

Easy-Mix PE-PP 45

Introduction

WEICON Easy-Mix PE-PP is a two-component construction adhesive on the basis of methyl acrylate. It is in particular suitable for structural, high-strength bonding of low energy plastics like PE, PP and TPE. A pre-treatment of the surfaces to be bonded is not required.



WEICON Easy-Mix PE-PP features the following characteristics:

- No pre-treatment of the parts to be bonded ("integrated primer")
- Short pot life and processing time
- Fast development of strength
- High final strength
- Curing with residual elasticity
- Aging resistant
- Chemical resistant
- Controlled bonding gap of min. 0.15-0.20 mm through special additives (glass beads)
- Pasty, stable

Technical data

Basis	Methylmethacrylate
Properties	pasty
Viscosity of the mixture at + 20°C	45,000 mPa.s
Mixing proportion by volume resin / hardener	10 : 1
Density of the mixture	1,07 g/cm ³
Colour adhesive	colourless, translucent
Colour after curing	yellowish, transparent
Pot life at + 20°C	2 - 3 min.
Processing temperature	+ 20 to + 25 °C
Curing temperature	+ 15 to + 70 °C
Gap covering power	bis max. 1,00 mm
Handling strength (35% strength) after	120 to 180 min.
Mechanical durability (50% strength) after	240 min.
Final hardness (100%) strength after	24 h
Aluminium, sand-blasted	15,7 N/mm ²
Polypropylen	7,6 N/mm ²
Polyethylen HD	7,4 N/mm ²
Polyethylen LD	2,8 N/mm ²
Polyethylen UHMW	5,2 N/mm ²
Steel, sand-blasted	17,2 N/mm ²
Stainless steel, sand-blasted	15,9 N/mm ²
Copper, sand-blasted	15,7 N/mm ²

ABS, roughened	10,5 N/mm ²
Hard PVC, roughened	14,1 N/mm ²
GRP, roughened	17,0 N/mm ²
Average strength at +20°C acc. to DIN 53281-83	13 mPa.s
Temperature resistance	- 50 to + 80 °C
Shore hardness D	55
Expansion	max. 5,3 %

Pretreatment of the surface

The prerequisite for perfect adhesion are clean and dry surfaces (e.g. cleaning and degreasing with Cleaner S or Plastic Cleaner). Smooth surfaces can be roughened mechanically, for example with grinding paper grain size P 120.

Processing

WEICON Easy-Mix PE-PP can only be processed with the WEICON Dispenser Pistol with special piston (10:1) and the special mixing nozzles for this system. It is absolutely essential that the mixing nozzle is put on correctly (details hereof can be found in the instructions for use attached to each packing unit). Optimum processing is at room temperature (+20°C to +25°C).

WEICON Easy-Mix PE-PP has a pot life and a processing time of approx. 2-3 minutes. Immediately after the application of the adhesive, the parts to be bonded should be joined, then positioned and fixed for curing.

The integrated additives (glass beads) provide a minimum thickness of the adhesive layer of 0.15 mm to 0.20 mm. This thickness is required for the chemical reaction between the adhesive and the plastic to be bonded. Best strength values are achieved with adhesive layers of 0.20 mm to 0.30 mm.

Storage

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

Note

Any product specifications and recommendations given herein 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 warrant the continuously high quality of our products being free from defects in accordance with and subject to our General Sales Conditions. 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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