

PELLETHANE* 2102-80A

Thermoplastic Polyurethane Elastomer

- Low compression set

Properties	Test Method	Values ⁽¹⁾
Physical		
Specific Gravity	ASTM D 792	1.18
Mould Shrinkage (1.6 mm [1/16"] thick plaques), %		
MD		0.5-0.6
TD		0.2-0.5
Mechanical		
Durometer Hardness, Shore A (+/-4)	ASTM D 2240	84A
Tensile Modulus at	ASTM D 412	
50% elongation, MPa (psi)		3.9 (560)
100% elongation, MPa (psi)		5.5 (800)
300% elongation, MPa (psi)		13.1 (1900)
Ultimate Tensile Strength, MPa (psi)	ASTM D 412	40 (5800)
Ultimate Elongation, %	ASTM D 412	575
Elongation Set After Break, %	ASTM D 412	50
Tear Strength, Die "C", KN/m (pli)	ASTM D 624	105 (600)
Compression Set	ASTM D 395	
22 hours at 25 °C (77 °F), %	Method B	28
22 hours at 70 °C (158 °F), %		28
Taber Abrasion Resistance	ASTM D 1044	
1000 g, 1,000 cycles; H-22 wheel (coarser), mg		10
Flexural Modulus, MPa (psi)	ASTM D 790	-
Thermal		
Vicat Softening Temperature, °C (°F)	ASTM D 1525	85.0 (185)
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ mm/mm/°C	ASTM D 696	158 (87.7 10 ⁻⁶ in/in/°F)
Glass Transition Temperature, °C (°F)	DSC	-40 (-40)
Rheological		
Melt Index, 190°C, 8700 g, g/10 min	ASTM D 1238	4
Processing Information		
Recommended Drying Temperature, °C (°F)		80-95 (180-200)
Recommended Melt Temperature (Moulding), °C (°F)		200-215 (390-420)
Recommended Melt Temperature (Extrusion), °C (°F)		-
Recommended Mould Temperature, °C (°F)		15-60 (60-140)

(1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.

