WEICON

MIL-A-47284A

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
Minimum shelf life	at room temperature	3 mon.
Minimum shelf life	from +2 °C to +7 °C	6 Mon.
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 ³
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

Lan shear strength material thickn 1 5mm DIN EN 1465

Lap snear strength material thickn.	,SITIITI DIN EN 1405	
Steel 1.0338 sandblasted		17 N/mm²
Stainless steel V2A sandblasted		16 N/mm²
PVC-rigid roughened		14 N/mm²
CFRP		16 N/mm²
GFRP		17 N/mm²
Polyamide 6.6		6 N/mm ²
POM (polyoxymethylene)		2 N/mm²
PE-HD		7 N/mm²
PP (polypropylene)		8 N/mm²
Thermal parameters		
Temperature resistance		-50 °C to +80 °C
Tg after curing at room temperature	(DSC)	46,3 °C
Temperature conductivity		0,127 mm ² /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 ¹²
Approvals / Guidelines		

Instructions for use

MIL-Spec

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.

complies with

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.

Application

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

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.

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 requested properties are recommended. A claim cannot be derived from them.

Structural Acrylic Adhesives

Easy-Mix PE-PP 45

Scope of delivery

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

Accessories

10023115 Mixing Nozzle 10:1 B, 10 PCE, orange

10023333 Dispenser PE-PP, 1 PCE 10023341 Special Piston, 1 PCE

10102860 WEICON Manual Dispenser, 1 x 10:1

Conversion table

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ Nm x 8.851 = lb·in mm/25.4 = inch $Nm \times 0.738 = Ib \cdot ft$ um/25.4 = mil $Nm \times 141.62 = oz \cdot in$

 $N \times 0.225 = lb$ mPa·s = cP

 $N/mm^2 x 145 = psi$ $N/cm \times 0.571 = Ib/in$ $MPa \times 145 = psi$ $kV/mm \times 25.4 = V/mil$

Available sizes

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



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