

IPOTEC

Innovation in Polymer Technology

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MATERIAL DATA: S10XT - S90XT EXTREME TEMPERATURE SILICONE ELASTOMERS

S10XT – S90XT silicone elastomers are polysiloxanes which have been cross linked with an organic peroxide and which contain high performance heat stability additives. They have excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation and weathering in general.

S10XT – S90XT grades are suitable for continuous use at temperatures between -60°F (-50°C) and 520°F (270°C) and for intermittent use from -80°F (-62°C) to 570°F (300°C). Standard colors are natural opaque or dark grey. Special colors may be possible.

Mechanical, Electrical and Thermal Properties

Property	Test Method	Typical Value								
		S10XT	S20XT	S30XT	S40XT	S50XT	S60XT	S70XT	S80XT	S90XT
Durometer (ShA)	ASTM D2240	10 +10/-0	20 +8/-3	30 +8/-3	40 +/-5	50 +/-5	60 +/-5	70 +/-5	80 +/-5	90 +0/-10
Tensile Strength (psi)	ASTM D412	900	1250	1300	1375	1525	1500	1550	1450	1200
Tear Strength (ppi)	ASTM D624 B	100	100	95	90	115	115	125	140	110
Elongation (%)	ASTM D412	1200	920	700	550	480	390	400	400	300
Specific Gravity	ASTM D792	1.07	1.11	1.11	1.12	1.15	1.17	1.18	1.19	1.20
Dielectric Strength (V/mil)	ASTM D149	500	500	500	500	500	500	500	500	500
Brittle Point	ASTM D2137	-112°F	-112°F	-112°F	-122°F	-112°F	-112°F	-112°F	-112°F	-112°F
Compression Set 22 hrs / 175°C (347°F)	ASTM D395 B	40%	35%	45%	45%	50%	50%	40%	50%	55%

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.