

Revised  
January 2002



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## TECHNICAL DATA SHEETS

### FLEX 1100 SILICONE

#### Description:

**FLEX 1100** is a multi-purpose silicone for use in numerous bonding and sealing applications.

#### Typical Applications:

Designed primarily for flange sealing with good oil resistance and to withstand high joint-movement requirements. For example, stamped sheet metal covers (timing covers and oil sumps).

#### PROPERTIES OF UNCURED MATERIAL

Typical	Value	Range
Chemical Type	Oxime Silicone Rubber Paste	
Appearance		
Specific Gravity @ 20°C	1.34	1.30 to 1.37
Viscosity @ 25°C	Thixotropic Paste	
Extrusion Rate gm/min: (3mm nozzle, 6 bar, 25°C)	35	20 to 50
Flash Point (TCC), °C	>93	

#### TYPICAL CURING PERFORMANCE

##### Tack Free Time

The surface of this adhesive becomes dry to touch on exposure to atmospheric moisture in 7 to 24 minutes at 23±2°C, 50±5%RH.

#### Electrical Properties

	Constant	Loss
Dielectric constant & loss, ASTM D150,		
@1 kHz	5.05	0.048
@ 100kHz	4.29	0.042
@ 1MHz	4.13	0.023
@ 10MHz	4.12	0.013
Volume resistivity, ASTM D257, Ω.cm		6.70 x 10 <sup>13</sup>
Surface resistivity, ASTM D257, Ω		4.35 x 10 <sup>15</sup>

#### Physical Properties

Hardness, Shore A, ASTM D2240	35
Elongation at break, %, ASTM D412	400 minimum
Tensile strength, N/mm <sup>2</sup> , ASTM D412	1.4 minimum

#### PERFORMANCE OF CURED MATERIAL

(After 21 days @ 23±2°C, 50±5% RH at 0.5mm gap)  
Isopropyl Alcohol wiped substrates

	Value	Typical Range
Shear Strength, ASTM D1002, DIN 53283		
Mild steel, N/mm <sup>2</sup>	1.2	1.0 to 1.4
(psi)	(150)	(150 to 200)
Aluminum (T2024), N/mm <sup>2</sup>	1.0	0.7 to 1.3
(psi)	(150)	(100 to 190)
Aluminum (Alclad), N/mm <sup>2</sup>	1.3	1.0 to 1.5
(psi)	(180)	(150 to 220)
Zinc Dichromate, N/mm <sup>2</sup>	1.3	1.0 to 1.5
(psi)	(180)	(150 to 220)

#### Storage

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container.

#### Engineering Excellence

For technical information  
and support call **1-800-552-0299** or visit our website at

**[www.instantca.com](http://www.instantca.com)**