# Silaflex<sup>®</sup> MS

# High performance multi-purpose modified silicone sealant

Positioning Description	Silaflex MS is a tough, durable elastomeric joint sealant suitable for use in a wide range of external and internal building applications. It is based upon modified silicone polymer technology resulting in a unique combination of properties ideally suited to New Zealand climatic conditions. Silaflex MS has excellent primerless adhesion to a wide range of common building substrates as indicated below and does not stain concrete, marble and other masonry surfaces.
Use	Silaflex MS has been formulated for sealing joints in and around concrete, brick, masonry, pre-cast panels, stone cladding, windows, doors and fibre cement sheeting. Silaflex MS bonds well to:  Concrete and masonry.  Cement plaster systems.  Aluminium, copper, brass and zinc.  Stainless, mild or galvanised steel.  Glass and ceramic tiles.  Glass reinforced plastics.  Fibre reinforced cement sheetings.  Timber, particleboard, hardboard and plywood. (Refer to Limitations sections.)  Butylclad rubber products - chase sealing.
Advantages	<ul> <li>Excellent primerless* adhesion to most common building materials.</li> <li>Paintable any time after curing, with water-based paints.</li> <li>Will not stain masonry, marble or other surfaces.</li> <li>Very durable - BRANZ appraised</li> <li>Neutral cure.</li> <li>Highly flexible.</li> <li>Low odour.</li> <li>MAF approved for use in hygiene areas.</li> <li>* Refer to Priming section.</li> </ul>
Tests Approvals / Standards	Silaflex MS has been appraised by BRANZ – Certificate No.311 (2005)
Product Data Form:	Uncured sealant: Smooth, non slump paste Cured sealant: Elastic solid
Colour:	Grey, white, black, bronze and ivory
Storage & Shelf Life:	12 months from date of production if stored properly in original unopened, sealed and undamaged packaging in dry conditions.
Packaging:	<ul> <li>300 ml cartridges</li> <li>375 ml cartridges</li> <li>600 ml sachets</li> <li>Grey and white</li> <li>Grey, white and black</li> </ul>
Technical Data	

**UNCURED SEALANT** 

Flash point: Not applicable Solids content: 98% approximately Application temperature: 5°C to 40°C

6 mm in 4 days at 25°C, 65% RH Cure rate:

**CURED SEALANT** Typical Shore 'A'

25 - 30 Hardness: U.V. resistance: Excellent

Paintability: Will accept water-based paints Good to dilute acids and alkalis Chemical resistance:

Service temperature: - 30°C to 70°C

Movement: Butt joints ± 25 %, Lap joints ± 50 % (ISO 11600 1993)

#### **Design Criteria**

Silaflex MS may be applied to joints between 5 and 35 mm wide. To minimise stresses imposed on the joint sealant, all moving joints should be designed to an optimum width to depth ratio of 2:1. This ratio is subject to these overriding minimum sealant depths:

- 5 mm minimum sealant depth at any point.
- 5 mm minimum bonding depth against metals, glass and other non-porous surfaces, providing that joint faces are in good condition.
- 8 mm minimum bonding depth against masonry or other porous surfaces, or any non-porous surfaces where joint faces are in poor condition.
- Shear joints shall be a minimum joint width to depth ratio of 1:2 up to a maximum of 1:1.

## **Application Conditions**

#### Instructions for use **Preparation**

Joint surfaces must be clean and free from frost and surface water. Remove all dirt, laitance, loose materials and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using Sika TCN Thinner/Cleaner. In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, and hence allow optimum performance. In shallow joints self adhesive polyethylene tape can be used. Deep joints should incorporate a backing strip such as Sika PEF Rod to support the sealant while also acting as a bond breaker.

#### **Priming**

Good adhesion can be gained on concrete, timber, metals, ceramics, brick work and most coating surfaces without the use of primers. However, on some surfaces adhesion may be improved by the use of a primer - refer to Sika's Technical Advisory Service for advice.

### **Application** Cartridge:

Cut the end off threaded stub on cartridge, screw on nozzle and cut nozzle to desired bead size at a 45° angle.

#### Sachet:

Cut the wire clamped end off the sachet and fit with open end towards nozzle into a fully enclosed barrel gun. Extrude the sealant firmly into joint to ensure complete contact with joint faces. Smooth finish if necessary with a spatula wetted with a dilute detergent solution.

# Cleaning

Clean tools immediately after use with Sika TCN Thinner/ Cleaner.

# **Important Notes**

In the event of damage to Silaflex MS, the damaged sealant can be removed and replaced. Adhesion of new to old Silaflex MS is excellent.

#### Limitations

Silaflex MS must not be used as follows:

- With polyethylene, polypropylene, polybutylene, polycarbonate and bitumen.
- Where it is subjected to permanent immersion in water.
- With structural glazing or floor joints.
- With pipes or in other applications where it may be subjected to hydrostatic or pneumatic pressures (other than wind pressure).
- Where continual exposure to aggressive solvents or chemicals will occur.
- Where timber or wood based products have been painted.
- Silaflex MS is recommended for use only as described in the Uses section of this datasheet.

Silaflex MS will accept waterbased and multi-component coatings. However, as with all elastomeric sealants, coatings may cause undesirable side effects. Movement accommodation ability may be reduced. Dirt pick-up and discolouration may occur in the long term.

Notes	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
Health & Safety Ir	nstructions
Warning	Silaflex MS may be harmful if swallowed or inhaled and may cause skin and eye irritation. Further details on each of the products mentioned are available on the product Material Safety Data Sheets. To ensure no harm is caused to persons using Sika products, it is recommended that the appropriate Material Safety Data Sheets are read by all concerned. Contact Sika for copies.
First Aid	
Swallowed:	<ul> <li>Do not induce vomiting, give a glass of water to dilute and contact a doctor immediately.</li> </ul>
Skin:	<ul><li>Remove contaminated clothing, wash skin with warm soapy water.</li><li>Do not scrub.</li></ul>
Inhaled:	<ul><li>Remove person to fresh air.</li><li>Get medical advice if breathing becomes difficult.</li></ul>
Eyes:	<ul><li>Hold open and flood with water for at least 15 minutes.</li><li>Get medical advice.</li></ul>
Disposal:	<ul> <li>Dispose of according to local authority regulations.</li> <li>Do not dispose of down drains or into local waterways.</li> </ul>
Protective Measures	<ul> <li>To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.</li> <li>Local regulations as well as health and safety advice on packaging labels must be observed.</li> </ul>

available on request.

#### **Important Notes**

Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

If in doubt always follow the directions given on the pack or label.

For further information refer to the Sika Material Safety Data Sheet which is

Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheet.

### **Legal Notes**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.