

2-Component Adhesives and Sealants

# **Belt Repair-Kit**

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Pasty | highly elastic, wear-resistant, impact- and abrasion resistant | high resistance to chemicals and pressure

WEICON Belt Repair-Kit is a 2-component polyurethane system for the fast repair and coating of rubber surfaces.

It has a high curing speed, high elasticity and wear resistance, is impact-resistant and abrasion-resistant, and has a particularly high tear resistance. Thanks to its high mechanical strength, it is suitable especially for repairs on rubber and metal components, which are exposed to impacts, abrasion or vibrations.

The Belt Repair-Kit offers fast and easy processability. The system is suitable for various applications, such as the repair and coating of conveyor belts, the repair of rubber coatings, for use as flexible wear protection, and for the fast repair of worn-out rubber surfaces.

In addition to the polyurethane system, the set comprises a primer for surface pre-treatment, and a spatula to spread the compound evenly.

In order to cover a broader application range, in addition to the classic 500 g working package, which needs to be mixed by hand, the product is also available as easy-to-use 540 g double cartridge.

### Technical data Primer

Base	Urethane
Colour	black
Density of the mixture	0,9 g/cm <sup>3</sup>

#### Technical data Urea

Base		polyurea
Colour after curing PU		black
Minimum shelf life	at room temperature	12 mon.
Mixing ratio by weight PU		10:100
Texture		pasty
Pot life PU	20°C	20 min.
Working strength/demouldable after PU	20 °C	6-8 h
Handling strength / demouldable (50 °C)		60-90 min.
Final strength PU	(100 % strength)	24 h
Hardness (Shore A) PU		85
Tensile strength PU	DIN EN ISO 527	7,8 N/mm <sup>2</sup>
E-modulus (tensile) PU		9,6 N/mm <sup>2</sup>
E-modulus (tensile) PU Norm		DIN EN ISO 527
Elongation at break (tensile) PU	DIN EN ISO 527	470
Tear resistance PU		31 kN/m
Temperature resistance (wet)		-60 °C - +60 °C
Temperature resistance (dry)		-60 °C - +100 °C
Swelling in water	(7 days)	<1,5 %
Zugscherfestigkeit mit Primer G nach DIN	EN 1465	
Steel 1.0338 sandblasted		8 N/mm <sup>2</sup>
Stainless steel V2A sandblasted		8
Aluminium sandblasted		7 N/mm²
Galvanized steel		4 N/mm²

### 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**

The successful application of the WEICON Belt Repair-Kit depends on the thorough pre-treatment of all surfaces. This is the most important factor of the overall success. Dust, dirt, oil, grease, rust and moisture have a negative impact on the adhesion of polyurethane resins. Best results are achieved with application on clean, rigid and thoroughly roughened surfaces. Prior to the application of WEICON Belt Repair-Kit, the following points must be strictly observed:

Surfaces must be clean, dry and free of grease. First remove any surface soiling, like dust, dirt, oil and grease, with WEICON Surface Cleaner.

### Surface roughening

Then roughen the clean surface with coarse abrasives (twist knot wire wheel, wire brush, diamond blade) thoroughly. While doing so, apply gentle pressure evenly to the surface in order

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to prevent the rubber from overheating. Brush off any loose dirt from the surface, then clean again with WEICON Surface Cleaner.

Surface pre-treatment with 1K Primer G

1K Primer G is a 1-component system that must be stirred carefully before application until a homogeneous, viscous, black mass is obtained. Apply 1K Primer G to the clean, dry and roughened surface and spread it evenly with a brush. Allow the primer to flash off until the solvent has evaporated and the layer looks dry (after approximately 5-15 minutes, depending on ambient temperature and humidity).

# **Mixing**

- Belt Repair-Kit 550 g

Before adding the hardener, the resin needs to be mixed with the fillers thoroughly and without creating bubbles. Then mix the resin and the hardener at +20°C for at least four minutes thoroughly and without any bubbles with the processing spatula or mechanical mixers at a low speed (max. 500 r/min.). The mixing ratio must be strictly observed. Only prepare as much as can be used up within the pot life of 20 minutes at +20°C. After mixing, apply Urethane 85 with the spatula straight to the primed surface.

- Belt Repair-Kit 590 g

With the help of the provided static mixer, the product can be applied straight from the double cartridge. Discard the first five centimetres of the dispensed bead, then apply Urethane 85 evenly to the primed surface.

## **Application**

For a pre-coating, use the Contour Spatula Flexy to intensely work the Urethane 85 into the surface to achieve maximum adhesion. Immediately after pre-coating, fill the areas that need treatment completely with the compound and spread it evenly.

### Curing

After approx. eight hours at +20°C (68°F), the area can be fully loaded and mechanically processed, e.g. the height can be adjusted with an angle grinder. Temperatures above +20°C (68°F) can reduce the curing time. Temperatures below 16 °C (61°F) increase the curing time, until at approx. 5 °C (41°F) and below, almost no reaction will take place at all.

# Storage

WEICON Urethane should be stored at room temperature in a dry place. Unopened containers can be stored at temperatures of +18 °C to +25 °C and a relative humidity of < 70 %. Opened containers must be used up within 3 months.

#### Accessories

1005/514	Dispenser 2C 10:1 Standard, 1 PCE
10104191	1K Primer G, 50 ml, black
10057191	Mixing Nozzle MFHX, 1 PCE, orange
10022562	Processing Spatula, 1 PCE
10010887	Processing Spatula, 1 PCE
10010066	Contour Spatula Flexy, 1 PCE
10032350	Primer Applicator, 1 PCE

#### Conversion table

$(^{\circ}C \times 1.8) + 32 = ^{\circ}F$	Nm x 8.851 = lb⋅in
mm/25.4 = inch	Nm x $0.738 = lb \cdot ft$
$\mu$ 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 x 145 = psi	$kV/mm \times 25.4 = V/mil$

### Available sizes

Belt Repair-Kit, 0,59 kg 10052425 10055014 Belt Repair-Kit, 0,55 kg



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