

## **Speed-Flex**

**Technical Datasheet** 

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#### Introduction

Elastic adhesives and sealants are used today in many areas of industrial production and assembly. They combine the advantages of adhesive bonding and sealing technology and are used wherever the elasticity and the sealing of a joint are the most important requirements.



Highly adhesive and universal power adhesive with extremely high initial strength; on MS polymer basis. Replaces conventional fasteners, e.g. screws, bolts, dowels, rivets, etc.

Speed-Flex is pasty and stable; this enables adhesive bonds even on vertical surfaces indoors and outdoors.

#### Technical data

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Basis	One-component MS polymer
Density	1,60 g/cm³
Viscosity	extremely pasty
Stability/Run-off (ASTM D 2202)	<1 mm
Processing temperature	+5 to +35 °C
Cure type	by humidity
Curing condition +5	5°C to +40°C and 30% to 95% rel. humidity
Skin-over time	10 min.
Cure speed (first 24 h)	2-3 mm
Volume change (DIN 52451)	-1 %
Gap filling up to max.	5 mm
Gap width up to max.	5 mm
Shelf life (+5°C to +25°C)	12 months
Shore Hardness A (DIN 53505 / ASTM D	2240) ± 5 58
Elongation at break (DIN 53504 / ASTM D	412) 230 %
Tensile strength of the pure adhesive/seal	ant 2,2 N/mm²
Average tensile shear strength (DIN 53283	3/ASTM D 1( 1,3 N/mm <sup>2</sup>
Tear strength (DIN 53515 / ASTM D 624)	10 N/mm²
Movement capacity max.	15 %
Temperature resistance -40 to	o +80 briefly (approx. 2 hrs.) up to +120 °C
Overpaintable (liquid paint)	Only "wet in wet," within 3 hours at the
	latest after material app
Building material category (DIN 4102)	B 2

 $<sup>^{\</sup>star}$  at +23°C and 50% rel. air humidity. This can vary according to environmental circumstances such as temperature, humidity, substrate etc.

#### Pretreatment of the surface

The surfaces must be clean and grease-free. Many surface contaminants, e.g. oil, dust and dirt, can be removed with WEICON Surface Cleaner. For heavily soiled metal surfaces, we recommend WEICON Cleaner Spray S; WEICON Sealant and Adhesive Remover is suitable for removing old paint or adhesive residues.

Most materials can be bonded well to themselves and among each other. For certain materials or extreme requirements, we recommend the use of an adhesion agent (primer). Detailed information on this subject is contained in the Primer selection table. A mechanical surface pretreatment, e.g. sanding or

sand-blasting, can considerably improve the adhesion.

#### **Processing**

WEICON elastic one-component adhesives and sealants are supplied either in tubes or in Euro cartridges (Black-Seal also in 200 ml press pack). Euro cartridges are processed with a cartridge gun or with automatic dosing systems. WEICON Speed-Flex should be applied only with professional-quality cartridge guns (WEICON Cartridge Gun "Special").

Joining the parts to be bonded

To ensure optimum wetting, the parts must be joined before the first skin has been formed on the adhesive (skin-over time).

#### Curing

All elastic one-component adhesives and sealants from WEICON cure under the influence of humidity. The curing process starts at the surface and proceeds toward the inside. At 50 % relative humidity and +23°C, the cure speed is approx. 3 mm in the first 24 hrs.

Adhesive bonds of big surfaces and high layer thicknesses cure more slowly since the humidity can not penetrate so fast to the inside if the outer layers have already cured. Higher temperatures or higher humidity accelerate the curing, while lower temperatures or low humidity slow it down.

## Storage

When unopened and stored in a normal climate (+23°C and 50 % rel. humidity), WEICON elastic one-component adhesives and sealants have a shelf life of 9 - 12 months, depending on the type.

#### Note

Any product specifications and recommendations given herein 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 warrant the continuously high quality of our products being free from defects in accordance with and subject to our General Sales Conditions. 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 GmbH & Co. KG (Headquarter)

Königsberger Str. 255 · DE-48157 Münster P.O. Box 84 60 · DE-48045 Münster Germany

Tel. +49 (0) 251 / 93 22-0 Fax +49 (0) 251 / 93 22-244 Fax +49 (0) 251 / 93 22-233 Export www.weicon.de · info@weicon.de

## WEICON Middle East L.L.C.

Jebel Ali Ind Area 3 · P.O. Box 118 216 Dubai · U.A.E

Phone +971 4 880 25 05 Fax +971 4 880 25 09 Mobile +971 50 545 99 83 www.weicon.ae · info@weicon.ae

#### WEICON Inc.

20 Steckle Place · Unit 20 Kitchener · Ontario · N2E 2C3 Canada

Phone +1 519 896 5252 Fax +1 519 896 5254 Cell +1 519 590 5168 www.weicon.ca · info@weicon.ca

## WEICON Kimya Sanayi Tic. Ltd. Şti.

Yenibosna Mahallesi Yalçın Koreş Caddesi Arifağa Sokak No: 29 Kat: 3 34530 Yenibosna – Istanbul Turkey www.weicon.biz.tr · info@weicon.biz.tr

## WEICON Romania SRL

Str. Depozitelor 22 540240 Targu Mures, jud. Mures Romania www.weicon.com · office@weicon.com