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#### PRODUCT DESCRIPTION

BONDAN ST01 is a temperature and impact-resistant two-component methyl methacrylate adhesive. The adhesive exhibits fast curing at room temperature and good gap filling properties. In the cured state BONDAN ST01, additionally, is very resistant to thermo shocks and, thus, is well suited for the application on substrates with strongly differing properties and thermal expansion coefficients. The product adheres very well to many substrates such as plastics, composite materials and many metals (especially aluminium).

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

### **TECHNICAL PROPERTIES**

#### **Component A (in liquid state)**

Chemical composition Appearance Viscosity at 25°C Density

methyl methacrylate off-white 20000 - 80000 mPa·s ≈ 1.0 g/cm<sup>3</sup>

#### **Component B (in liquid state)**

Chemical composition Appearance Viscosity at 25°C Density

methyl methacrylate off-white 20000 - 70000 mPa·s  $\approx 1.0 \text{ g/cm}^3$ 

#### **CURING PROPERTIES**

Maximum gap fill	4 mm
Pot life at 25 °C (2 g A+B)	≈ 8 min
Fixture time at 25 °C	≈ 18 min
Functional cure time at 25 °C	≈ 30 min
Full cure time at 25 °C	≈ 24 h

#### **PROPERTIES IN THE CURED STATE**

Colour after mixing (A+B)	cream-coloured
Peel strength (ISO 4578)	≈ 150 N/25mm
Hardness Shore D	≈ 80
Shear strength at 25 °C (ISO 4587)	
Steel	≈ 25 N/mm²
Aluminium	≈ 25 N/mm²
ABS	≈ 3 N/mm²

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## **TECHNICAL DATA SHEET**

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Carbon fibre Polyester GRP PMMA PC Temperature resistance ≈ 12 N/mm<sup>2</sup> ≈ 4 N/mm<sup>2</sup> ≈ 4 N/mm<sup>2</sup> ≈ 4 N/mm<sup>2</sup> -40 to +120 °C

## 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 to use 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 2 to 7 °C in unopened packaging

## PRODUCT LABELLING

See safety data sheet.

## **PACKAGE UNITS**

• For manual application

50 ml 2C cartridge

# TECHNICAL DATA SHEET BONDAN ST01

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