

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, high-strength 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 ³ |
| 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 material thickn. 1,5mm DIN EN 1465 | | |
| Steel 1.0338 sandblasted | | 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 (polycarbonate) | | 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 |
|------------------------|--|

Approvals / Guidelines

| | | |
|----------|---------------|--------------|
| MIL-Spec | complies with | MIL-A-47284A |
|----------|---------------|--------------|

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.

Note

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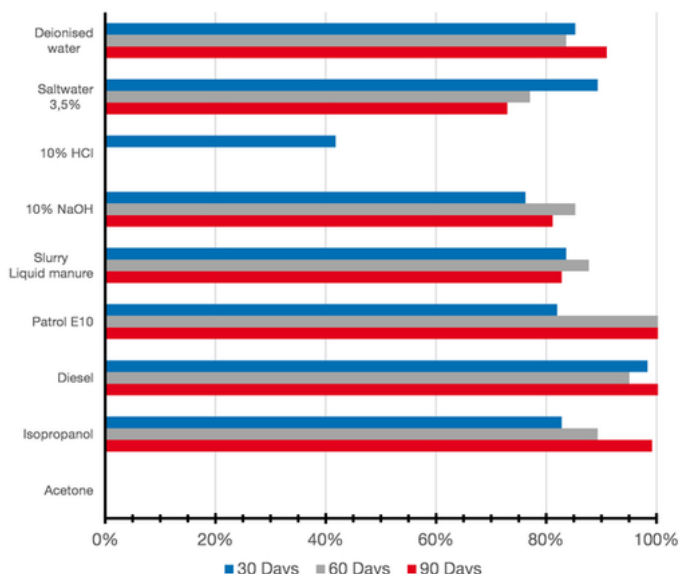
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Tensile strength after storage



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. +5°C and below, no reaction takes place.

Application

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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 |
| 10101999 | WEICON Manual Dispenser, 1 x 1:1 2:1 |

Conversion table

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{mm}/25.4 = \text{inch}$
 $\mu\text{m}/25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N}/\text{mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$

$\text{Nm} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{Nm} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{Nm} \times 141.62 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$
 $\text{N}/\text{cm} \times 0.571 = \text{lb}/\text{in}$
 $\text{kV}/\text{mm} \times 25.4 = \text{V}/\text{mil}$

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, 24 ml (Set), transparent |

To the product detail page:



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