

Technical Data Sheet

Type: Estane® 2103-90AENH is a thermoplastic polyurethane elastomer.

Feature: NSF Standard 61 certified.

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical⁽¹⁾					
Shore Hardness	ASTM D 2240	90 47	A D	90 47	A D
Specific Gravity	ASTM D 792	1.14		1.14	
Melt Flow Rate, 224°C/8700g	ASTM D 1238	-	g/10min	9	g/10min
Taber Abrasion, Wt Loss, 1000g wt 1-1000g, H-22 (coarser)	ASTM D 1044	-	mg	50	mg
Mold Shrinkage, Transverse direction	ATSM D 955	0.6	%	0.6	%
Mold Shrinkage, Flow direction	ATSM D 955	0.7-1.0	%	0.7-1.0	%
Mechanical⁽²⁾					
Tensile Modulus -50% elongation -100% elongation -300% elongation	ASTM D 412	900 1300 2500	psi psi psi	6.2 9.0 17.2	MPa MPa Mpa
Ultimate Elongation	ASTM D 412	560	%	560	%
Ultimate Tensile Strength	ASTM D 412	5500	psi	48.2	Mpa
Elongation Set After Break	ASTM D 412	60	%	60	%
Tear Strength, Die C	ASTM D 624	720	PLI	126	KN/m
Compression Set, Method B -22 hrs @ 25°C -22 hrs @ 70°C	ASTM D 395	25 40	% %	25 40	% %
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	194	°F	90.0	°C
Glass Transition Temperature	DSC	-30	°F	-34	°C
CLTE, in-flow	ASTM D 696	86	in/in/°F	155	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		190-220	°F	88-104	°C
Melt Temperature (Molding)		380-410	°F	193-210	°C
Melt Temperature (Extrusion)		370-400	°F	188-204	°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.

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

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