

PRODUCT DATA

AlphaSil

TECHNICAL BULLETIN

SILICONE RUBBER CORD

Cord is an eternally popular product. Silicone Cords are held in stock in metric sizes ranging from 1mm to 12mm. Most commonly used in the manufacture of 'O' rings and seals.

AlphaSil remains the primary choice for these products because of its ability to deliver immediately. The fabrication department is also well equipped to join cords into 'O' rings and seals with special treatment to the cord to achieve high strength of join.

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