



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS SIL PS001 RTV SILICONE COMPOUND

Product overview

SIL PS001 is a room temperature vulcanising (RTV) or curing silicone elastomer. It is particularly suited for Form-in-Place (CNC application) directly onto components or enclosures where it cures to form an elastomeric gasket section that has good adhesion to most commonly used substrates. This allows intricate, small section gaskets to be reliably and efficiently applied to any quantity of parts without the requirement for expensive tooling.

When designed in correctly it provides a reusable environmental seal that is suitable for applications up to IP68 (water immersion).

It is also suitable for use as a flexible adhesive where there is a requirement to resist vibration, shock, thermal shock, extremes of temperature or where materials with differing coefficients of thermal expansion have to be reliably bonded

Uncured Properties

Colour	Translucent / white
Form	Thixotropic paste
Cure time – 0.6mm high bead at 23 °C/50% RH	10 hours
Recommended minimum time to use after application	24 hours



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Cured Properties

Density	1.1gcm ⁻³
Hardness	30 Shore A
Adhesion	>100 Ncm ⁻²
Compression recommended (allowable range)	25% (10 – 50%)
Volume resistivity	1 x 10 ¹⁵ Ω.cm
Dielectric strength	>20kV/mm
Dielectric constant	2.9 (50Hz)
Dielectric loss	0.004 (50Hz)
Elongation	>300%
Compression set – 70 hours at 23°C	<20%
Service temperature range	-55°C to 150°C
Force/deflection – 0.7mm high gasket section	0.6Ncm ⁻¹ @ 10%
	1.6Ncm ⁻¹ @ 25%
	7.8Ncm ⁻¹ @ 50%

Packaging

SIL PS001 is supplied in industry standard syringe type barrels from which the material may be directly dispensed. The two main sizes are 30ml and 55ml both of which incorporate luer lock fastenings at the nozzle that allow a wide range of dispense tips to be easily attached or detached.



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Storage

It is recommended that when not in use that the material is stored in a cool dark, dry place. If the facility exists then some form of refrigerated or freezer storage is ideal. If kept properly sealed and in a suitable location then the material will remain usable for up to 6 weeks.

Handling

When using this material observe usual standards of industrial hygiene/practice. Avoid skin/eye contact and work in a well ventilated area. For more detailed information please refer to the MSDS (Material Safety Data Sheet)



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