Technical Data Sheet

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

Feature: Film resin for injection blow molding.

Properties	Test Method	English		S.I.	
		Values[t]	Units	Values[t]	Units
Physical[(1)]					
Shore Hardness	ASTM D 2240	86	A	86	A
Specific Gravity	ASTM D 792	1.13		1.13	
Melt Flow Rate, 190°C/8.7kg	ASTM D 1238	-	g/10min	13	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	-0.2-0.6	%	-0.2-0.6	%
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	 700 925 1790	 psi psi psi	 4.8 6.4 12.3	 MPa MPa Mpa
Ultimate Elongation	ASTM D 412	580	730	580	%
Ultimate Tensile Strength	ASTM D 412	5000	psi	34.5	Mpa
Elongation Set After Break	ASTM D 412	40	%	40	%
Tear Strength, Die C	ASTM D 624	460	66.5	80.6	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	178	°F	81.1	°C
Glass Transition Temperature	DSC	-44	°F	-42	°C
CLTE, in-flow	ASTM D 696	92.1	in/in/°F	166	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		180-200	°F	82-93	°C
Melt Temperature (Molding)		360-390	°F	182-199	°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.