

# Fast-Metal Minute Adhesive

## Introduction

WEICON Epoxy Adhesives are cold-curing, solvent-free two-component systems with extremely strong bonding properties. They enable material bonds with high tensile and impact strength and are thus ideal for assembly, repairs and production.



Due to its high viscosity (paste consistency), this steel-filled adhesive can not only be applied to vertical surfaces, it can also be used to fill cracks, bubbles and uneven surfaces. Ideal for repairs requiring large tolerance gaps to be bridged.

- paste consistency, gap-filling
- very short pot life (3 - 4 minutes)
- quick-curing
- machinable (grinding, filing, drilling etc.)
- colour dark grey

## Technical data

Basis	epoxy resin, steel-filled
Nature	paste consistency, crack-filler
Supplied in	double syringe
Content	24 ml
Mixing ratio by volume (Resin/Hardener)	1 : 1
Pot life with 10 ml material at +20°C	3-4 Min.
Density of the mixture	1,80 g/cm <sup>3</sup>
Viscosity of the mixture at +20°C	300000 mPa·s
Processing temperature	+10 to +30 °C
Curing temperature	+6 to +40 °C
Colour	dark grey
Gap covering power to max.	4 mm
Handling strength (35% strength/+20°C) after	40 Min.
Capable of bearing mechanical loads(50% strength/+20°C) after	2 h
Final strength (100% strength/+20°C) after	1 day(s)
Pressure	10 MPa
Tensile	24 MPa
Torsion	58 MPa
Shore hardness D	70
Steel, sand-blasted	20 N/mm <sup>2</sup>
Aluminium, sand-blasted	19 N/mm <sup>2</sup>
Rigid PVC, roughened	11 N/mm <sup>2</sup>
Temperature resistance	-50 to +145 °C

## Pretreatment of the surface

To ensure a perfect bond, the surfaces to be joined must be clean and dry (e.g., clean and degrease using Cleaner S or Plastic Cleaner). Smooth surfaces should be roughened, e.g. by sandblasting.

## Processing

Apply adhesive to only one of the surfaces to be bonded. WEICON Epoxy Adhesives will bridge a gap of minimum 0.2 mm and maximum of 2 mm (for Fast Metal Minute Adhesive minimum 0.5 mm and maximum 4 mm). 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 due to the typical reaction heat of epoxy resins (exothermic reaction). Similarly, higher ambient temperatures shorten the cure time (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.

## Physiological properties / health and safety at work

WEICON Epoxy Adhesives, when properly handled and completely cured, are toxicologically essentially harmless. When using these adhesives, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets ([www.weicon.com](http://www.weicon.com)) must be observed.

## Storage

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

## 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.

### 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](http://www.weicon.de) · [info@weicon.de](mailto: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](http://www.weicon.ae) · [info@weicon.ae](mailto: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](http://www.weicon.ca) · [info@weicon.ca](mailto:info@weicon.ca)

### WEICON Kimya Sanayi Tic. Ltd. Şti.

Yenibosna Mahallesi Yalçın Koreş Caddesi  
Arifağa Sokak No: 29 Kat: 3  
34530 Yenibosna – İstanbul Turkey  
[www.weicon.biz.tr](http://www.weicon.biz.tr) · [info@weicon.biz.tr](mailto:info@weicon.biz.tr)

### WEICON Romania SRL

Str. Depozitelor 22  
540240 Targu Mures, jud. Mures Romania  
[www.weicon.com](http://www.weicon.com) · [office@weicon.com](mailto:office@weicon.com)