

AuroraFlex™ EL 8170N

Aurora Material Solutions, LLC - *Thermoplastic Elastomer*

General Information

Product Description

EL 8170N is a colorable general purpose thermoplastic elastomer formulated for applications that require rubber like properties and a good surface finish. EL 8170N is well suited for consumer goods and industrial application requiring UV Stability. It can be over molded to polypropylene.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• UV Stabilizer		
Features	• General Purpose	• Good Surface Finish	
	• Good Colorability	• UV Stabilized	
Uses	• Consumer Applications	• Industrial Applications	
	• General Purpose	• Overmolding	
Processing Method	• Extrusion	• Injection Molding	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.16		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.5 g/10 min		ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	421	psi	ASTM D412
Tensile Strength (Break)	711	psi	ASTM D412
Tensile Elongation (Break)	590	%	ASTM D412
Tear Strength ²	146	lbf/in	ASTM D624
Compression Set			ASTM D395B
73°F, 22 hr	22	%	
158°F, 22 hr	55	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 5 sec)	70		ASTM D2240

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	345 to 376	°F
Front Temperature	354 to 385	°F
Nozzle Temperature	365 to 399	°F
Mold Temperature	70 to 100	°F
Injection Rate	Fast	
Back Pressure	50.0 to 99.9	psi
Screw Compression Ratio	2.5:1.0 to 3.0:1.0	
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	340	°F
Cylinder Zone 2 Temp.	360	°F
Cylinder Zone 3 Temp.	380	°F
Cylinder Zone 4 Temp.	380	°F
Cylinder Zone 5 Temp.	400	°F
Melt Temperature	380 to 420	°F
Die Temperature	380 to 420	°F

