

Black-Seal Special Silicone



Extremely resistant against oil and grease

WEICON Black-Seal is black, high-temperature-resistant (+280 °C/+536 °F), free of solvents, strong, oil-resistant, grease-resistant, pressure-resistant, resistant to ageing and extremely elastic (breaking elongation of approx. 500%).

It is suitable for bonding and sealing in applications where particularly high oil and grease resistance is required.

The product can be used on gearbox, valve and casing covers, oil sumps, water pumps, gears and axles, flanges, tanks and containers, and in many other areas.

Characteristics

Base	1-C. polysiloxane (acetate)	
Texture	pasty	
Colour	black	
Cure type	moisture-curing	
Solid content	96 %	
Can be painted	no	
Stability/run-off	ASTM D 2202	1.0 mm
Building material class	DIN 4102	B 2
Minimum shelf life	Presspack / Green Tube	12/18 mon.

Processing

Curing condition	from +5°C to +40°C and 30% to 95% rel. air air humidity	
Curing speed	in the first 24 h	2 -3 mm
Density	1,06 g/cm ³	
Max. sealing joint width	25 mm	
Gap bridging up to max.	5 mm	

Curing

Skin-over time	7 min.
----------------	--------

Mechanical properties after curing

Tensile strength	ISO 37	2,2 N/mm ²
Elongation at break (tensile)	ISO 37, S3A	500 %
Tear resistance	DIN 53515 / ASTM D 1002	4 kN/m
Elongation at 100 %	ISO 37 S3A	0,7 N/mm ²
Movement absorption max.	15 %	
Hardness (Shore A)	DIN ISO 7619	30±5
Shear strength according to DIN EN 1465		
Medium lap shear strength (DIN EN 1465/ ASTM D 1002)	0,7 N/mm ²	
Volume change	DIN 52451	-9 %

Thermal parameters

Temperature resistance	-40 °C to briefly +280 °C (approx. 2 h) +300 °C	
Thermal conductivity	0,2 W/m·K	

Electrical parameters

Resistance	2,5 x 10 ¹⁵ Ω·m	
Dielectric strength	21,0 kV/mm	

Approvals / Guidelines

ISSA Code	75.634.24/25/26	
IMPA Code	815248/85/86	
MIL-Spec	complies with	MIL-A-46106B Group III Typ 1

Surface Pre-Treatment

Surfaces must be clean and free of grease. Many surface soiling, such as oil, grease, dust and dirt can be removed with WEICON Surface Cleaner. For heavily soiled metal surfaces, we recommend Cleaner Spray S; for removing old colour residues or adhesive residues, WEICON Sealant and Adhesive Remover is ideal. Most materials can be bonded to and among each other. For certain materials or special requirements, we recommend the use of a bonding agent (primer). Mechanical surface pre-treatment e.g. by grinding or sanding can also improve the adhesion considerably.

Application

Application methods:

Cartridge gun for 310 ml cartridges, compressed air gun, we recommend a version with piston rod (WEICON Compressed Air Cartridge Gun), automatic dosing systems.

Squeeze out by hand, close tube again immediately after use, opened tubes should be used up as quickly as possible

Processing mini hose bag:

Hook the tube key centrally onto the clip of the mini hose bag. Remove the safety tab. Then screw the cap further in — this will cut open the mini hose bag. Open the closure and dispense the material by turning the tube key.

Processing Presspack

Remove tamper-evident seal. Regulate discharge by smooth turning of the cap from min. to max. Press the lever and

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 Colombia S.A.S
Colombia
Phone: +57 314 793 86 06
Email: info@weicon.co

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

Black-Seal Special Silicone

process the medium. After having turned the cap into the “min.” position the valve closes automatically and the product flow is stopped.

Joining the components

In order to guarantee and ideal wetting, the bonding parts need to be joined, before the adhesive skins over (skin-over time).

Storage

Store in the unopened original container at room temperature. Avoid sources of heat and direct sunlight.

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.

Accessories

- 10025241 V-Joint Nozzle, 1 PCE
- 10020751 Cartridge Gun Special, 1 PCE
- 10000441 Cartridge Gun, 1 PCE
- 10101992 Clip Nozzle Green Tube, 1 PCE, transparent
- 10059792 Pressure gun Airflow 3, 1 PCE

Available sizes

- 10000763 Black-Seal Special Silicone, 200 ml (Presspack), black
- 10022222 Black-Seal Special Silicone, 85 ml, black
- 10104022 Black-Seal Special Silicone, 280 ml (Green Tube), black
- 10104057 Black-Seal Special Silicone, 280 ml (Set), black

Conversion table

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$	$\text{Nm} \times 8.851 = \text{lb}\cdot\text{in}$
$\text{mm}/25.4 = \text{inch}$	$\text{Nm} \times 0.738 = \text{lb}\cdot\text{ft}$
$\mu\text{m}/25.4 = \text{mil}$	$\text{Nm} \times 141.62 = \text{oz}\cdot\text{in}$
$\text{N} \times 0.225 = \text{lb}$	$\text{mPa}\cdot\text{s} = \text{cP}$
$\text{N}/\text{mm}^2 \times 145 = \text{psi}$	$\text{N}/\text{cm} \times 0.571 = \text{lb}/\text{in}$
$\text{MPa} \times 145 = \text{psi}$	$\text{kV}/\text{mm} \times 25.4 = \text{V}/\text{mil}$

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 Colombia S.A.S
Colombia
Phone: +57 314 793 86 06
Email: info@weicon.co

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