

ColorFast® TPES5000-43A
Americhem - Thermoplastic Elastomer
General Information
Product Description

TPES5000-43A is an injection molding grade styrenic block copolymer (TPE-S) with excellent processability and colorability. It is specifically designed for nylon overmolding applications and is suitable for a wide range of thermoplastic elastomer applications.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Features	• Excellent Colorability
Uses	• Consumer Applications • Industrial Applications • Household Goods • Industrial Parts
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.09		ASTM D792
Molding Shrinkage - Flow	0.019 to 0.026	in/in	ASTM D955
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	150	psi	ASTM D412
Tensile Strength	290	psi	ASTM D412
Tensile Elongation (Break)	510	%	ASTM D412
Tear Strength	90.0	lbf/in	ASTM D624
Compression Set (73°F, 22 hr)	22	%	ASTM D395B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 10 sec, 73°F)	43		ASTM D2240
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity	31.0	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	200 to 220	°F
Drying Time	2.0	hr
Rear Temperature	385 to 410	°F
Middle Temperature	390 to 410	°F
Front Temperature	390 to 410	°F
Nozzle Temperature	395 to 420	°F
Processing (Melt) Temp	395 to 420	°F
Mold Temperature	70 to 120	°F
Back Pressure	800	psi
Screw Speed	40 to 80	rpm

