

PELLETHANE* 2102-75A

Thermoplastic Polyurethane Elastomer

- Memory and elasticity
- Impact modification

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical					
Specific Gravity	ASTM D 792	1.17		1.17	
Mold Shrinkage (1/16" [1.6 mm] thick plaques)					
MD		0.4-0.6	%	0.4-0.6	%
TD		-0.2-0.5	%	-0.2-0.5	%
Mechanical					
Durometer Hardness, Shore A (+/-4)	ASTM D 2240	77A		77A	
Tensile Modulus at	ASTM D 412				
50% elongation		430	psi	3.0	MPa
100% elongation		680	psi	4.7	MPa
300% elongation		1400	psi	9.7	MPa
Ultimate Tensile Strength	ASTM D 412	5400	psi	37.2	MPa
Ultimate Elongation	ASTM D 412	535	%	535	%
Elongation Set After Break	ASTM D 412	30	%	30	%
Tear Strength, Die "C"	ASTM D 624	500	PLI	87.6	KN/m
Compression Set	ASTM D 395				
22 hours at 25°C (77°F)	Method B	25	%	25	%
22 hours at 70°C (158°F)		28	%	28	%
Taber Abrasion Resistance	ASTM D 1044				
1000 g, 1,000 cycles; H-22 wheel (coarser)				20	mg
Flexural Modulus	ASTM D 790	–	psi	–	MPa
Thermal					
Vicat Softening Temperature	ASTM D 1525	179	°F	81.6	°C
Coefficient of Linear Thermal Expansion	ASTM D 696	95.0	10 ⁻⁶ in/in/°F	171	10 ⁻⁶ mm/mm/°C
Glass Transition Temperature	DSC	-39	°F	-39	°C
Rheological Properties					
Melt Index, 224°C, 1200 g	ASTM D 1238	–	–	25	g/10 min
Processing Information					
Recommended Drying Temperature		180-200	°F	82-93	°C
Recommended Melt Temperature (Molding)		390-420	°F	199-216	°C
Recommended Melt Temperature (Extrusion)		370-400	°F	188-204	°C
Recommended Mold Temperature		60-140	°F	16-60	°C

[†]Typical values, not to be construed as specifications. Users should confirm results by their own tests.

