



PELLETHANE 2363-90A

Thermoplastic Polyurethane Elastomer

Overview

- USP Class VI

Applications

Physical Properties ⁽¹⁾	Test Method	English Units	SI Units
Hardness	ASTM D 2240		
Shore A		90A	90A
Specific Gravity	ASTM D 792	1.14	1.14
Melt Flow Rate	ASTM D 1238		
224°C/2160g		-- g/10 min	30 g/10 min
Taber Abrasion, Wt Loss, 1000g wt	ASTM D 1044		
1-1000g, H-22 (coarser)		-- mg	10 mg
Mold Shrinkage, Transverse direction	ASTM D 955	0.5-0.6 %	0.5-0.6 %
Mold Shrinkage, Flow direction	ASTM D 955	0.5-0.6 %	0.5-0.6 %
Mechanical Properties ⁽²⁾			
Tensile Modulus	ASTM D 412		
50% elongation		1200 psi	8.3 MPa
100% elongation		1700 psi	11.7 MPa
300% elongation		3000 psi	20.7 MPa
Ultimate Elongation	ASTM D 412	500 %	500 %
Ultimate Tensile Strength	ASTM D 412	5850 psi	40.3 MPa
Elongation Set After Break	ASTM D 412	30 %	30 %
Tear Strength, Die C	ASTM D 624	570 PLI	100 KN/m
Compression Set, Method B	ASTM D 395		
22 hrs @ 25°C		25 %	25 %
22 hrs @ 70°C		30 %	30 %
Flexural Modulus	ASTM D 790	11,000 psi	75.8 MPa
Thermal Properties			
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	230 °F	110 °C
Glass Transition Temperature	DSC	-22 °F	-30 °C
CLTE, in-flow, -30 to -80°C	ASTM D 696	87 in/in/°F	157 mm/mm/°C
Processing Conditions (Typical)			
Drying Temperature (air dew point <-40C)		190-220 °F	88-104 °C
Melt Temperature (Molding)		400-430 °F	204-221 °C
Mold Temperature		60-140 °F	16-60 °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.

