AuroraTec™ 1400 EZ

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 with ease of processing and mold release. Suitable for non-painted and functional 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 Flow	• Good Mold Release • Good Processability	• High Flow
Uses	• 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	1.14		ASTM D792
Density	1.14	g/cm³	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)	7690	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	12000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F, 0.157 in	9.5	ft·lb/in²	
73°F, 0.157 in	22	ft·lb/in²	
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	460 to 510	°F
Middle Temperature	480 to 550	°F
Front Temperature	480 to 550	°F
Nozzle Temperature	480 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.