

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/cm ³	
Gap bridging up to max.	4 mm	

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/mm ²
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 thickn. 1,5mm DIN EN 1465		
	Steel 1.0338 sandblasted	20 N/mm ²
	Stainless steel V2A sandblasted	20 N/mm ²
	Aluminium sandblasted	10 N/mm ²
	Galvanized steel	19 N/mm ²
	PVC-rigid roughened	11 N/mm ²

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 mm ² /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	4,57·10 ¹² 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.

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.

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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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