

**Technical Data Sheet**[swiftsupplies.com.au](http://swiftsupplies.com.au)

Our Flex 310M 2K MS Polymer is a specialised, 2-part adhesive that is widely used in specialised industrial and commercial applications. Flex 310M 2K is grey in colour and is completely free of silicone, isocyanate and solvents.

Manufactured by Weicon in Germany, this strong elastic adhesive is often selected for jobs that require a particularly high strength bond across larger surface areas and with bonding gaps larger than a contact adhesive (such as GMK 2510) can bridge.

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

- High strength surface bonding (especially when surfaces are rough or a little separated).
- Metal construction and engineering work.
- Machine and system construction.
- Ship and boat maintenance and construction.
- Air conditioning & ventilation systems.
- Furniture making and repair.
- All kinds of applications where adhesives containing silicones are not suitable.

**Preparation of the Surface**

To ensure good adhesion, the surface Flex 310 M 2K 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 2K. 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 2K should be applied using a cartridge. Reject the first 5 – 8 cm of the dosed bead. The adhesive may be applied to only one of the surfaces to be bonded.

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.

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**

Colour	Grey
Basis	Two Part MS Polymer (2K – Hybrid Polymer)
Viscosity	Pasty
Density	1.4 g/cm <sup>3</sup>
Processing Temperature	+5°C to +35°C
Skin-Over Time	5 Minutes
Processing Time	10 Minutes
Suitable for Load Bearing	60 Minutes
Cure Type	Chemical Polymerisation
Volume Change	1%
Max. Gap Filling Capacity	10mm
Shore Hardness (DIN 535 / ASTM D 224)	40 Shore A
Elongation at Break (DIN 53504 / ASTM D2240)	350%
Tensile Strength of Sealant	2.2 N/mm <sup>2</sup>
Average Tensile Shear Strength (DIN 53283)	1.3 N/mm <sup>2</sup>
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 HT 200 Chemical Resistance After Curing**

Acetic Acid (<5%)	-	Ketones	-
Acetone	-	Lyes (diluted)	+
Alcohol	O	Methanol	-
Ammonia (10%)	+	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)	+	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)	+	Toluene	-
Glycol Ether	-	Water	+
Hydraulic Oil	O	Water (90°C)	+
Hydrochloric Acid (5%)	-	Xylene	-
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 2K Adhesive has a minimum shelf-life of 12 months.

### Available Sizes

Weicon Flex 310 M 2K is available from Swift Supplies in 250ml cartridges.

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