

ColorRx® TPEU9500-90A-RX
Americhem - Thermoplastic Polyurethane Elastomer
General Information
Product Description

TPEU9500-90A-RX is an injection molding grade of aromatic polyether-based thermoplastic polyurethane (TPU) with Shore-A hardness of 90. It has good chemical and wear resistance and good flexibility. Suitable for healthcare applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible • E-beam Sterilizable	• Ethylene Oxide Sterilizable • Excellent Colorability	• Radiation Sterilizable
Uses	• Engineering Parts	• Medical/Healthcare Applications	• Surgical Instruments
Agency Ratings	• ISO 10993	• USP Class VI	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Molding Shrinkage - Flow	8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus ²	6000	psi	ASTM D790
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength ² (Break)	5800	psi	ASTM D412
Tensile Elongation (Break)	520	%	ASTM D412
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	90		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 200	°F
Drying Time	2.0 to 6.0	hr
Rear Temperature	380 to 400	°F
Middle Temperature	385 to 405	°F
Front Temperature	385 to 405	°F
Nozzle Temperature	390 to 410	°F
Processing (Melt) Temp	390 to 410	°F
Mold Temperature	60 to 100	°F
Back Pressure	50.0 to 800	psi
Screw Speed	40 to 80	rpm

Notes

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

² 2.0 in/min

