

PRODUCT DATA

AlphaSil

TECHNICAL BULLETIN

SILICONE RUBBER SHEET

Demand for Solid Silicone sheeting continues to grow and is available in three standard colours - white, translucent and red oxide - sizes ranging from 0.5mm thick to 12mm thick and width available are 1m, 1.2m, 1.5m and even up to 2m in roll form.

Flexible, resilient silicone rubber has a unique chemical structure which gives it a high temperature stability and general inertness unavailable in any other elastomer.

Unique Silicone Properties

- Long service life
- Excellent thermal properties
- Superior ablative properties
- Compression set resistance
- Consistent electrical properties
- Excellent weatherability
- Low out gassing
- Chemically inert
- Release ability
- Flame retardance
- Non-toxic
- Food grade

TEST	TEST METHOD	TYPICAL VALUES	UNIT
Density	DIN 53479 A	1.19	g/cm ³
Hardness	DIN 53505	60	Shore A
Tensile Strength	DIN 53504 (S1)	12	N/mm ²
Elongation to break	DIN 53504 (S1)	600	%
Tear Strength	DIN 53515 (C1)	18	N/mm
Compression Set	DIN 53517	11	%
Temperature Range	-60°C to +200°C (Continuous) +260°C (Intermittent)		
Dissipation Factor	VDE 0303	70x10 ⁻⁴	Tan δ
Dielectric Strength	VDE 0303	19	kV/mm
Dielectric Constant	DIN 53482 @ 25°C and 50Hz	3	N/A
Arc Resistance	VDE 0441	90	seconds
Surface Resistance	VDE 0303	5x10 ¹²	Ω.cm
Volume Resistivity	VDE 0303	5x10 ¹⁵	Ω.cm
Abrasion Resistance	DIN 53516	76	mm ³
Thermal Conductivity	DIN 52612	0.25	W · m ⁻¹ · K ⁻¹
Coefficient of Expansion	DIN 52612	3x10 ⁻⁴	K ⁻¹
Weathering	DIN 50018 - SFW 2.0 S	Without changes	15 cycles
Flame Retardancy	UL 94 V 1	pass	
Oil Resistance	Hardness Change	-2	%
ASTM Oil 1	Tensile Strength	-10	%

	Elongation Change	+5	%
	Volume Change	+3.8	%

Yureka