



HIGH TEMPERATURE SILICONE RUBBER

MATERIAL SPECIFICATION SHEET

Grades:	GP40THT GP50THT GP60THT GP70THT
Temperature Range:	-60°C (-76°F) to 300°C (572°F)
	Up to 315°C (599°F) Intermittent short term

SPECIFICATIONS

Contain only ingredients that are listed by the American Food and Drugs Administration (FDA) under the 21 CFR number 177-2600.

These products meet the flammability requirements of FAR 25.853 (a) (1) (iv) and (a) (1) (v) horizontal flammability tests.

GENERAL CHARACTERISTICS

Test	Result	Standard
Brittle Point	-80 °C (- 112°F)	ASTM D146
Limiting Oxygen Index	24.0 %	BS2872 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 @ 50 c/s	3 x 10 ⁻⁴	VDE 0303
Volume Resistivity	3 x 10 ¹⁵ Ω.cm	VDE 0303

ENVIRONMENT RESISTANCE

Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionizing radiation and weathering in general.

MECHANICAL PROPERTIES ON SECOND SHEET



The company's products are used for a multiplicity of purposes and as the company has no control over the method of their applications or use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise, as to their products and/or their fitness for any particular purpose. Any technical co-operation between the company and the customer is given for customers assistance only and without liability on the part of the company

MECHANICAL PROPERTIES

Property	Units	GP40THT		GP50THT		GP60THT		GP70THT		Test Method
		Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	Spec Limits	Typical Value	
Hardness	Shore A	40±5	44	50±5	54	60±5	64	70±5	70	ASTM D2240 DIN ISO 7619-1
Tensile Strength	MPa	7.0 min	7.1	7.5 min	8.2	8.5 min	9.4	9.0 min	10.7	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1 ISO 37 type 1
	Psi	1015 min	1030	1088 min	1189	1233 min	1363	1305 min	1552	
Elongation to Failure	%	300 min	396	300 min	387	300 min	362	280 min	332	ASTM D412 die C DIN 53504 type S1
Tear Strength	N/mm	12.0 min	15.3	15.0 min	17.7	18.0 min	22.1	18.0 min	19.3	ASTM D624 die B
	Lb./in.	68.5 min	87.4	85.7 min	101.1	102.8 min	126.2	102.8 min	110.2	
Compression Set 24 Hours @ 150°C	%	35 max	13	30 max	11	30 max	11	30 max	10	BS 903 pt A6 type B DIN/ISO 815 type B
Compression Set 22 Hours @ 300°C	%	35 max	13	30 max	10	30 max	10	30 max	10	ASTM D395 method B Type 2



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