Elastic adhesives and sealants
MS-Polymers

Flex 310 M® HT 200 MS-Polymer



High-temperature resistant

The high temperature resistance makes it possible to bond and seal components, which will be thermal-coated (powder-coated) afterwards. WEICON Flex 310 M HT 200 can be used in metal construction, tank and apparatus engineering, in ventilation and air conditioning systems, carriage, container, wagon and vehicle construction. WEICON Flex 310 M HT 200 Adhesive and Sealant is resistant even to high temperatues, has an outstanding resistance to ageing and is free of silicone, isocyanate, halogens and solvents.

Characteristics		
Base		1C MS-polymer
Texture		pasty
Colour		grey
Cure type		moisture-curing
Can be painted after		only "wet into the wet"
Stability/run-off	ASTM D 2202	<1 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 humidity
Curing speed	in the first 24 h	2 - 3 mm
Density		1,41 g/cm³
Curing		
Skin-over time		10 min.
Mechanical properties after curing		
Tensile strength	DIN EN ISO 527 / 5A	3,2 N/mm²
Elongation at break (tensile)	DIN EN ISO 527 / 5A	400 %
Tear resistance	DIN ISO 34	21 N/mm
Hardness (Shore A)	DIN ISO 7619	55±5
Shear strength according to	DIN EN 1465	
Aluminium sandblasted		1,8 N/mm²
Volume change	DIN EN ISO 10563	< 3 %

Thermal parameters	
Temperature resistance	-40°C to +90°C (45 min. +180°C / 30 min. +200°C)
Tg after curing at room temperature	~ -59 °C
Electrical parameters	
Resistance	3,4 x 10^{11} Ω·m
Approvals / Guidelines	
ISSA Code	75.634.37
IMPA Code	815278
Fire resistance	DIN EN 45545-2 R1/R7/ R17 HL3

Surface pretreatment

Surfaces must be clean and free of grease. Many surface soilings, 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

Hand-operated caulking gun for 310 ml cartridges, pneumatic caulking gun (we recommend only a piston rod version, such as the WEICON pneumatic cartridge gun), automatic dispensing systems.

Joining the parts

To ensure optimal wetting, the parts must be joined before the first skin forms on the adhesive (skin formation time).

Ageing

The test specimens were artificially aged according to DIN ISO 21194 Annex A in order to assess long-term durability. After artificial ageing, Flex 310 M® HT 200 MS-Polymer with Primer K 200 or Activating Cleaner achieved grade 1 on aluminium in the bead peel test. After artificial ageing, Flex 310 M® HT 200 MS-Polymer with Primer K 200 or Activating Cleaner achieved grade 1 on stainless steel (V2A) in the bead peel test. After artificial ageing, Flex 310 M® HT 200 MS-Polymer with Primer K 200 or Activating Cleaner achieved grade 1 on bare steel in the bead peel test. Grade 1 means: more than 95 % cohesive failure and less than 5 % adhesive failure in the form of the adhesive detaching from the contact surface.

Storage

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

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
(Headquaters) 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

Elastic adhesives and sealants
MS-Polymers

Flex 310 M® HT 200 MS-Polymer

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

Available sizes

10104850	Flex 310 M® HT 200 MS-Polymer, 280 ml (Green Tube), grey
10104846	Flex 310 M® HT 200 MS-Polymer, 280 ml (Set), grey

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/mm^2 x 145 = psi	N/cm x 0.571 = lb/in
MPa x 145 = psi	kV/mm x 25.4 = V/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
(Headquaters) 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