Technical Data Sheet

Type: Estane® 2103-80AE is a thermoplastic polyurethane elastomer.

Properties	Test Method	English		S.I.	
		Values[t]	Units	Values[t]	Units
Physical[(1)]					
Shore Hardness	ASTM D 2240	82	A	82	A
Specific Gravity	ASTM D 792	1.13		1.13	
Melt Flow Rate, 224C/1200g	ASTM D 1238	-	g/10min	40	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	-0.2-0.5	%	-0.2-0.5	%
Mold Shrinkage, Flow direction	ASTM D 955	0.6-0.8	%	0.6-0.8	%
Mechanical[(2)]					
Tensile Modulus -50% elongation -100% elongation -300% elongation	ASTM D 412	 600 800 1700	 psi psi psi	 4.1 5.5 11.7	 MPa MPa Mpa
Ultimate Elongation	ASTM D 412	600	730	600	%
Ultimate Tensile Strength	ASTM D 412	5000	psi	34.5	Mpa
Elongation Set After Break	ASTM D 412	70	%	70	%
Tear Strength, Die C	ASTM D 624	600	66.5	105	KN/m
Compression Set, Method B -22 hrs @ 25°C -22 hrs @ 70°C	ASTM D 395	 30 33	 % %	 30 33	 % %
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	185	°F	85.0	°C
Glass Transition Temperature	DSC	-40	°F	-40	°C
CLTE, in-flow	ASTM D 696	93.2	in/in/°F	168	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		180-200	°F	82-93	°C
Melt Temperature (Molding)		360-410	°F	182-210	°C
Melt Temperature (Extrusion)		360-390	°F	182-199	°C
Mold Temperature		60-140	°F	16-60	°C

[1]Typical 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.

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