

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	Thixotropic Paste	
Specific Gravity @ 20°C	1.34	1.30 to 1.37
Viscosity @ 25°C		
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 ¹³
Surface resistivity, ASTM D257, Ω		4.35 x 10 ¹⁵

Physical Properties

Hardness, Shore A, ASTM D2240	35
Elongation at break, %, ASTM D412	400 minimum
Tensile strength, N/mm ² , 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 ²	1.2	1.0 to 1.4
(psi)	(150)	(150 to 200)
Aluminum (T2024), N/mm ²	1.0	0.7 to 1.3
(psi)	(150)	(100 to 190)
Aluminum (Alclad), N/mm ²	1.3	1.0 to 1.5
(psi)	(180)	(150 to 220)
Zinc Dichromate, N/mm ²	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