

Easy-Mix HT 180



high-temperature resistant
steady
shock and impact resistant

WEICON Easy-Mix HT 180 is a 2-component adhesive on epoxy resin basis and has a high temperature resistance up to +180°C (+356°F); short term to +230°C (+446°F).

The adhesive is highly viscous and stable and is also suitable for vertical applications. It is shock and impact resistant, has a long pot life, cures at room temperature, can be processed mechanically and his special fillers allow a constant bonding line. The adhesive is particularly suitable for the bonding of composite materials and metal and can be spot-welded while curing.

Easy-Mix HT 180 can furthermore be utilised for plastics, ceramic, glass, stone or wood and is suitable for adhesions where larger tolerances have to be bridged. Due to special fillers it is possible to achieve a constant and reliable bonding line of at least 0.20 - 0.25 mm.

The high temperature resistance permits the bonding of components which require powder-coating after complete curing.

Technical Data

Composition	Epoxy resin mineral-filled
Nature	pasty, gap-filling
Supplied in	double cartridge
content	50 ml
Mixing ratio Volume (resin / hardener)	2 : 1
Potlife at 10 ml batch and + 20 ° C	60 Min.
Density of the mixture	1,10 g/cm³

Viscosity of the mixture at + 20 ° C	pasty
Processing temperature	+10 to +40 °C
Curing temperature	+10 to +50 °C
Colour	black
Adhesive gap bridging up to max.	4 mm
Handling strength (35%) after	2 h
Mechanically resistant (50% strength / + 20 ° C) after	4 h
Final hardness (100% strength / + 20 ° C) after	24 h
Average strenght of the pure epoxy resin in accordance with DIN 53281-83	
pressure	52 MPa
pull	27 MPa
Bending	46 MPa
E-Modul	4.100 - 4.550 MPa
Shore hardness D	80
Average tensile shear strenght as per DIN 53283 on:	
Steel, sand blasted	23 N/mm²
Alu, sandblasted	13 N/mm²
Rigid PVC, roughened	11 N/mm²
Temperature resistance	-50 to +180 briefly to +230 °C
Linear shrinkage	ca. 0,3

Surface pretreatment

To ensure a perfect bond, the surfaces to be joined must be clean and dry (e.g., clean and degrease using WEICON Surface Cleaner).

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

When kept at a constant room temperature of about +20°C and unopened in dry conditions, WEICON Epoxy Adhesives will keep

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for at least 18 months. Avoid direct sunlight. If these storage instructions are disregarded, the storage life will be reduced to six months. Epoxy resins are fundamentally liable to crystallise at temperatures of less than +5°C. This effect is accentuated by wide variations in temperature such as can frequently occur during transport in winter. This also has a negative effect on working qualities, curing and technical details, although these effects can be reversed by warming up to a maximum of +50°C (no naked flame). In the case of WEICON Epoxy Adhesives, careful selection and combination of the base resins (bisphenol A and F) ensures a reduction of crystallisation.

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:

10650850 Easy-Mix HT 180 50 ml

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