

Technical Data Sheetswiftsupplies.com.au

Weicon Flex 310 M Stainless Steel Sealant and Adhesive is a specialised grade of adhesive sealant that is non-corrosive, strong and highly compatible with stainless steel, aluminium and other non-ferrous metals. It has excellent UV resistance and is resistant to ageing so that it provides long lasting performance.

Flex 310 M Stainless Steel is completely free of silicones, isocyanate, halogens and solvents and is resistant to attack from fresh or salt water. It is colour matched to fit in with stainless steel parts and can be sanded once cured.

Flex 310 M Stainless Steel is an ISEGA recognised sealant suitable for use in food processing areas and applications.

[View This Product](#)**Applications**

- Metal construction work
- Sealing joints on aluminium, stainless steel or non-ferrous metal parts
- Kitchen and sanitary area sealing
- Electrical and light fitting sealing and bonding
- Ventilation and air conditioning system sealing and construction
- Anywhere silicone adhesives are not suitable or permitted

Preparation of the Surface

To ensure good adhesion, the surface Flex 310 M Stainless Steel will be applied to must be clean and free of greases or oils. Surface contaminants like dust or dirt can be removed with general cleaners (or Weicon Surface Cleaner). For heavily soiled surfaces, Weicon Cleaner S or Weicon Gasket Remover may be more suitable.

Most types of materials can be bonded to with Weicon Flex 310 M. That said, for certain materials (such as low surface energy plastics like polyethylene or PTFE) or extreme requirements the use of a primer may be necessary. More information on these is available from Swift Supplies. Alternatively, (and for very smooth surfaces) a mechanical surface pre-treatment (e.g. sanding or sand-blasting) can considerably improve adhesion.

Application

Flex 310 M Stainless Steel should be applied using a cartridge gun or automatic dosing system. To ensure optimum wetting and therefore adhesion to the surfaces, the parts being bonded must be joined before the first skin has formed on the adhesive. All Weicon elastic one part adhesives and sealants cure by reacting with humidity in the surrounding environment. The curing process starts at the surface of the adhesive and proceeds inwards from there. At 50% relative humidity and 23°C, the cure speed is approximately 3mm in the first 24 hours.

Adhesive bonds of large surfaces and high layer thicknesses cure more slowly as the humidity cannot penetrate as quickly towards the inside of the adhesive if the outer layers have already cured. Higher temperature and/or higher humidity accelerates curing while lower temperatures and/or lower humidity slows it down.

Important

The values listed here and the information presented should not be treated as a substitute for specific technical advice. We cannot warrant the products performance or suitability for particular applications.

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Technical Details
Properties

Basis	One Part MS Polymer
Viscosity	Pasty
Density	1.06 g/cm ³
Stability / Run-Off (ASTM D 2202)	<1mm
Processing Temperature	+5°C to +35°C
Curing Temperature	+5°C to +40°C 30% to 95% Relative Humidity
Skin-Over Time	10 Minutes
Cure Speed (first 24 hours)	2-3mm
Volume Change (DIN 52451)	-3%
Gap Fill Max. Depth	5mm
Gap Fill Max. Width	25mm
Shore Hardness (DIN 53504 / ASTM D 412)	45 Shore A
Elongation at Break (DIN 53504 / ASTM D412)	250%
Tensile Strength of Sealant	2.4 N/mm ²
Average Tensile Shear Strength (DIN 53283)	1.8 N/mm ²
Tear Strength (DIN 53515 / ASTM D 624)	10 N/mm ²
Max. Movement Capacity	20%
Temperature Resistance (Continuous)	-40°C to +90°C
Paintable (Liquid Paint)	Only using "wet in wet" within 3 hours (max.) after material application.
Building Material Category (DIN 4102)	B 2
Shelf Life (Stored at +5°C to +25°C)	12 Months

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Weicon Flex 310 M Stainless Steel Chemical Resistance After Curing

Acetic Acid (<5%)	+	Ketones	-
Acetone	-	Lyes (diluted)	+
Alcohol	O	Methanol	-
Ammonia (10%)	O	Methyl Ethyl Ketone	-
Antifreeze	+	Motor Oil (Mineral and Synthetic)	-
Caustic potash solution (20%)	O	+140°C	-
Citric Acid (10%)	-	Motor Oil (Mineral and Synthetic)	-
Concentrated Formic Acid	-	Naphtha	-
Concentrated Phosphoric Acid	-	Nitric Acid (5%)	-
Concentrated Silicon Oil	+	Paint Thinner	-
Cooling Lubricant (Water Dilutable)	O	Paraffin Oil	-
Diesel / Heating oil	-	Petrol (92 to 100 octane)	-
Edible Oil / Vegetable Oil	O	Phosphoric Acid (5%)	-
Ethanol	-	Salt Water / Sea Water	+
Freon	-	Sodium Hydroxide Solution (20%)	-
Gear Oil	-	Sulphuric Acid (5%)	-
Glycerine (glycol)	O	Toluene	-
Glycol Ether	-	Water	+
Hydraulic Oil	-	Water (90°C)	-
Hydrochloric Acid (5%)	-	Xylem	-
Hydrogen Peroxide (3%)	-		

+ = Resistant

O = Resistant for a Limited Time

- = Not Resistant

Storage

When stored unopened and in normal climatic conditions (23°C and 50% relative humidity) Weicon Flex 310 M Stainless Steel has a minimum shelf-life of 12 months.

Available Sizes

Weicon Flex 310 M is available from Swift Supplies in 290ml cartridges.

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