

Technical Data Sheet

Type: Estane® 2103-70A is a thermoplastic polyurethane elastomer.

Feature: High MVTR.

Properties	Test Method	English		S.I.	
		Values ^t	Units	Values ^t	Units
Physical ⁽¹⁾			•		
Shore Hardness	ASTM D 2240	72 +/- 3	А	72 +/- 3	А
Specific Gravity	ASTM D 792	1.06		1.06	
Melt Flow Rate, 190°C/8.7kg	ASTM D 1238	-	g/10min	11	g/10min
Taber Abrasion Resistance, 1000g, 1000 cycles; H-22 wheel (coarser)	ASTM D 1044	-	mg	3	mg
Mold Shrinkage, Transverse direction	ASTM D 955	-0.3-0.8	%	-0.3-0.8	%
Mold Shrinkage, Flow direction	ASTM D 955	0.4-0.5	%	0.4-0.5	%
Mechanical ⁽²⁾					
Tensile Modulus -50% elongation -100% elongation -300% elongation	ASTM D 412	300 440 750	psi psi psi	2.1 3.0 5.2	MPa MPa Mpa
Ultimate Elongation	ASTM D 412	730	%	730	%
Ultimate Tensile Strength	ASTM D 412	3580	psi	24.7	Мра
Elongation Set After Break	ASTM D 412	50	%	50	%
Tear Strength, Die C	ASTM D 624	300	lbf/in	53	KN/m
Compression Set, Method B -22 hrs @ 25°C -22 hrs @ 70°C	ASTM D 395	25 75	% %	25 75	% %
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	168	°F	75.6	°C
Glass Transition Temperature	DSC	-92	°F	-69	°C
CLTE, in-flow	ASTM D 696	97	in/in/°F	175	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		180-200	°F	82-93	°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.

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