TECHNICAL DATA SHEET

SabreSeal™ NC

SabreSeal NC is a 100% silicone sealant with excellent resistance to weathering, UV radiation, vibration, moisture, ozone, temperature extremes, airborne pollutants, and many cleaning detergents and solvents. It is a single-component elastomeric sealant that is permanently elastic upon curing and has a movement capability of ±50 % (ASTM C719).

Application

- SabreSeal NC is well-suited for a strong weatherproof seal on most common building materials such as glass, aluminium, galvanized and zinc-coated steel, painted surfaces, brick, concrete and mirror bonding.
- Ideal for sealing metal lap joints in roofing, guttering and cladding applications.

Features

- 100% neutral silicone
- Certified Green Building Standard
- MPI approved for use in farm dairies, dairy processing facilities, and non-dairy processing facilities
- ±50 % movement capability (ASTM C719)
- Excellent weathering resistance
- Permanently flexible
- Indoor and outdoor use

Specification

Base	Silicone polymer	
Physical state	Non-sagging paste (Before cure) Elastic rubber (After cure)	
Curing system	Moisture curing, neutral	
Specific gravity	1.02 g/mL	
Slump	<1 mm	ASTM D2202
Maximum tensile strength	1.3 N/mm²	ASTM D412
Elongation at break	370 %	ASTM D412
Movement capability	±50 %	ASTM C719
	±25 %	ISO 11600
Shore a hardness	25	ASTM C661
Low VOC compliance	Yes	SCAQMD Rule 1168
VOC content	43.68 g/L	USEPA Method 24
	0.86 %	USEPA Method 310
Tack-free / skin-form time	10 – 30 minutes (at 25 °C & 50% R.H.)	
Application temperature	-20 °C – 50 °C	
Service temperature	-40 °C – 150 °C	

Applicable Tests / Standards

SabreSeal NC meets the requirements of:

- ASTM C920 & ASTM C719, Type S, Grade NS, Class 50, Use NT, M, A & G
- ISO 11600, F Class 25 LM
- Leadership in Energy and Environmental Design (LEED) v4.1 EQ compliant
- Low VOC - USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 310
- AS/NZS 4020:2005, Testing of Products for Use in Contact With Drinking Water.
- Sirim Test - ASTM D412: 2016 & MS1583-Part 1-2003

Specially formulated to achieve superior performance and feature low VOC emission and content, SabreSeal NC is able to comply with the stringent requirements of ASTM C920 as well as contribute to the Leadership in Energy and Environmental Design (LEED) v4.1 credit.

Preparation

- Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.
- For a neat finishing, use masking tape and remove it within the working time.
- Sabre Primer PX is recommended especially for porous substrates such as concrete for excellent adhesion.
- For sealant designs with depth of over 10mm, use approved backing materials.

Application Direction

Cartridges:

1. Cut the cartridge tip carefully.
2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
3. Use a caulking gun and extrude the sealant with a single bead.
4. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

Sausages:

1. Cut the tip of the sausage carefully and slip it into the caulking gun.
2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
3. Place the nozzle into the caulking gun and screw tight.
4. Extrude the sealant with a single bead.
5. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

Clean Up

- Wet sealants can be cleaned up with acetone or mineral spirits.
- Cured sealants can only be removed mechanically.

Joint Design

- The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.
- Generally calculation of the width sealant bead should be computed on the basis of a maximum ±50 % movement capability
- Minimum joint depth should not be less than 6 mm to accommodate movement.
- Sealant design joint width-to-depth ratio should be 2:1.

Limitations

Not recommended for following applications:

- Structural glazing applications.
- Below waterline or permanent water immersion.
- Traffic areas subject to abrasion.
- Polycarbonate and polyacrylate, if under tension.
- Applications that requires the sealant to be painted.
- Neoprene rubber.

Coverage

Width	Depth	Coverage (300 ml) *
6 mm	6 mm	7.58 meter
10 mm	10 mm	2.73 meter
20 mm	10 mm	1.36 meter
25 mm	12 mm	0.91 meter

* The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.

• **Calculation formula:**
X / [(Y x Z) x 1.1] = Coverage
X = volume of cartridge (or sausage) in ml,
Y = joint width in cm, **Z** = joint depth in cm,
1.1 = 10% wastage assumption,
Coverage = linear meter run in cm per cartridge (or sausage)

Packaging & Colour

Colours: • Translucent • Black • Grey • Aluminium

Packaging size: 300 ml/cartridge (25 cartridges/carton)

Health & Safety

Consult MSDS for full list of hazards.

Storage

Store in a dry and cool place with temperature below 30 °C.

Shelf Life

12 months

Caution

Product releases methylethylketoxime during application and curing. May cause an allergic skin reaction. If medical advice is needed, have product container or label at hand. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Keep out of reach of children. For further health and safety information, consult the latest safety data sheet.

New Zealand

+64 6 366 0007
40-42 Cambridge St South
Levin 5510

Australia

+61 2 9098 8244
Level 6, 10 Herb Elliott Ave
Sydney Olympic Park, NSW 2127