

# Fast-Metal Minute Adhesive



high-temperature resistant | gap-filling | fast-curing

WEICON Fast-Metal Minute Adhesive is a 2-component epoxy resin system specifically developed for repairs and bonding applications where larger tolerances need to be bridged. Thanks to its gap-filling properties, the adhesive is suitable for rough and poorly fitting surfaces and fills cracks, cavities and uneven areas.

Fast-Metal Minute Adhesive is resistant to temperatures up to +180 °C and offers extremely strong adhesion even on vertical surfaces. The system is highly-filled, pasty, has a very short pot life and cures quickly. It allows for impact-resistant bonds with high tensile and impact strength. WEICON Fast-Metal Minute Adhesive can be used on numerous materials such as metal, plastic, fibre-reinforced materials, ceramics, glass, stone and wood.

The adhesive can be used in many areas of industry, in crafts and for demanding DIY projects.

## Characteristics

Base	Epoxy
Filler	highly filled
Texture	pasty, gap-filling
Colour	grey
Minimum shelf life	at room temperature 18 mon.

## Processing

Processing temperature	+15 °C to +40 °C
Component temperature	>3°C above dew point
Cure temperature	+6 °C to +40 °C
Relative air humidity	max. 85%
Mixing ratio by volume	1:1
Viscosity of the mixture	at +20 °C 55.000 mPa·s
Density of the mixture	1,8 g/cm³
Gap bridging up to max.	4 mm

## Note

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## Curing

Pot life	at 20 °C, 10 g batch	4-5 min.
Handling strength	(35 % strength)	20 min.
Working strength after	(80 % strength)	40 min.
Final strength	(100 % strength)	24 h
Shrinkage		0,49 %

## Mechanical properties after curing

- Measured after curing at		24 h RT + 24 h 60 °C
Tensile strength	DIN EN ISO 527-2	28 N/mm²
Elongation at break (tensile)	DIN EN ISO 527-2	0,6 %
E-modulus (tensile)	DIN EN ISO 527-2	4.100 - 4.600 MPa
Compressive strength	DIN EN ISO 604	30 MPa
Bending strength	DIN EN ISO 178	58 MPa
Hardness (Shore D)	DIN ISO 7619	83 ±3
Lap shear strength material thicken. 1,5mm DIN EN 1465		
Steel 1.0338 sandblasted		20 N/mm²
Stainless steel V2A sandblasted		20 N/mm²
Aluminium sandblasted		10 N/mm²
Galvanized steel		19 N/mm²
PVC-rigid roughened		11 N/mm²

## Thermal parameters

Temperature resistance	-50 °C to +180 °C (-58°F to +356°F)
Tg after curing at room temperature (DSC)	44,3 °C
Tg after tempering (at 90°C) (DSC)	32,5 °C
Temperature conductivity	0,286 mm²/s
Thermal conductivity	DIN EN ISO 22007-4 0,51 W/m·K
Heat capacity	DIN EN ISO 22007-4 0,904 J/(g·K)

## Electrical parameters

Resistance	DIN EN 62631-3-1	4,57·10¹² Ω·m
Dielectric strength	DIN EN 60243-1 (20°C)	17 kV/mm
Magnetic		no

## Approvals / Guidelines

ISSA Code	75.629.51
IMPA Code	812981

## Instructions for use

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.

## Surface Pre-Treatment

Clean and dry bonding surfaces are essential for flawless adhesive bonding (e.g. cleaning and degreasing with WEICON Surface Cleaner).

## Application

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.

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## Storage

WEICON epoxy adhesives should be stored in a dry place at room temperature. Unopened containers can be stored at temperatures from +18 °C to +25 °C. Protect from direct sunlight. Failure to observe these storage instructions will reduce the shelf life to 6 months. Epoxy resins generally tend to crystallise at temperatures below +5 °C. This effect is increased by large temperature fluctuations, e.g. during transport especially in the winter months. This has a negative impact on processing, curing and technical data, can, however, be reversed by heating the product (up to max. +50 °C, no open flame). In WEICON epoxy adhesives, crystallisation is reduced by the careful choice and combination of base resins (bisphenol A and F).

## Scope of delivery

Adhesive

## Accessories

10024313 Surface Cleaner, 400 ml, transparent

## Conversion table

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$	$\text{Nm} \times 8.851 = \text{lb}\cdot\text{in}$
$\text{mm}/25.4 = \text{inch}$	$\text{Nm} \times 0.738 = \text{lb}\cdot\text{ft}$
$\mu\text{m}/25.4 = \text{mil}$	$\text{Nm} \times 141.62 = \text{oz}\cdot\text{in}$
$\text{N} \times 0.225 = \text{lb}$	$\text{mPa}\cdot\text{s} = \text{cP}$
$\text{N}/\text{mm}^2 \times 145 = \text{psi}$	$\text{N}/\text{cm} \times 0.571 = \text{lb}/\text{in}$
$\text{MPa} \times 145 = \text{psi}$	$\text{kV}/\text{mm} \times 25.4 = \text{V}/\text{mil}$

## Available sizes

- 10007785 Fast-Metal Minute Adhesive, 24 ml, grey  
10058777 Fast-Metal Minute Adhesive, 24 ml (Set), grey

To the product detail page:



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