

Technical Data Sheet
Type: Estane® 2103-55D is a thermoplastic polyurethane elastomer.

Feature: Load bearing capacity.

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical⁽¹⁾					
Shore Hardness	ASTM D 2240	96 55	A D	96 55	A D
Specific Gravity	ASTM D 792	1.15		1.15	
Melt Flow Rate, 190°C/8.7kg	ASTM D 1238	-	g/10min	15	g/10min
Taber Abrasion Resistance, 1000g, 1000 cycles; H-22 wheel (coarser)	ASTM D 1044	-	mg	80	mg
Mold Shrinkage, Transverse direction	ASTM D 955	0.5-0.9	%	0.5-0.9	%
Mold Shrinkage, Flow direction	ASTM D 955	0.6-0.7	%	0.6-0.7	%
Mechanical⁽²⁾					
Tensile Modulus -50% elongation -100% elongation -300% elongation	ASTM D 412	1950 2400 4600	psi psi psi	13.4 16.5 31.7	MPa MPa Mpa
Ultimate Elongation	ASTM D 412	425	%	425	%
Ultimate Tensile Strength	ASTM D 412	6400	psi	44.1	Mpa
Elongation Set After Break	ASTM D 412	30	%	30	%
Tear Strength, Die C	ASTM D 624	900	PLI	158	KN/m
Compression Set, Method B -22 hrs @ 25°C -22 hrs @ 70°C	ASTM D 395	25 30	% %	25 30	% %
Flexural Modulus	ASTM D 790	25,000	psi	172	MPa
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	219	°F	104	°C
CLTE, in-flow	ASTM D 696	72.3	in/in/°F	130	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		190-220	°F	88-104	°C
Melt Temperature (Molding)		410-440	°F	210-227	°C
Mold Temperature		60-140	°F	16-60	°C

¹Typical properties; not to be construed as sales specifications. Fabrication conditions, part design, additives, processing aids, finishing materials and use conditions can all affect the integrity, performance and regulatory status of finished goods.

¹ 0.02% or less of moisture content should be obtained before extrusion.

²Tests conducted on 0.126 inch (3.2mm) injection molded specimen, unannealed, unless noted.

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