

TECHNICAL DATA SHEET

BONDAN ST42

Revision: 16.04.2021
Version: 1.003



PRODUCT DESCRIPTION

BONDAN ST42 is a colourless and transparent two-component epoxy adhesive. The product is fast curing at room temperature and enables subsequent work steps without long waiting times.

BONDAN ST42 is well suited for structural bonding of metal, ferrite, ceramic, marble, glass, concrete, wood and plastic (e.g. polyester, ABS and rigid PVC). However, it is not suitable for rubber, soft materials, PE, PP and PTFE. When cured, the adhesive is highly resistant to water, petrol and many oils.

Mixing ratio by volume: 1:1 (A:B)

TECHNICAL PROPERTIES

Component A (resin)

Chemical composition	epoxy resin
Appearance	colourless, transparent
Viscosity at 25°C	12000 – 18000 mPa·s
Density	≈ 1.17 g/cm ³

Component B (hardener)

Chemical composition	amine
Appearance	colourless, transparent
Viscosity at 25°C	15000 – 30000 mPa·s
Density	≈ 1.13 g/cm ³

CURING PROPERTIES

Maximum gap fill	0.1 to 2.0 mm
Pot life at 25 °C (2 g A+B)	≈ 3 – 8 min
Functional cure time at 25 °C	≈ 20 – 30 min
Full cure time at 25 °C	≈ 24 h
Processing temperature	15 – 40 °C

PROPERTIES IN THE CURED STATE

Colour after mixing (A+B)	colourless, transparent
Peel strength (ISO 4578)	4 – 20 N/25 mm
Hardness Shore D	65 – 75
Shear strength at 25 °C (ISO 4587)	
Steel	12 – 14 N/mm ²
Temperature resistance	-40 to +80 °C

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DIRECTIONS FOR USE

Preparation - Please read the safety data sheet carefully before use. Clean, grease-free and dry surfaces result in maximum strength. Soiled surfaces should be cleaned with BONDAN Cleaner or a suitable solvent prior to the application. We do not recommend the use of cleaning agents containing acetone.

Mixing - The specified mixing ratio (see above) must be strictly respected. The adhesive's properties will be changed by changing the mixing ratio.

To prevent from air inclusions during mixing, we recommend using an appropriate mixing system. In case of the application via 2C cartridges, the mixing ratio is already set correctly. However, the first 3 - 5 cm should not be used.

After mixing both components, the product must be used within the pot life described above.

Do not use an adhesive that has already started to set.

Application - In order to achieve optimal adhesion and good mechanical properties, the inclusion of air in the adhesive joint must be avoided. For small- to medium-sized applications we recommend using 2C cartridges.

Elevated temperatures reduce the pot life of the product. Therefore, the recommended processing temperature of 15 - 40 ° C has to be considered.

To ensure good wetting, appropriate pressure should be applied when dispensing the product and during the curing process. The time required depends on the design and surface of the devices as well as environmental conditions. Clamping parts with an excessive pressure is not recommended.

STORAGE

- 12 months at 5 to 25 °C in unopened packaging

PRODUCT LABELLING

See safety data sheet.

PACKAGE UNITS

- For manual application 50 ml 2C cartridge

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