WEICON

Plastic-Bond



Excellent adhesion to plastics |high strength | shock- and impact-resistant

WEICON Plastic-Bond is a solvent-free structural adhesive with very good adhesion to plastics, aluminum, steel and many other meterials. The adhesive is suitable for static as well as dynamic loads, has high impact and peel strength and a maximum gap-filling capacity of 5 mm.

Plastic-Bond is particularly convenient for structural bondings if high-strength connections are required. The adhesive is highly viscous and is therefore suitable for processing on vertical surfaces.

The structural adhesive is universally applicable and can be used, for example, in plastics technology, in metal construction, in car body and vehicle construction, in mechanical engineering, in electrical engineering, in wood processing, or in trade show and exhibition construction.

Characteristics

Base		methyl methacrylate
Texture		viscous
Colour		off-white, milky
Processing		
Processing temperature		+10°C to +40°C
Cure temperature		+18 °C
Mixing ratio by weight		1:1
Viscosity of the mixture		40.000-60.000 mPa·s
Density of the mixture		0,98-1,02 g/cm ³
Gap bridging up to max.		5 mm
Curing		
Pot life	at 20 °C	15 min.
Handling strength	(35 % strength)	40 min.
Working strength after	(50 % strength)	60 min.
Final strength	(100 % strength)	12 h

Mechanical properties after curing

Lap shear strength material thickn. 1,5mm DIN EN 1465

Steel 1.0338 sandblasted		23 N/mm ²
Stainless steel V2A sandblasted		22 N/mm²
Aluminium sandblasted		20 N/mm²
PVC-rigid roughened		12 N/mm²
CFRP		22 N/mm²
ABS		7 N/mm²
PC (polycarbonate)		11 N/mm²
GFRP		21 N/mm ²
PMMA		9 N/mm²
Polyamide 6.6		1 N/mm²
Thermal parameters		
Temperature resistance		-55°C to +125°C
Electrical parameters		
Dielectric strength	DIN EN 60243-1 (20°C)	21 kV/mm
Approvals / Guidelines		
IMPA Code		812993

Instructions for use

When using WEICON products, the physical, safety-related, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

Surface pre-treatment

Clean and dry bonding surfaces are essential for flawless adhesive bonding (e.g. cleaning and degreasing with WEICON Surface Cleaner). Best results are achieved when the adhesive surfaces are mechanically roughened. The adhesive is applied to just one side.

Processing

Plastic-Bond can be processed straight from the double cartridge by means of the included static mixer. Dismiss the first 5 cm of the adhesive bead. The adhesive is applied to just one side. The specified pot life refers to a material batch of 10 ml at room temperature. Larger batch quantities will result in faster curing. Higher temperatures also reduce the pot life and curing time. (General rule: every increase by +10 °C above room temperature results in a decrease of the pot life and curing time by half). Temperatures below +16 °C increase the pot life and curing time significantly. From approx. +5C and below, no reaction takes place.

Storage

Shelf life of 12 months when unopened and stored in normal climate (+23°C and 50 % rel. air humidity).

Scope of delivery

Adhesive

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the requested properties are recommended. A claim cannot be derived from them.

Structural Acrylic Adhesives

Plastic-Bond

Accessories

10005237 Dispenser Easy-Mix D 50, 1 PCE 10005236 Quadro Mixing Nozzle A, 1 PCE 10026925 Helix Mixing Nozzle A, 1 PCE 10068261 Dosing Tip, 1 PCE

Conversion table

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ Nm x 8.851 = Ib·in mm/25.4 = inch $Nm \times 0.738 = Ib \cdot ft$ $\mu m/25.4 = mil$ Nm x 141.62 = oz·in

 $N \times 0.225 = Ib$ mPa·s = cP

 $N/mm^2 \times 145 = psi$ $N/cm \times 0.571 = Ib/in$ $MPa \times 145 = psi$ $kV/mm \times 25.4 = V/mil$

Available sizes

10018558 Plastic-Bond, 24 ml, off-white, milky 10058780 Plastic-Bond, 1 Set, off-white, milky

To the product detail



Note
The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

WEICON Czech Republic s.r.o. Czech Republic phone +42 (0) 417 533 013 info@weicon.cz

WEICON Ibérica S.L. Spain phone +34 (0) 914 7997 34 info@weicon.es WEICON GmbH & Co. KG (Headquaters) Germany phone +49 (0) 251 9322 0 info@weicon.de

WEICON Italia S.r.L. Italy phone +39 (0) 010 2924 871 info@weicon.it WEICON Romania SRL phone +40 (0) 3 65 730 763

WEICON SA (Pty) Ltd South Africa phone +27 (0) 21 709 0088 info@weicon.co.za

WEICON South East Asia Pte Ltd Singapore Phone (+65) 6710 7671 info@weicon.com.sg

WEICON Kimya Sanayi Tic. Ltd. Şti. Turkey phone +90 (0) 212 465 33 65