

# PRODUCT DATA

## AlphaSil

TECHNICAL BULLETIN

### SILICONE RUBBER PROFILE

*Silicone rubber profiles are specially made extruded silicone rubber to suit specific design of seal according to customer requirement. The colour, hardness, grade are selected for specific requirement.*

*AlphaSil remains the primary choice for extruded profiles because of its accuracy and consistency of section.*

*The specification below is the common grade for general reference.*

TEST	TEST METHOD	TYPICAL VALUES	UNIT
Density	DIN 53479 A	1.19	g/cm <sup>3</sup>
Hardness	DIN 53505	60	Shore A
Tensile Strength	DIN 53504 (S1)	12	N/mm <sup>2</sup>
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 <sup>-4</sup>	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 <sup>12</sup>	Ω.cm
Volume Resistivity	VDE 0303	5x10 <sup>15</sup>	Ω.cm
Abrasion Resistance	DIN 53516	76	mm <sup>3</sup>
Thermal Conductivity	DIN 52612	0.25	W · m <sup>-1</sup> · K <sup>-1</sup>
Coefficient of Expansion	DIN 52612	3x10 <sup>-4</sup>	K <sup>-1</sup>
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 Elongation Change Volume Change	-10 +5 +3.8	% % %

**Yureka**