



PELLETHANE 2101-85A

Thermoplastic Polyurethane Elastomer

Overview

Applications

Physical Properties ⁽¹⁾	Test Method	English Units	SI Units
Hardness Shore A	ASTM D 2240	88A	88A
Specific Gravity	ASTM D 792	1.13	1.13
Melt Flow Rate 224°C/1200g	ASTM D 1238	45 g/10 min	35-55 g/10 min
Mechanical Properties ⁽²⁾			
Tensile Modulus	ASTM D 412		
50% elongation		-- psi	-- MPa
100% elongation		1160 psi	8.0 MPa
300% elongation		1870 psi	12.9 MPa
Ultimate Elongation	ASTM D 412	590 %	590 %
Ultimate Tensile Strength	ASTM D 412	4070 psi	28.0 MPa
Tear Strength, Die C	ASTM D 624	630 PLI	111 KN/m
Compression Set, Method B	ASTM D 395		
22 hrs @ 25°C		-- %	-- %
22 hrs @ 70°C (molded)		81 %	81 %
22 hrs @ 70°C (cured)		37 %	37 %
Thermal Properties			
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	228 °F	109 °C
Glass Transition Temperature	DSC	-11 °F	-24 °C
Processing Conditions (Typical)			
Drying Temperature (air dew point <-40C)		180-220 °F	82-93 °C
Melt Temperature (Molding)		400-430 °F	204-221 °C
Melt Temperature (Extrusion)		380-420 °F	193-216 °C
Mold Temperature		80-120 °F	27-49 °C

Notes

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 0.125 inch (3.2 mm) injection molded specimen, unannealed, unless noted.

