

AuroraFlex™ CLR40

Aurora Material Solutions, LLC - Thermoplastic Elastomer

General Information

Product Description

CLR40 is a transparent thermoplastic elastomer that has been developed for applications that require resilience, high strength properties and a good surface finish. CLR40 is FDA compliant and well suited for consumer goods and industrial applications requiring U.V. stability. CLR40 can be overmolded onto polypropylene.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Additive	• UV Stabilizer
Features	• Good Surface Finish • Resilient • High Strength • UV Stabilized
Uses	• Consumer Applications • Industrial Applications • Overmolding
Agency Ratings	• FDA
Appearance	• Clear/Transparent
Processing Method	• Extrusion • Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.902		ASTM D792
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	87.0	psi	ASTM D412
Tensile Strength	943	psi	ASTM D412
Tensile Elongation (Break)	730	%	ASTM D412
Tear Strength	143	lbf/in	ASTM D624
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 10 sec)	40		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature ²	-86.8	°F	ASTM D2137

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	331 to 351	°F
Front Temperature	360 to 370	°F
Nozzle Temperature	379 to 399	°F
Mold Temperature	70 to 100	°F
Injection Rate	Fast	
Back Pressure	99.9 to 200	psi
Screw Compression Ratio	2.5:1.0 to 3.0:1.0	

Notes

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

² Procedure B

