

AuroraTec™ 1600 LG

Aurora Material Solutions, LLC - Polycarbonate + ABS

General Information

Product Description

Injection molding grade of Polycarbonate and Acrylonitrile Butadiene Styrene (PC/ABS) alloy. Offers high flow and inherently low gloss with hydrolytic stability, ease of processing, and mold release. Suited for both painted or mold-in color (MIC) applications. Contains post-industrial recycle (PIR).

General

Material Status	• Commercial: Active
Availability	• Europe • Latin America • North America
Recycled Content	• Post-Industrial (PIR)/Pre-Consumer
Features	• Anti-fogging • Good Processability • Low Gloss • Good Colorability • High Flow • Good Mold Release • Hydrolytically Stable
Uses	• Automotive Applications • Automotive Interior Parts
RoHS Compliance	• RoHS Compliant
Appearance	• Colors Available • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PC/ABS

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Density	1.13	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	25	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	25	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Molding Shrinkage - Flow (0.125 in)	0.40 to 0.60	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7900	psi	ASTM D638
Tensile Stress (Yield)	7660	psi	ISO 527-2
Tensile Elongation (Break)	110	%	ASTM D638
Tensile Strain (Break)	60	%	ISO 527-2
Flexural Modulus	335000	psi	ASTM D790
Flexural Modulus	336000	psi	ISO 178
Flexural Strength	12800	psi	ASTM D790
Flexural Stress	12100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F, 0.157 in	9.5	ft·lb/in ²	
73°F, 0.157 in	22	ft·lb/in ²	
Notched Izod Impact (73°F, 0.125 in)	12	ft·lb/in	ASTM D256
Gardner Impact	440	in·lb	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)	248	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed, 0.157 in)	250	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in)	220	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.157 in)	221	°F	ISO 75-2/A
Vicat Softening Temperature	255	°F	ASTM D1525 ²
Vicat Softening Temperature	252	°F	ISO 306/B120



Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.125 in, Self-Extinguishing)	0.0	in/min	ISO 3795
Flame Rating (0.06 in)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Fogging ³	100	%	SAE J1756

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 540	°F
Middle Temperature	490 to 550	°F
Front Temperature	490 to 550	°F
Nozzle Temperature	490 to 550	°F
Mold Temperature	140 to 180	°F
Injection Rate	Moderate-Fast	
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

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

² Rate B (120°C/h), Loading 2 (50 N)

³ Clear and Dry.

