

Technical Data Sheet
Type: Estane[®] 2103-80AEN 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	83	A	83	A
Specific Gravity	ASTM D 792	1.13		1.13	
Melt Flow Rate, 190°C/8.7kg	ASTM D 1238	-	g/10min	20	g/10min
Taber Abrasion Resistance, 1000g, 1000 cycles; H-22 wheel (coarser)	ASTM D 1044	-	mg	20	mg
Mold Shrinkage, Transverse direction	ASTM D 955	0-0.6	%	0-0.6	%
Mold Shrinkage, Flow direction	ASTM D 955	0.5-0.7	%	0.5-0.7	%
Mechanical⁽²⁾					
Tensile Modulus	ASTM D 412	550	psi	3.8	MPa
-50% elongation		870	psi	6.0	MPa
-100% elongation		1600	psi	11.0	Mpa
-300% elongation					
Ultimate Elongation	ASTM D 412	650	730	650	%
Ultimate Tensile Strength	ASTM D 412	4200	psi	28.9	Mpa
Elongation Set After Break	ASTM D 412	40	%	40	%
Tear Strength, Die C	ASTM D 624	500	66.5	87.6	KN/m
Compression Set, Method B	ASTM D 395				
-22 hrs @ 25°C		30	%	30	%
-22 hrs @ 70°C		75	%	75	%
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	162	°F	72.2	°C
Glass Transition Temperature	DSC	-49	°F	-45	°C
CLTE, in-flow	ASTM D 696	95	in/in/°F	171	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		180-200	°F	82-93	°C
Melt Temperature (Molding)		370-400	°F	188-204	°C
Melt Temperature (Extrusion)		360-390	°F	182-199	°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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