

Easy-Mix RK-7100 Structural Acrylic Adhesive



fast-curing
high strength
impact resistant, residual elasticity

WEICON Easy-Mix RK-7100 can be used to bond numerous materials such as plastics, metals and ceramics to themselves and among. It is particularly convenient for structural bondings if high-strength connections are required. The adhesive is very viscous and is therefore suitable also for applications on vertical surfaces.

WEICON Easy-Mix RK-7100 can be used universally and, for example, in plastics technology, metal construction, car body and vehicle construction, machine construction, electrical engineering, model and mould making and in trade show and exhibition construction.

Technical Data

Base	Methyl methacrylate
Mixing ratio resin/hardener	1:1
Density of the mixture	0,98 - 1,02 g/cm ³
Viscosity of the mixture	40.000 - 60.000 mPa·s
Application procedure	Easy-Mix
Texture	viscous
Pot life at +20°C (+68°F)	5 min.
Handling strength (35% strength) after	25 min.
Capable of bearing mechanical loads (50% strength) after	60 min.
Processing temperature	+10 to +40 °C
Curing temperature	+18 °C
Final strength (100%) after	12 h
Tensile strength ISO 527 max.	24 N/mm ²

Note

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Strength-E-Module (DIN EN ISO 527)	1200 - 1700 Mpa
Elongation at break (DIN EN ISO 527)	28 %
Adhesive gap bridging	0,1 - 5,0 mm
Shear strength according to DIN EN 1465 at:	
Aluminium	20 N/mm ²
Steel sand blasted	23 N/mm ²
Stainless Steel	22 N/mm ²
PC	12 N/mm ²
Tg after curing at room temperature	-40,3 °C
PMMA	9 N/mm ²
ABS	7 N/mm ²
Hard-PVC	12 N/mm ²
GRP	21 N/mm ²
CFK	22 N/mm ²
Polyamide 6.6	1 N/mm ²
Temperature resistance	-55 to +125 °C
Thermal diffusivity (23 °C)	0,125 mm ² /s
Thermal conductivity	0,22 W/m·K
Specific heat capacity	1,517 J/(g·K)
Resistivity	6,26 · 10 ¹⁰ Ωm

Surface pre-treatment

The prerequisite for perfect adhesion are clean and dry surfaces (e.g. cleaning and degreasing with WEICON Surface Cleaner). The highest strength values can be achieved through additional pre-treatment of the surfaces, such as roughening using blasting or abrasive agents. Several plastics, in particular polyamide, Teflon®, polyolefin etc. can only to be bonded after special surface treatment, for example using fluoridation, low-pressure plasma, corona, flame impingement etc.

Processing

WEICON Easy-Mix products can be processed directly from the double cartridges with the help of the included static mixer. Reject the first 5 cm of the dosed bead. Apply adhesive to only one of the surfaces to be bonded. The pot life given is for a material quantity of 10 ml at room temperature. If larger quantities are used, the curing time will be faster. Similarly, higher ambient temperatures shorten the cure times (as a rule of thumb, every +10°C increase above room temperature will halve working and curing time). Temperatures below +16°C will extend working and curing times considerably, while below about +5°C, no reaction will take place at all.

Storage

The shelf life is 12 months when stored unopened at a normal climate (+23°C and 50 % rel. humidity).

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Safety and health

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

Available sizes:

10566050	Easy-Mix RK-7100 Structural Acrylic Adhesive 50 ml cream white
10566150	Easy-Mix RK-7100 Structural Acrylic Adhesive 50 ml black

Accessories:

10650005	Mixing Nozzles Easy-Mix,
10653050	Dispenser D 50, 50 ml
12955175	Dosing Tips,

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