

Technical Grade Moulded Silicone Rubber

The following tables and specifications apply to technical grade moulded silicone compounds. Samco 'in-house' standard cure duration 15 minutes @ 165°C and 4 hours post cure @ 180°C, catalysed with 0.7 Ppm dcp.

The material exhibits a good blend of physical properties and is easily pigmented.

The compound meets fda cfr177 2600 after post cure.

General electrical specifications to bs2848.

Typical Physical Properties and Values

Hardness, Shore ±5	60/70
Specific Gravity	1.18
Tensile Strength, Mpa	11
Elongation at Break, %	500
Brittle Temperature °C	-73
Max Operating Temperature, °C (Temperature range can be extended for short duration)	-45°/+200°C
Compression Set (22 Hours At 177°C)	20%

Electrical (Post-cured samples)

Volume Resistivity, cm	10 ¹⁵
Dielectric Strength, KV/mm (1mm Thick Sample)	23
Dissipation Factor, Tan (50 Hz)	40 x 10 ⁻⁴
Dielectric Constant (50 Hz)	2.9

Thermal

Thermal Conductivity, Watts/Km 0°-90°C (Kelvin/M)	0.15
90°-260°C	Max 0.17

Technical Grade Extruded Silicone Rubber

Variations in colour to BS or RAL spec numbers available to special order (chart available).

Standard Extrusion Tolerances To BS3734 Class E2

Nominal Above	Dimension Up To	(Values In mm) +/-
0.0	2.5	0.20
2.5	4.0	0.25
4.0	6.3	0.35
6.3	10.0	0.40
10.0	16.0	0.50
16.0	25.0	0.70
25.0	40.0	0.80

Specific Design Tolerances

Achievable to +/- 0.1mm when required.