

易混合型 PU-90



高强度
固化迅速
高粘度

WEICON PU 90在30分钟后便进行研磨和涂漆处理。它能够耐风化，对化学物质的抵抗能力突出，耐温范围为-55至+125°C。

PU 90能够粘接多种材质，如复合材料、塑料、聚氨酯环氧树脂、聚酯、金属、木材和陶瓷等，实现异材粘接。该产品具备极高的拉伸、剪切和剥离强度。

PU 90适用于塑料技术、机械工程、模型和模具制造、船舶制造、动力系统和电气工程、金属制造、车辆工程、交易会 and 展台搭建等领域。

技术参数

基础成分	聚氨酯
固化后的颜色	黑
混合比例 (树脂/固化剂)	1:1
混合物密度	1,30 - 1,35 g/cm ³
温度为+20°C时的可操作时间	90 秒
达到初始强度 (35%强度) 所需时间	5 分钟
达到机械强度 (50%强度) 所需时间	10 分钟
达到最终强度 (100%强度) 所需时间	12 h
最大粘接缝隙	0,1 - 4,0 mm
依据 DIN EN 1465, 平均拉伸剪切强度为	
铝	13 N/mm ²
最大抗拉强度 依据 ISO 527	21 N/mm ²
冷轧钢	19 N/mm ²
不锈钢	17 N/mm ²
温度 +20°C时的平均弹性模量	650 - 750 N/mm ²
邵氏硬度 D 依据 DIN EN ISO 868	66
最大拉伸率 依据ISO 527	35 %
热变形温度	+65 °C

耐温性	-55至+125 °C
热扩散率 (23 °C)	0.186 mm ² /s
热传导率	0.283 W/m·K
比热容	1.268 J/(g·K)
电阻率	1,90 · 10 ¹² Ωm
IMPA 编码	812986

表面预处理

为了达到完美的粘接效果，待粘接的物体表面必须保持洁净、干燥（可事先使用表面清洁剂进行预处理）。对粘接表面进行粗糙处理能够提高粘接效果。一些表面张力较低的材料（特别是PTFE和聚烯烃等）只能在表面特殊处理（例如氟化反应、低压等离子体、电晕、火焰冲刷等）后，方能进行粘接。

操作

WEICON易混合系列可通过产品附带的胶嘴，直接从胶瓶中挤出。将最初的5 cm弃置。粘接时只需要单侧涂胶。

本资料中所提供的可加工时间是10毫升胶水在室温条件下的测试结果。若材料用量大于该数值，固化时间会缩短，这是由环氧树脂典型的热反应所致（放热反应）。更高的环境温度也会缩短固化时间（根据经验，以室温为基准，环境温度每增加10°C，可操作时间和固化时间将减半）。若温度低于16°C，则可操作时间和固化时间将被极大延长；温度低于5°C，则不会发生任何化学反应。

储藏

在未开封且存放于正常环境（23°C，50%相对湿度）的情况下，保质期为18个月。

安全与健康

使用WEICON产品时，需注意产品的物理性、安全性、毒性、生态性的详细参数以及我们EG材料安全数据表（www.weicon.com）的具体信息。

包装

10751050 易混合型 PU-90 50 ml

产品配件

10650005 易混合型胶嘴,
10653050 易混合型胶枪D 50, D50
10953001 处理抹刀,
12955175 精密胶嘴,

提示

本资料中列出的所有产品，其参数和建议是在实验室的测试结果及经验总结，不得被视为对产品特性的保证。由于每一个用的实际应用情况并不在我们的认知、控制及责任范围内，我们对这些信息并不承担任何义务。我们保证我们的产品符合并遵守我们销售条款中承诺的高品质、无瑕疵的要求。我们建议用户通过自行试验来论证其希望选用的产品是否完全符合预期。因用户未遵照指定的操作方法使用产品而造成损失的情况，用户将独自承担全部责任。

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Easy-Mix PU-90 Polyurethane Adhesive



high strength
extremely fast-curing
highly viscous

WEICON Easy-Mix PU-90 structural adhesive is high-strength, extremely fast-curing, 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 90 seconds.

WEICON PU-90 can be used to bind numerous materials such as composite materials, plastics, polyurethane, epoxies, polyester, metals, wood and ceramics to themselves and among each other with high tensile, shear and peel strength.

PU-90 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

Base	polyurethane
Colour after curing	black
Mixing ratio resin/hardener	1:1
Density of the mixture	1,30 - 1,35 g/cm ³
Pot life at +20°C (+68°F)	90 sec.
Handling strength (35% strength) after	5 min.
Capable of bearing mechanical loads (50% strength) after	10 min.
Final strength (100%) after	12 h
Adhesive gap bridging	0,1 - 4,0 mm
Medium shear strength according to DIN EN 1465 at	
Aluminium	13 N/mm ²
Tensile strength ISO 527 max.	21 N/mm ²
Steel bright	19 N/mm ²
Stainless Steel	17 N/mm ²

Note

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 only responsibility for non-appropriate or other than specified applications.

Medium e-module +20°C (+68°F)	650 - 750 N/mm ²
Shore hardness D DIN EN ISO 868	66
Tensile Extension ISO 527 max.	35 %
Thermoforming resistance	+65 °C
Temperature resistance	-55 to +125 °C
Thermal diffusivity (23 °C)	0.186 mm ² /s
Thermal conductivity	0.283 W/m·K
Specific heat capacity	1.268 J/(g·K)
Resistivity	1,90 · 10 ¹² Ωm
IMPA-Code	812986

Surface pre-treatment

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. can only 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 18 months when stored unopened at a normal climate (+23°C and 50 % rel. humidity).

Safety and health

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.

Available sizes:

10751050 Easy-Mix PU-90 Polyurethane Adhesive 50 ml

Accessories:

10650005 Mixing Nozzles Easy-Mix,
10653050 Dispenser D 50, 50 ml
10953001 Processing Spatula,
12955175 Dosing Tips,