

AuroraTec™ TPU460-NA

 Aurora Material Solutions, LLC - *Thermoplastic Polyurethane Elastomer*
General Information
Product Description

AuroraTec™ TPU460-NA is a Natural. Thermoplastic Polyurethane Elastomer Injection Molding Grade.,

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Abrasion Resistant • Chemical Resistant • Fast Molding Cycle • Good Toughness • Hydrolysis Resistant
Uses	• Automotive Interior Parts • Shock Absorbing Pads
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.09		ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress			DIN 53504
Break, 73°F	3600	psi	
Break, 73°F ²	435	psi	
Break, 73°F ³	735	psi	
Tensile Strain (Break)	880	%	DIN 53504
Abrasion Resistance ⁴	33.0	mm ²	ISO 4649
Tensile Storage Modulus			
-4°F	6092	psi	ISO 6721
68°F	1015	psi	
140°F	725	psi	ISO 6721
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ⁵ (73°F)	166	lbf/in	ISO 34-1
Compression Set			ISO 815
73°F, 72 hr	19	%	
158°F, 24 hr ⁶	41	%	
Rebound Resilience	45	%	ISO 4662
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 1 sec, 73°F)	65		ISO 7619

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	195	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	390 to 430	°F
Mold Temperature	68	°F

Notes
¹ Typical properties: these are not to be construed as specifications.

² 100 % Strain


³ 300% Strain

⁴ mm³

⁵ 20 in/min

⁶ Method A

