

# Easy-Mix N 50 Epoxy Adhesive



**High adhesive strength | highly viscous | self-levelling | long pot life**

WEICON Easy-Mix N 50 can be used on numerous materials such as metal, plastic, fibre-reinforced materials, ceramics, glass, stone and wood. N 50 is suitable for manufacturing processes with assembly and positioning carried out at different times.

For the processing of the Easy-Mix product, the Easy-Mix D 50 dispenser is required.

## Characteristics

Base	Epoxy resin, non-filled
Texture	viscous
Colour	pale yellow, clear

## Processing

Processing temperature	+10°C to +40°C
Curing temperature	+10 °C - +40 °C
Mixing ratio by weight	1:1
Viscosity of the mixture at +20 °C	7.500 mPa·s
Density of the mixture	1,07 g/cm <sup>3</sup>
Gap bridging up to max.	2 mm

## Curing

Pot life at 20 °C, 10 ml batch	45 min.
Handling strength (35 % strength)	120 min.
Working strength after (50 % strength)	24 h
Final strength (100 % strength)	72 h
Shrinkage	2,0 %

## Mechanical properties after curing

Tensile strength	DIN EN ISO 527-2	35 MPa
E-modulus (tensile)	DIN EN ISO 527-2	2.000 - 2.500 MPa
Compressive strength	DIN EN ISO 604	90 MPa
Bending strength	DIN EN ISO 178	50 MPa
Hardness (Shore D)	DIN ISO 7619	55
Lap shear strength material thickn. 1,5mm DIN EN 1465		
Steel 1.0338 sandblasted		17 N/mm <sup>2</sup>
Aluminium sandblasted		16 N/mm <sup>2</sup>
PVC-rigid roughened		11 N/mm <sup>2</sup>

## Thermal parameters

Temperature resistance	-50°C to +100°C	
Tg after curing at room temperature (DSC)	49 °C	
Tg after tempering (at 120°C) (DSC)	50 °C	
Temperature conductivity	0,133 mm <sup>2</sup> /s	
Thermal conductivity	DIN EN ISO 22007-4	0,17 W/m·K
Heat capacity	DIN EN ISO 22007-4	1,267 J/(g·K)

## Electrical parameters

Resistance	DIN EN 62631-3-1	1,32·10 <sup>13</sup> Ω·m
Dielectric strength	DIN EN 60243-1 (20°C)	>26 kV/mm

## Approvals / Guidelines

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](http://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).

## Processing

WEICON Easy-Mix products can be processed straight from the double cartridge by means of the included static mixer. Dismiss the first 5 cm of the adhesive bead. 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

When stored in unopened condition in a dry place at constant room temperature of approx. +20 °C, WEICON Epoxy Adhesives have a shelf life of at least 18 months. Protect from direct sunlight. In case of non-observance of these storage instructions, the shelf life is reduced to 6 months. In general, epoxy resins tend to crystallise at temperatures below +5 °C. This effect is increased by large temperature fluctuations, e.g. during transport especially in the winter

## 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.  
Turkey  
phone +90 (0) 212 465 33 65  
info@weicon.com.tr

# Easy-Mix N 50 Epoxy Adhesive

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 combinations of base resins (bisphenol A and F).

## Scope of delivery

Adhesive | Quadro Mixing Nozzle

## Accessories

10005237 Dispenser Easy-Mix D 50, 1 PCE  
10005236 Quadro Mixing Nozzle A, 1 PCE  
10026925 Helix Mixing Nozzle A, 1 PCE  
10068261 Dosing Tip, 1 PCE

## 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

10005231 Easy-Mix N 50 Epoxy Adhesive, 50 ml, pale yellow, clear

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.  
Turkey  
phone +90 (0) 212 465 33 65  
info@weicon.com.tr