Elastic adhesives and sealants

Flex 310 M HT 220+

High temperature resistant up to +220 °C

Fast-curing, elastic, high temperature resistant 1-component SMP-based adhesive and sealant for tolerance-bridging joints. Viscoplastic, very fast strength build-up, good initial adhesion, moisture-curing, neutral cross-linking. In the cured state, Flex 310 M HT 220+ can be loaded once for approx. 30 minutes with temperatures up to +220 °C and permanently up to +90 °C. Adheres to a wide variety of surfaces. Free from solvents, halogen, silicone and isocyanate. High resistance to weathering and ageing. Good resistance to water, aliphatic solvents, oils, greases, diluted inorganic acids and alkalis.

The high temperature resistance makes it possible to bond and seal components, which will be thermal-coated (powdercoated) afterwards.

Flex 310 M HT 220+ can be used in metal construction, tank and apparatus engineering, in ventilation and air conditioning systems, in car body, container, wagon and vehicle construction.

| Technical Data | | |
|---|---------------------|--|
| Base | | 1-C. MS polymer |
| Colour | | grey |
| Cure type | | moisture-curing |
| Texture | | pasty |
| Stability/run-off | | <1 mm |
| Density | (+20°C) DIN 51757 | 1,50 g/cm ³ |
| Curing condition | | from +5 °C to +40 °C and 30% to 95% rel. air humidity |
| Processing temperature | | +5 °C to +40 °C |
| Curing speed | in the first 24 h | 2-3 mm |
| Skin-over time | | 10 min. |
| Tensile strength | DIN EN ISO 527 / 5A | 3,4 N/mm² |
| Elongation at break (tensile) | DIN EN ISO 527 / 5A | 160 % |
| Medium lap shear strength (DIN EN 1465/ASTM D 1002) | | 1,6 N/mm² |
| Hardness (Shore A) | DIN ISO 7619 | 57 |
| Temperature resistance | | -40 °C to +90 °C (120 min. +200 °C / 30 min. +220 °C) |
| Minimum shelf life | at room temperature | 12 mon. |

Surface Pre-Treatment

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.

Processing

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.

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).

Ageing

The test specimens were artificially aged according to DIN ISO 21194, Annex A, to assess their long-term durability.

After artificial ageing, Flex 310 M HT220+ with Primer K 200 or Activating Cleaner achieved grade 2 in the bead peel test on aluminium.

Grade 2 means: 75 % to 95 % cohesive failure.

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 test 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 Inc. Canada phone +1 877 620 8889 info@weicon.ca WEICON Czech Republic s.r.o. Czech Republic phone +42 (0) 417 533 013 info@weicon.cz

WEICON Ibérica S.L. Spain phone +34 (0) 914 7997 34 info@weicon.es WEICON GmbH & Co. KG (Headquaters) Germany phone +49 (0) 251 9322 0 info@weicon.de

WEICON Italia S.r.L. Italy phone +39 (0) 010 2924 871 info@weicon.it WEICON Romania SRL Romania phone +40 (0) 3 65 730 763 office@weicon.com

WEICON SA (Pty) Ltd South Africa phone +27 (0) 21 709 0088 info@weicon.co.za WEICON South East Asia Pte Ltd Singapore Phone (+65) 6710 7671 info@weicon.com.sg

WEICON Kimya Sanayi Tic. Ltd. Şti. Türkiye phone +90 (0) 212 465 33 65 info@weicon.com.tr

W E I C D N [©]

Flex 310 M HT 220+

After artificial ageing, Flex 310 M HT220+ with Primer K 200 or Activating Cleaner achieved grade 2 in the bead peel test on stainless steel (V2A).

Grade 2 means: 75 % to 95 % cohesive failure.

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 |
|----------|-------------------------------------|
| 10033114 | Compressed Air Cartridge Gun, 1 PCE |
| 10020751 | Cartridge Gun Special, 1 PCE |
| 10000441 | Cartridge Gun, 1 PCE |

Available sizes

10067865 Flex 310 M HT 220+, 290 ml, 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/mm² 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



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 Inc. Canada phone +1 877 620 8889 info@weicon.ca

WEICON Czech Republic s.r.o. Czech Republic phone +42 (0) 417 533 013 info@weicon.cz

> WEICON Ibérica S.L. Spain phone +34 (0) 914 7997 34 info@weicon.es

WEICON GmbH & Co. KG (Headquaters) Gern phone +49 (0) 251 9322 0 info@weicon.de

WEICON Italia S.r.L. Italy phone +39 (0) 010 2924 871 info@weicon.it

WEICON Romania SRL Romania phone +40 (0) 3 65 730 763 office@weicon.com

WEICON SA (Pty) Ltd South Africa phone +27 (0) 21 709 0088 info@weicon.co.za WEICON South East Asia Pte Ltd Singapore Phone (+65) 6710 7671 info@weicon.com.sg

WEICON Kimya Sanayi Tic. Ltd. Şti. Türkiye phone +90 (0) 212 465 33 65 info@weicon.com.tr

Elastic adhesives and sealants **MS-Polymers**