- Superior anti-sagging performance

Product Description

XPU 16505 A/B is a solvent-free, two-component polyurethane adhesive.
XPU 16505 A (Part A): Hydroxyl-terminated polyurethane prepolymer
XPU 16505 B (Part B): Isocyanate polymer curing agent, used together with Part A

XPU 16505 A/B is a thixotropic two-component polyurethane adhesive. When Parts A and B are uniformly mixed at a weight ratio of 100:25, the adhesive cures rapidly.

Applications

- Assembly of insulation materials in LNG carriers and liquefied gas storage tanks, with an application temperature range of -190°C to 80°C
- Bonding of sandwich panels, such as plywood, rigid polyurethane foam, pretreated metal sheets, or aluminum honeycomb
- Other structural bonding requiring fast curing

Technical Data

Item	Part A	Part B
Product Label	XPU 16505 Part A	XPU 16505 Part B
Base Material	Polyurethane Prepolymer	Isocyanate
Appearance	Beige paste	Brown liquid
Density (25°C) [g/ml]	1.4–1.5	1.2–1.3
Viscosity (23°C) [Pa·s]	–	0.18–0.24
Mixing Ratio (by weight)	100	25
Mixing Ratio (by volume)	100	30

Mixture Properties

- Appearance: Beige paste
- Viscosity (25°C/S7/20rpm) [Pa·s]: >50
- Working time [min]: 60.0
- Recommended application rate [g/m²]: 300–500
- Shear strength (ISO 4587, 20°C) [MPa]: >8.0
- Minimum application temperature [°C]: >15

Application Instructions

- Clean substrates before bonding to ensure surfaces are free from dust, oil, or contaminants. Proper surface treatment improves adhesion and long-term performance.
- Parts A and B can be manually mixed, but using suitable mixing equipment is recommended for optimal results.
- After applying the adhesive, fix and press the bonded parts until initial curing is achieved. Bonding must be completed within the working time. Beyond this period, viscosity increases rapidly and bonding performance decreases.
- Working and open times shorten as temperature increases.
- Reaction speed can be accelerated by adding an appropriate amount of catalyst.

Storage

- Keep containers tightly closed in a dry, cool, and well-ventilated place.
- Recommended storage temperature: 10°C–35°C.
- Shelf life: 12 months (unopened).

Packaging

XPU 16505 A: 20kg / 250kg drums
XPU 16505 B: 20kg / 250kg drums

Additional Information

- Material Safety Data Sheet (MSDS) available upon request.

The technical data and recommendations provided are based on Bostik’s test results and are for reference only. Actual performance, shelf life, and characteristics may vary depending on specific user conditions, production processes, and environments. Users are responsible for testing the product for suitability before use. Bostik makes no guarantee regarding fitness for specific applications beyond contractual obligations.

For assistance, please contact your local Bostik representative.