Easy-Mix RK-7300 Structural Acrylic Adhesive



excellent adhesion on plastics and EPDM high strength highly viscous, impact resistant

WEICON Easy-Mix RK-7300 is a fast curing, solvent free structure and construction adhesive based on MMA (methyl methacrylate). RK-7300 adheres perfectly on a variety of materials and has a high adhesive strength.

It can be applied universally for static and dynamic loads. High strength bondings are also possible in case of low energy plastics, such as PE or PP.

Its high viscosity characteristics also permits material pairing with different expansion coefficients, such as plastic / aluminium or steel.

Special fillers (glass beads) ensure a consistent bonding line of 0.25 mm; maximum gap-bridging: 1 mm.

Technical Data

	Martin days attack and date
Base	Methyl methacrylate
Colour after curing	translucent / creamy white
Mixing ratio resin/hardener	1:1
Density of the mixture	1,00 g/cm ³
Viscosity of the mixture	170.000 - 200.000 mPa·s
Application procedure	Easy-Mix
Texture	pasty
Pot life at +20°C (+68°F)	8 min.
Handling strength (35% strength) after	60 min.
Capable of bearing mechanical loads (50% strength) after	480 min.
Processing temperature	+10 to +40 °C
Curing temperature	+18 °C
Final strength (100%) after	24 h
Adhesive gap bridging	0,25 - 1,0 mm
Shear strength according to DIN EN 1465 at:	

Steel sand blasted5 N/mm²Stainless Steel4 N/mm²PC6 N/mm²Tg after curing at room temperature51,5 °CPMMA6 N/mm²ABS8 N/mm²Hard-PVC11 N/mm²GRP7 N/mm²CFK7 N/mm²Polyamide 6.63 N/mm²PE-HD5 N/mm²PE-HD5 N/mm²PTFE (polypropylene)6 N/mm²PTFE (polytetrafluorethylene)2 N/mm²EPDM (Shore A 70)1 N/mm²Temperature resistance-55 to +100 °CThermal conductivity0,15 W/m-KSpecific heat capacity1,489 J/(g-K)Resistivity1,25 · 10^13 Ωm	Aluminium	5 N/mm²
PC 6 N/mm² Tg after curing at room temperature 51,5 °C PMMA 6 N/mm² ABS 8 N/mm² Hard-PVC 11 N/mm² GRP 7 N/mm² PK 7 N/mm² Polyamide 6.6 3 N/mm² POM (polyoxymethylene) 5 N/mm² PE-HD 5 N/mm² PP (polypropylene) 6 N/mm² PTFE (polytetrafluorethylene) 2 N/mm² EPDM (Shore A 70) 1 N/mm² Temperature resistance -55 to +100 °C Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	Steel sand blasted	5 N/mm²
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PMMA6 N/mm²ABS8 N/mm²Hard-PVC11 N/mm²GRP7 N/mm²CFK7 N/mm²Polyamide 6.63 N/mm²POM (polyoxymethylene)5 N/mm²PE-HD5 N/mm²PP (polypropylene)6 N/mm²PTFE (polytetrafluorethylene)2 N/mm²EPDM (Shore A 70)1 N/mm²Temperature resistance-55 to +100 °CThermal conductivity0,15 W/m-KSpecific heat capacity1,489 J/(g-K)	PC	6 N/mm ²
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Polyamide 6.6 3 N/mm² POM (polyoxymethylene) 5 N/mm² PE-HD 5 N/mm² PP (polypropylene) 6 N/mm² PTFE (polytetrafluorethylene) 2 N/mm² EPDM (Shore A 70) 1 N/mm² Temperature resistance -55 to +100 °C Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	GRP	7 N/mm ²
POM (polyoxymethylene) 5 N/mm² PE-HD 5 N/mm² PP (polypropylene) 6 N/mm² PTFE (polytetrafluorethylene) 2 N/mm² EPDM (Shore A 70) 1 N/mm² Temperature resistance -55 to +100 °C Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	CFK	7 N/mm ²
PE-HD 5 N/mm² PP (polypropylene) 6 N/mm² PTFE (polytetrafluorethylene) 2 N/mm² EPDM (Shore A 70) 1 N/mm² Temperature resistance -55 to +100 °C Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	Polyamide 6.6	3 N/mm ²
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EPDM (Shore A 70) 1 N/mm² Temperature resistance -55 to +100 °C Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m·K Specific heat capacity 1,489 J/(g·K)	PP (polypropylene)	6 N/mm ²
Temperature resistance -55 to +100 °C Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	PTFE (polytetrafluorethylene)	2 N/mm ²
Thermal diffusivity (23 °C) 0,118 mm²/s Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	EPDM (Shore A 70)	1 N/mm ²
Thermal conductivity 0,15 W/m-K Specific heat capacity 1,489 J/(g-K)	Temperature resistance	-55 to +100 °C
Specific heat capacity 1,489 J/(g·K)	Thermal diffusivity (23 °C)	0,118 mm²/s
	Thermal conductivity	0,15 W/m·K
Resistivity 1,25 · 10^13 Ωm	Specific heat capacity	1,489 J/(g·K)
	Resistivity	1,25 · 10^13 Ωm

Surface pre-treatment

The prerequisite for perfect adhesion are clean and dry surfaces (e.g. cleaning and degreasing with WEICON Surface Cleaner). Smooth surfaces can be roughened mechanically.

Processing

Processing of the RK Activator

The RK Activator is applied, depending on the size of the bonding gap, on either one side or both sides of the surfaces to be bonded (brush, spray, dip). In case of bond lines with a max. of 0.4 mm in width, the Activator only needs to be applied on one side, for bond lines of up to a max. of 0.8 mm in width and/or rough, porous or passive surfaces (chrome, nickel etc) the Activator must be applied on both sides. For smooth plastic and metal surfaces, approx. 30 g/m² is necessary, for rough and porous surfaces up to 150 g/m² of Activator may be necessary. The evaporation time at room temperature (+20°C) is at least 5 minutes. A significant advantage to other adhesive systems is that the coated components can be stored up to 30 days at room temperature (+20°C) without loosing effectiveness.

Processing of the RK Adhesive

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.

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WEICON Italia S.r.I. Italy phone (+39) 0102924871 info@weicon.it www.weicon.it **Technical Datasheet**

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The Adhesive is applied only on one side and normally on the surface which is not coated with Activator. The size of the bonding gap can be up to 0.80 mm (only if the Activator is applied on both sides). Bonding gaps of 0.15 mm to 0.25 mm in width always have the highest tensile shear strength.

Processing temperature

The processing should take place at room temperature (approx. +20°C). Higher temperatures, e.g. +40°C shorten the positioning and curing times by approx. 30%, lower temperatures of approx. +10°C increase the respective times by approx. 50% and at down +5°C almost no reaction occurs anymore.

Storage

The shelf life is 6 months when stored unopened at a normal climate (+23°C and 50 % rel. humidity).

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:

10569050	Easy-Mix RK-7300 Structural Acrylic
	Adhesive 50 g

Accessories:

10650005	Mixing Nozzles Easy-Mix,
10653050	Dispenser D 50, 50 ml
10850005	Glass Fibre Cloth Tape, 50 mm x 1 m
12955175	Dosing Tips,

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