

IPOTEC

Innovation in Polymer Technology

Ipotec LLC, 41 Industrial Drive, Exeter, NH 03833, USA
Tel: (+1)(603) 778 2882 • Fax: (+1)(603) 778 2878 • <http://www.ipotec.com> • e-mail: info@ipotec.com

MATERIAL DATA: S40PT-S80PT SILICONE ELASTOMERS

S40PT – S80PT silicone elastomers are polysiloxanes which have been cross linked with a platinum catalyzed, addition cure system. They have excellent mechanical properties and are resistant to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation and weathering in general.

S40PT – S80PT grades are suitable for continuous use at temperatures between -60°F (-50°C) and 400°F (204°C) and for intermittent use from -80°F (-62°C) to 500°F (260°C).

Natural translucent S40PT – S80PT products contain only ingredients that are listed under FDA 21 CFR 177-2600 and are USP Class VI compliant. Many colors can also be formulated within FDA requirements.

Mechanical, Electrical and Thermal Properties

Property	Test Method	Typical Value				
		S40PT	S50PT	S60PT	S70PT	S80PT
Durometer (ShA)	ASTM D2240	40 +/-5	50 +/-5	60 +/-5	70 +/-5	80 +/-5
Tensile Strength (psi)	ASTM D412	1495	1400	1465	1360	1175
Tear Strength (ppi)	ASTM D624 B	135	200	200	220	100
Elongation (%)	ASTM D412	850	840	710	600	290
Specific Gravity	ASTM D792	1.13	1.14	1.16	1.18	1.18
Dielectric Strength (V/mil)	ASTM D149	500	500	500	500	500
Brittle Point	ASTM D2137	-112°F	-112°F	-112°F	-112°F	-112°F
Compression Set 22 hrs / 175°C (347°F)	ASTM D395 B	40%	40%	40%	40%	40%

Unless specifically stated data relates to general-purpose materials. Some properties of special grades may differ. Information provided in this data sheet is indicative and is given in good faith but without warranty, express or implied. Whilst test results are deemed to be reliable, performance of these products is dependent on conditions of use and it is the responsibility of the user to determine suitability for a particular application.