

Easy-Mix PU-240

Technical Datasheet

Create Date: 06.06.2016 - Page 1/1



high strength extremely fast-curing highly viscous

WEICON Easy-Mix PU-240 structural adhesive is high-strength, extremely fastcuring, highly viscous, and can be sanded and painted over after approx. 30 minutes. It is weather resistant, resistant to chemicals and temperature resistant from -55°C to +125°C (-67 to +257°F) and has a very short pot life of around 240 seconds.

PU-240 can be used to bond numerous materials such as composite materials, plastics, polyurethane, epoxides, polyester, metals, wood and ceramics to themselves and among each other with high tensile, shear and peel strength.

WEICON PU-240 can be used in plastic technology, machine construction, model and mould making, metal construction, ship and boat building, carriage and vehicle construction, trade show and exhibition construction and in many other applications.

Technical data

recilinear data	
Basis	Polyurethane
Mixing ratio Resin / Hardener	1:1
Colour after curing	black
Density of the mixture	1,30 - 1,35 g/cm ³
Pot life at +20°C	4 min.
Handling strength (35%) after	10 min.
Mechanical loads (50% strength) after	30 min.
Final strength (100%) after	12 hours
Adhesive gap bridging	0,1 - 4,0 mm
Average strength (+20°C) acc. to DIN 1465	
on GRP	19 N/mm²
on PVC	2,8 N/mm ²
on Aluminium	14 N/mm²
on Steel bright	23 N/mm ²
on Stainless steel	18 N/mm²
on PMMA	4 N/mm²
on Beech	1,5 N/mm²
on MDF	4 N/mm²
on Mineral Cast	9 N/mm²
Average E-module (+20 °C)	450 - 550 N/mm²
Shore hardness D DIN EN ISO 868	68
Tensile strength ISO 527 max.	20 N/mm²

Tensile Extension ISO 527 max.	31 %
Temperature resistance	-55 up to +125 °C
Thermoforming resistance	+65 °C
TGA decomposition temperature (Onset temp.)	+336 °C

Pretreatment of the surface

The prerequisite for perfect adhesion are clean and dry surfaces (e.g. cleaning and degreasing with WEICON Surface Cleaner). The highest strength values can be achieved through additional pre-treatment of the surfaces, such as roughening using blasting or abrasive agents. Several plastics, in particular polyamide, Teflon®, polyolefin etc. are only to be bonded after special surface treatment, for example using fluoridation, low-pressure plasma, corona, flame impingement etc.

Processing

WEICON Easy-Mix products can be processed directly from the double cartridges with the help of the included static mixer. Reject the first 5 cm of the dosed bead. Apply adhesive to only one of the surfaces to be bonded.

The pot life given is for a material quantity of 10 ml at room temperature. If larger quantities are used, the curing time will be faster. Similarly, higher ambient temperatures shorten the cure times (as a rule of thumb, every +10°C increase above room temperature will halve working and curing time). Temperatures below +16°C will extend working and curing times considerably, while below about +5°C, no reaction will take place at all.

Storage

The shelf life is 9 months when stored unopened at a normal climate ($\pm 23\,^{\circ}$ C and 50 % rel. humidity).

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.

Health and Safety

When using WEICON products, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets (www.weicon.com) must be observed.

WEICON GmbH & Co. KG (Headquarter)

Königsberger Str. 255 · DE-48157 Münster P.O. Box 84 60 · DE-48045 Münster Germany

Tel. +49 (0) 251 / 93 22-0 Fax +49 (0) 251 / 93 22-244 Fax +49 (0) 251 / 93 22-233 Export www.weicon.de · info@weicon.de

WEICON Middle East L.L.C.

Jebel Ali Ind Area 3 · P.O. Box 118 216 Dubai · U.A.E

Phone +971 4 880 25 05 Fax +971 4 880 25 09 Mobile +971 50 545 99 83 www.weicon.ae · info@weicon.ae

WEICON Inc.

20 Steckle Place · Unit 20 Kitchener · Ontario · N2E 2C3 Canada

Phone +1 519 896 5252 Fax +1 519 896 5254 Cell +1 519 590 5168 www.weicon.ca · info@weicon.ca

WEICON Kimya Sanayi Tic. Ltd. Şti.

Yenibosna Mahallesi Yalçın Koreş Caddesi Arifağa Sokak No: 29 Kat: 3 34530 Yenibosna – Istanbul Turkey www.weicon.biz.tr · info@weicon.biz.tr

WEICON Romania SRL

Str. Podului Nr.1 547176 Budiu Mic (Targu Mures) www.weicon.com · office@weicon.com