

Pellethane® 2363-55DE TPU

Type: Pellethane 2363-55DE is a thermoplastic polyurethane elastomer

Features: USP Class VI^(a)

Properties	Test Method	English		S.I.	
		Values [†]	Units	Values [†]	Units
Physical ⁽¹⁾					
Shore Hardness	ASTM D 2240	53	D	53	D
Specific Gravity	ASTM D 792	1.15		1.15	
Melt Flow Rate, 224°C/2.16kg	ASTM D 1238	-	kg/10 min	30	kg/10 min
Taber Abrasion, Wt Loss, 1000g wt 1-1000g, H-22 (coarser)	ASTM D 1044	-	mg	70	mg
Mold Shrinkage, Transverse direction	ASTM D 955	0.6-0.8	%	0.6-0.8	%
Mold Shrinkage, Flow direction	ASTM D 955	0.6-0.8	%	0.6-0.8	%
Mechanical ⁽²⁾					
Tensile Modulus	ASTM D 412	1700	psi	11.7	MPa
50% elongation		2300	psi	15.9	MPa
100% elongation		4300	psi	29.6	MPa
300% elongation					
Ultimate Elongation	ASTM D 412	450	%	450	%
Ultimate Tensile Strength	ASTM D 412	6500	psi	44.8	MPa
Elongation Set After Break	ASTM D 412	30	%	30	%
Tear Strength, Die C	ASTM D 624	600	PLI	105	KN/m
Compression Set, Method B	ASTM D 395	30	%	30	%
22 hrs @ 25°C		75	%	75	%
22 hrs @ 70°C					
Flexural Modulus	ASTM D 790	22,000	Psi	152	MPa
Thermal					
Vicat Softening Point (120°C/hr, 9.8N)	ASTM D 1525	201	°F	93.9	°C
CLTE, in-flow, -30 to -80°C	ASTM D 696	78.4	in/in/°F	141	mm/mm/°C
Processing Conditions (Typical)					
Drying Temperature (air dew point <-40C)		190-220	°F	88-104	°C
Melt Temperature (Molding)		390-420	°F	199-216	°C
Mold Temperature (Extrusion)		380-410	°F	193-210	°C
Mold Temperature		60-140	°F	16-60	°C

- 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.

- Test conducted on 0.125 inch (3.2 mm) injection molded specimen, unannealed, unless noted.

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