

Aluminium Minute Adhesive



resistant to high temperatures | pasty | high impact resistance

Adhesive for bonding aluminium and other light metals to each other. WEICON Aluminium Minute Adhesive can be used to fill cracks and holes, for example in aluminium housings, and for repairing light alloy wheels.

Aluminium Minute Adhesive is a low-odour, two-component, aluminium-filled epoxy adhesive. It is resistant to high temperatures up to +180 °C and cures quickly at room temperature. After curing, the adhesive can be machined (filing, drilling, milling). Aluminium Minute Adhesive is gap-filling and non-dripping (thixotropic) and offers very high tensile and impact strength. To achieve optimal adhesion, the bonding surfaces should be dry and free from grease or dirt. Scraping or sanding the surfaces before cleaning additionally improves adhesion.

Characteristics

Base	Epoxy
Filler	filled
Texture	viscous
Colour	aluminium
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
	11.000 mPa·s
Density of the mixture	
	1,2 g/cm³
Gap bridging up to max.	
	4 mm

Curing

Pot life	at 20 °C, 10 g batch	4-5 min.
Handling strength	(35 % strength)	30 min.
Working strength after	(80 % strength)	1 h
Final strength	(100 % strength)	24 h
Shrinkage		0,8 %

Mechanical properties after curing

- Measured after curing at	24 h RT + 24 h 60 °C
Tensile strength	DIN EN ISO 527-2
Elongation at break (tensile)	DIN EN ISO 527-2
E-modulus (tensile)	DIN EN ISO 527-2
Compressive strength	DIN EN ISO 604
Bending strength	DIN EN ISO 178
Hardness (Shore D)	DIN ISO 7619
Lap shear strength material thickn. 1,5mm DIN EN 1465	
Steel 1.0338 sandblasted	18 N/mm²
Stainless steel V2A sandblasted	19 N/mm²
Aluminium sandblasted	15 N/mm²
Galvanized steel	17 N/mm²
PVC-rigid roughened	11 N/mm²

Thermal parameters

Temperature resistance	-50 °C to +180 °C (-58 °F to +356 °F)
------------------------	--

Electrical parameters

Dielectric strength	DIN EN 60243-1 (20°C)	16 kV/mm
Magnetic		no

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

WEICON Aluminium Minute Adhesive can be processed straight from the double cartridge. Dismiss the first centimetre of the adhesive bead. Mix product thoroughly. Apply adhesive to the bonding surface quickly. Then join both bonding surfaces immediately.

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

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.

Aluminium Minute Adhesive

adhesives, crystallisation is reduced by the careful choice and combination of base resins (bisphenol A and F).

Scope of delivery

Adhesive | Quadro Mixing Nozzle A

Accessories

10005236 Quadro Mixing Nozzle A, 1 PCE, blue
10068261 Dosing Tip A Size 0,5 mm, 1 PCE

Conversion table

(°C x 1.8) + 32 = °F	Nm x 8.851 = lb·in
mm/25.4 = inch	Nm x 0.738 = lb·ft
µm/25.4 = mil	Nm x 141.62 = oz·in
N x 0.225 = lb	mPa·s = cP
N/mm² x 145 = psi	N/cm x 0.571 = lb/in
MPa x 145 = psi	kV/mm x 25.4 = V/mil

Available sizes

10051229 Aluminium Minute Adhesive, 24 ml, aluminium
10058776 Aluminium Minute Adhesive, 24 ml (Set),
aluminium

To the product detail
page:



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.

WEICON Middle East L.L.C.
United Arab Emirates
phone +971 4 880 25 05
info@weicon.ae

WEICON Czech Republic s.r.o.
Czech Republic
phone +42 (0) 417 533 013
info@weicon.cz

WEICON GmbH & Co. KG
(Headquarters) Germany
phone +49 (0) 251 9322 0
info@weicon.de

WEICON Romania SRL
Romania
phone +40 (0) 3 65 730 763
office@weicon.com

WEICON South East Asia Pte Ltd
Singapore
Phone (+65) 6710 7671
info@weicon.com.sg

WEICON Inc.
Canada
phone +1 877 620 8889
info@weicon.ca

WEICON Ibérica S.L.
Spain
phone +34 (0) 914 7997 34
info@weicon.es

WEICON Italia S.r.l.
Italy
phone +39 (0) 010 2924 871
info@weicon.it

WEICON SA (Pty) Ltd
South Africa
phone +27 (0) 21 709 0088
info@weicon.co.za

WEICON Kimya Sanayi Tic. Ltd. Şti.
Türkiye
phone +90 (0) 212 465 33 65
info@weicon.com.tr