PELLETHANE 2363-55D

Thermoplastic Polyurethane Elastomer

Overview

- USP Class VI

Applications

Physical Properties[1]	Test Method	English Units	SI Units
Hardness	ASTM D 2240		
Shore D		55D	55D
Specific Gravity	ASTM D 792	1.15	1.15
Melt Flow Rate	ASTM D 1238		
224˚C/2160g		-- g/10 min	10 g/10 min
Taber Abrasion, Wt Loss, 1000g wt	ASTM D 1044		
1-1000g, H-22 (coarser)		-- mg	80 mg
Mold Shrinkage, Transverse direction	ASTM D 955	0.4-0.8 %	0.4-0.8 %
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		1900 psi	13.1 MPa
100% elongation		2500 psi	17.2 MPa
300% elongation		4280 psi	29.5 MPa
Ultimate Elongation	ASTM D 412	390 %	390 %
Ultimate Tensile Strength	ASTM D 412	6900 psi	47.5 MPa
Elongation Set After Break	ASTM D 412	30 %	30 %
Tear Strength, Die C	ASTM D 624	650 PLI	114 KN/m
Compression Set, Method B	ASTM D 395		
22 hrs @ 25˚C		25 %	25 %
22 hrs @ 70˚C		30 %	30 %
Fexural Modulus	ASTM D 790	25,000 psi	172 MPa
Thermal Properties			
Vicat Softening Point (120˚C/hr, 9.8N)	ASTM D 1525	229 ˚F	109 ˚C
CLTE, in-flow, -30 to -80˚C	ASTM D 696	79.4 in/in/˚F	143 mm/mm/˚C
Processing Conditions (Typical)			
Drying Temperature (air dew point <-40C)		190-220 ˚F	88-104 ˚C
Melt Temperature (Molding)		410-440 ˚F	210-227 ˚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.