

AuroraTec™ TPU825-NA

Aurora Material Solutions, LLC - Thermoplastic Polyester Elastomer

General Information

Product Description

AuroraTec™ TPU825-NA is a Natural, Thermoplastic Polyester Elastomer Injection Molding Grade.,

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Chemical Resistant
Uses	• Industrial Applications
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.10		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/21.6 kg)	25	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.015 to 0.017	in/in	ASTM D955
Water Absorption (24 hr)	0.50	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
5.0% Strain	427	psi	
10% Strain	569	psi	
50% Strain	996	psi	
Tensile Strength (Break)	1280	psi	ASTM D638
Tensile Elongation (Break)	> 400	%	ASTM D638
Flexural Modulus	2840	psi	ASTM D790
Flexural Strength	284	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Unnotched Izod Impact			ASTM D4812
-40°F	No Break		
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	28		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	120	°F	ASTM D648
Vicat Softening Temperature	210	°F	ASTM D1525 ²
Melting Temperature	316	°F	ASTM D2117

Notes

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

² Rate B (120°C/h)

