

TECHNICAL DATA SHEET

Ministry of Defence, General Purpose Solid Silicone Rubber - Sheeting

Grades: KSi50DTD, KSi60DTD & KSi70DTD

Temperature Range: -60°C to 230°C

AVAILABILITY

The KSi range of Silicone Rubbers has been specifically designed to produce silicone sheeting and can be purchased with self-adhesive backing. They are particularly suited for various engineering applications, and are suitable for use in the food and beverage industry. There is a full range of standard colours available and Silicone Engineering has the capability to colour match to customer requirements.

SPECIFICATIONS

These products meet the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(iv) and (a)(1)(v) horizontal flammability tests.

GENERAL CHARACTERISTICS FOR SILICONE RUBBER

Brittle Point	-80°C	ASTM D746
Limiting Oxygen Index	24.0 %	BS 2872 Part 1
Thermal Conductivity	0.24 W.m ⁻¹ .K ⁻¹	VDE 0304
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	
Dielectric Strength	23 kV.mm ⁻¹	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor @ 50c/s	3x10 ⁻⁴	VDE 0303
Volume Resistivity	3x10 ¹⁵ Ω.cm	VDE 0303

Note: During manufacture, and after initial curing, these products are post cured for 24 hours @ 250°C. The grades are then suitable for intermittent use up to 250°C.

Other grades of silicone rubber available from Silicone Engineering are:

- * General Purpose Grades
- * Cellular silicone Products
- * High Temperature Grades
- * High Tear Grades
- * Flame Retardant Grades
- * Low Combustion Hazard Grades

This wide range of grades and production capability in silicone rubber is only available from



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MECHANICAL PROPERTIES

Property	Units	KSil50DTD		KSil60DTD		KSil70DTD		Test Method
		Specification Limits	Typical Value	Specification Limits	Typical Value	Specification Limits	Typical Value	
Hardness	IRHD	50 +5/-4	51	60 +5/-4	62	70 +5/-4	72	BSISO 48
Tensile Strength	MPa	5.5 min.	7.0	5.5 min.	8.0	5.5 min.	8.0	BSISO 37
Elongation to Failure	%	280 min.	290	250 min.	280	200 min.	250	BSISO 37
Compression Set 24 hours @ 150°C	%	25 max.	18	25 max.	12	25 max.	20	BS 903 pt A6 Type B
Change in Properties after heat ageing for 336 hours @ 200°C								
Hardness Change	IRHD	+7/-3 max.	+5	+7/-3 max.	+5	+7/-3 max.	+5	BSISO 48
Tensile Strength Change	%	-20 max.	-10	-20 max.	-8	-20 max.	-8	BSISO 37
Elongation to Failure Change	%	-30 max.	-18	-30 max.	-10	-30 max.	+6	BSISO 37