

**Epoxy Resin Systems** 

# **Epoxy adhesives**

## Fast-Metal Minute Adhesive



## Highly filled | pasty |gap-filling | very short pot life | fastcuring

WEICON Fast-Metal Minute Adhesive is ideal for repairs and bondings with larger bonding gaps or bigger tolerances. Its gap-filling properties make it suitable for rough and poorly fitting surfaces as well as for filling in cracks, cavities and unlevelled surfaces. WEICON Fast-Metal Minute Adhesive can be used on numerous materials such as metal, plastic, fibre-reinforced materials, ceramics, glass, stone and wood.

#### Characteristics

Base		Epoxy resin, highly filled
Texture		pasty, gap-filling
Colour		grey
Minimum shelf life	at room temperature	12 mon.
Processing		
Processing temperature		+10°C to +30°C
Cure temperature		+6 °C to +40 °C
Mixing ratio by weight		1:1
Density of the mixture		1,8 g/cm <sup>3</sup>
Gap bridging up to max.		4 mm
Curing		
Pot life	at 20 °C, 10 ml batch	3-4 min.
Handling strength	(35 % strength)	40 min.
Working strength after	(50 % strength)	2 h
Final strength	(100 % strength)	24 h
Shrinkage		0,3 %

#### Mechanical properties after curing

Tensile strength	DIN EN ISO 527-2	24 MPa
E-modulus (tensile)	DIN EN ISO 527-2	4.000 - 4.500 MPa
Compressive strength	DIN EN ISO 604	10 MPa
Bending strength	DIN EN ISO 178	58 MPa
Hardness (Shore D)	DIN ISO 7619	70
Lap shear strength mater	ial thickn. 1,5mm DIN EN 1465	
Steel 1.0338 sandblasted		20 N/mm <sup>2</sup>
Aluminium sandblasted		19 N/mm²
PVC-rigid roughened		11 N/mm²
Thermal parameters		
Temperature resistance		-50°C to +145°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	4,57·10 <sup>12</sup> Ω·m
Dielectric strength	DIN EN 60243-1 (20°C)	17 kV/mm
Approvals / Guidelines		
ISSA Code		75.629.51
IMPA Code		812981
MIL-Spec	complies with	MIL-A-47284A

### 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.

## **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

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 requested properties are recommended. A claim cannot be derived from them.

## WEICON®

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(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

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ Nm x 8.851 = Ib·in mm/25.4 = inch $Nm \times 0.738 = Ib \cdot ft$  $\mu$ m/25.4 = mil Nm x 141.62 = oz·in  $N \times 0.225 = Ib$ mPa·s = cP

 $N/mm^2 x 145 = psi$  $N/cm \times 0.571 = Ib/in$  $MPa \times 145 = psi$  $kV/mm \times 25.4 = V/mil$ 

## Available sizes

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

To the product detail



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