# WEICON

PE-PP

Structural Acrylic Adhesives

# Easy-Mix PE-PP 45



#### Fast | high-strength | process-safe

WEICON Easy-Mix PE-PP 45 is a 2-component construction adhesive based on methyl acrylate. It is especially suitable for structural, high-strength bondings of low surface energy plastics such as PE, PP and TPE. Pre-treatment is unnecessary, as the "integrated primer" in the adhesive activates the surfaces and enables high-strength bonding.

The Dispenser Easy-Mix D 50 is required for processing Easy-Mix products in 50 ml cartridges.

Characteristics		
Base		methyl acrylate
Texture		pasty
Colour		nearly colourless, translucent
Processing		
Processing procedure		Easy-Mix
Mixing ratio by weight		10:1
Viscosity of the mixture		45.000 mPa⋅s
Density of the mixture		1,07 g/cm <sup>3</sup>
Gap bridging up to max.		0.2 mm
Curing		
Pot life	at 20 °C	2-3 min.
Handling strength	(35 % strength)	120-180 min.
Working strength after	(50 % strength)	180-240 min.
Final strength	(100 % strength)	24 h

#### Mechanical properties after curing

Lap shear strength material thickn. 1	,5mm DIN EN 1465	
Steel 1.0338 sandblasted		17 N/mm <sup>2</sup>
Stainless steel V2A sandblasted		16 N/mm <sup>2</sup>
PVC-rigid roughened		14 N/mm <sup>2</sup>
CFRP		16 N/mm <sup>2</sup>
GFRP		17 N/mm <sup>2</sup>
Polyamide 6.6		6 N/mm <sup>2</sup>
POM (polyoxymethylene)		2 N/mm <sup>2</sup>
PE-HD		7 N/mm²
PP (polypropylene)		8 N/mm <sup>2</sup>
Thermal parameters		
Temperature resistance		-50 °C to +80 °C
Tg after curing at room temperature	(DSC)	46,3 °C
Temperature conductivity		0,127 mm²/s
Thermal conductivity	DIN EN ISO 22007-4	0,21 W/m⋅K
Heat capacity	DIN EN ISO 22007-4	1,534 J/(g⋅K)
Electrical parameters		
Resistance		2,20 · 10 <sup>12</sup>

#### 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.

### Processing

WEICON Easy-Mix 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. +5°C and below, no reaction takes place.

#### Storage

6 months at 0°C to +4°C 3 months at 20°C to +25°C

#### Scope of delivery

Adhesive | Mixing Nozzle 10:1 B | Instructions for use

#### Accessories

10023115	Mixing Nozzle 10:1 B, 1 PCE, orange
10023333	Dispenser PE-PP, 1 PCE
10023341	Special Piston, 1 PCE

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 guarante 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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# **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 = $oz \cdot in$
N x 0.225 = lb	mPa $\cdot$ s = cP
N/mm <sup>2</sup> x 145 = psi	N/cm x 0.571 = lb/in
MPa x 145 = psi	kV/mm x 25.4 = V/mil

## **Available sizes**

10057687 Easy-Mix PE-PP 45 Structural Acrylic Adhesive, 45 ml, nearly colourless, translucent

To the product detail



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