

SS100



100% NEUTRAL SANITARY SEALANT

Description

Simseal® SS100 Neutral Sanitary Sealant is a high-quality silicone-based sealant, known for its robust resistance to various environmental factors such as weathering, UV radiation, vibration, moisture, ozone, temperature extremes, and pollutants. It is also resistant to a wide range of cleaning detergents and solvents. This single-component elastomeric sealant is designed to remain permanently elastic after curing, offering a movement capability of $\pm 25\%$.

The product is specially formulated to be resistant to mildew and to emit low levels of volatile organic compounds (VOCs). Adhering to the stringent requirements of SCAQMD rule #1168 (Architectural Sealant) for low VOC, Simseal® SS100 is also tested and complies with ASTM G21 standards, ensuring its suitability for a variety of sanitary applications.

Key Performance Properties

- Neutral curing system
- Antifungal
- $\pm 25\%$ movement capability
- Low VOC compliant
- Permanently flexible
- Indoor and outdoor use
- Food grade

Applications

Simseal® SS100 is particularly effective in damp environments like bathrooms and kitchens, where there's a higher risk of fungal growth. It's frequently used for sealing areas around shower enclosures, bathtubs, and sinks.

Specifications

Simseal® SS100 meets the requirements of:

- ASTM G21 (Antifungal)
- FDA 21 CFR Part 175.300 (Food contact safe)
- ASTM C920, Type S, Grade NS, Class 25, NT, A & G
- Low VOC - USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 310

Technical Data

PROPERTY	VALUE	
Curing system:	Moisture curing, neutral (oxime)	
Skin Time:	5-10 min.	
Cure Time:	5-7 days	
Specific gravity:	0.98 - 1.02 g/mL	
Slump :	<1 mm	ASTM D2202
Maximum tensile strength:	1.3 N/mm ²	ASTM D412
Elongation at break :	390 % A	STM D412
Movement capability:	$\pm 25\%$	ASTM C719
Shore A hardness:	23	ASTM C661
Anti-fungal testing :	0 rating (No growth)	ASTM G21
Low VOC compliance:	Yes	SCAQMD Rule 1168
VOC content: 5	7.38 g/L	USEPA Method 24
		2.83 % USEPA Method 310



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Application

Carefully cut the tip of the cartridge and then trim the nozzle to the required diameter, ideally at an angle between 45° to 60°. Apply the sealant in a single bead using a caulking gun. For a smooth finish, shape the bead of sealant with a clean, dry tool while it's still workable.

Preparation

- Ensure the substrate surface is clean and dry, devoid of dirt, grease, oil, or water.
- Apply masking tapes for neat finish and remove within the working time.
- Use Primer for enhanced adhesion on porous substrates like concrete.
- For sealant depths over 10 mm, employ approved backing materials.
- Wet sealants can be cleaned up with acetone or mineral spirits.
- Cured sealants can only be removed mechanically.

Joint Design

The calculation for the size of the sealant bead should consider the sealant's compression and extension capacity relative to the expected joint width changes from expansion and contraction. Typically, the width of the sealant bead is based on a maximum movement capability of ±25%. The minimum depth of the joint should be at least 6 mm to effectively handle movement. The recommended joint width-to-depth ratio for sealant design should be 2:1.

Coverage

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

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

$$X / [(Y \times Z) \times 1.1] = \text{Coverage}$$

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

300 mL - Cartridge

Available in cartons of 20

Product packed in Australia

Shelf life / Storage

The shelf life of SS100 is 12 months is stored in a cool dry place. The storage temperature should not exceed 25°C as this will decrease shelf life.

Health and safety

Simseal SS100® Sanitary Sealant emits methylethylketoxime, which can cause allergic skin reactions. To prevent exposure, avoid inhaling dust, fumes, gas, mist, vapors, or spray. Appropriate safety gear, including protective gloves, clothing, eye and face protection, and hearing protection, is advised. If skin irritation or rash develops, seek medical advice and attention. Contaminated clothing should be removed and washed before reuse. A safety data sheet with detailed information is available upon request, and for comprehensive health and safety guidelines, refer to the latest safety data sheet. **KEEP OUT OF REACH OF CHILDREN**

Limitations

Not recommended for the following applications:

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

Legal Notes

Simseal® has made every effort to ensure accurate information but cannot be held liable for any losses or damages arising from its use, due to uncontrollable variations in processing and workmanship. Users should verify the product's suitability through their own testing.