PE-PP

Structural Acrylic Adhesives

# Easy-Mix PE-PP 50 Structural Acrylic Adhesive





# transparent | for low surface energy plastics | for small bonding gaps

WEICON Easy-Mix PE-PP 50 is a 2-component construction adhesive based on methyl acrylate. Due to its transparent curing, it is particularly suitable for visually appealing, highstrength adhesive bonding of low surface energy plastics, such as PE, PP and TPE.

Thanks to its special formula, the adhesive is suitable for zero-gap bonds and for connecting surfaces with extremely small bonding gaps of less than 0,2 mm.

The structural adhesive has a fast strength build-up and a high final strength. It is impact-resistant, ageing-resistant, chemical-resistant, and slightly thixotropic.

PE-PP 50 has a short pot life of six minutes and a processing time of twelve minutes. It is applied with a 1:1 system and does not require pre-treatment of the bonding surfaces, as the adhesive has an integrated primer.

For the application of the Easy-Mix product, the Dispenser Easy-Mix D 50 is required.

#### Characteristics

Base		methyl methacrylate
Texture		pasty
Colour		transparent
Minimum shelf life	at room temperature	3 mon.
Minimum shelf life	from +2 °C to +7 °C	12 Mon.

Processing		
Processing procedure		Easy-Mix
Mixing ratio by weight		1:1
Viscosity of the mixture		20.000 mPa·s
Density of the mixture		1 g/cm <sup>3</sup>
Gap bridging up to max.		0 - 1,00 mm
Curing		
Pot life	at 20 °C	6 min.
Handling strength	(35 % strength)	12 min.
Final strength	(100 % strength)	24 h
Mechanical properties	after curing	
Lap shear strength mate	rial thickn. 1,5mm DIN EN 1465	
Steel 1.0338 sa	ndblasted	12 MPa
Stainless steel V2A sandblasted		11 MPa
Aluminium sandblasted		12 MPa
Galvanized steel		7 MPa
PVC-rigid roughened		12 MPa
CFRP		12 MPa
ABS		3 MPa
PC (polycarbon	ate)	6 MPa
GFRP		15 MPa
PMMA		8 MPa
Polyamide 6.6		2 MPa
PE-HD		12 MPa
PP (polypropylene)		8 MPa
Thermal parameters		
Temperature resistance		-50 °C to +80 °C,

briefly up to +100 °C

### 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). Smooth surfaces can be roughened mechanically.

### Mixing

PE-PP 50 products 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.

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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 individual application with object of 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-apportiate or other than specified applications.

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# Storage

WEICON acrylic structural adhesives should be stored in a dry place at a constant room temperature. Unopened containers can be stored at temperatures from +18 °C to +25 °C. Protect from direct sunlight. Storage in a refrigerated environment increases the shelf life.

### Scope of delivery

Adhesive

### Accessories

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

# **Conversion table**

(°C x 1.8) + 32 = °F	Nm x 8.851 = lb∙in
mm/25.4 = inch	Nm x 0.738 = lb·ft
µm/25.4 = mil	Nm x 141.62 = oz∙in
N x 0.225 = lb	mPa·s = cP
N/mm² x 145 = psi	N/cm x 0.571 = lb/in
MPa x 145 = psi	kV/mm x 25.4 = V/mil

# Available sizes

10058667	Easy-Mix PE-PP 50 Structural Acrylic Adhesive,
	50 ml, transparent
10062144	Easy-Mix PE-PP 50 Structural Acrylic Adhesive,
	24 ml, transparent
10062146	Easy-Mix PE-PP 50 Structural Acrylic Adhesive,
	1 Set, transparent





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