

# Somos® NeXt

## Technical Data: Mechanical Properties

		Somos® NeXt Postcure	
ASTM Method	Property Description	Metric	Imperial
D638M	Tensile Modulus	2,370 – 2,490 MPa	343 – 361 ksi
D638M	Tensile Strength at Break	31.0 – 34.6 MPa	4.5 – 5.0 ksi
D638M	Tensile Strength at Yield	41.1 – 43.3 MPa	5.9 – 6.3 ksi
D638M	Elongation at Break	8 – 10%	8 – 10%
D638M	Elongation at Yield	3%	3%
D638M	Poisson's Ratio	0.42 – 0.44	0.42 – 0.44
D790M	Flexural Strength	67.8 – 70.8 MPa	9.8 – 10.3 ksi
D790M	Flexural Modulus	2,415 – 2,525 MPa	350 – 366 ksi
D2240	Hardness (Shore D)	82	82
D256A	Izod Impact (Notched)	0.47 – 0.52 J/cm	0.88 – 0.97 ft-lb/in
D570-98	Water Absorption	0.39 – 0.41%	0.39 – 0.41%

## Technical Data: Thermal/Electrical Properties

		Somos® NeXt Postcure	
E831-05	C.T.E. -40°C - 0°C (-40°F – 32°F)	71.5 – 74.3 $\mu\text{m}/\text{m}^\circ\text{C}$	39.7 – 41.3 $\mu\text{in}/\text{in}^\circ\text{F}$
E831-05	C.T.E. 0°C - 50°C (32°F – 122°F)	106.5 – 114.5 $\mu\text{m}/\text{m}^\circ\text{C}$	59.2 – 63.6 $\mu\text{in}/\text{in}^\circ\text{F}$
E831-05	C.T.E. 50°C - 100°C (122°F – 212°F)	168.6 – 175.4 $\mu\text{m}/\text{m}^\circ\text{C}$	93.7 – 97.4 $\mu\text{in}/\text{in}^\circ\text{F}$
E831-05	C.T.E. 100°C - 150°C (212°F – 302°F)	168.8 – 176.4 $\mu\text{m}/\text{m}^\circ\text{C}$	93.8 – 98.0 $\mu\text{in}/\text{in}^\circ\text{F}$
D150-98	Dielectric Constant 60 Hz	4.65	4.65
D150-98	Dielectric Constant 1KHz	3.97	3.97
D150-98	Dielectric Constant 1MHz	3.62	3.62
D149-97a	Dielectric Strength	14.9 – 15.5 kV/mm	379 – 395 V/mil
E1545-00	Tg	43 – 47 °C	109 – 116°F
D648	HDT @ 0.46 MPa (66 psi)	55 – 57°C	131 – 134°F
D648	HDT @ 1.81 MPa (264 psi)	48 – 51°C	118 – 124°F

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