

AuroraTec™ 1814UXR-HR

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

Impact Modified Molding Grade PC/PBT Alloy with UV Stabilizer
 Excellent Impact Across a Wide Temperature Range
 Hydrolysis Resistant
 Extra Release for Ease of Demolding

Formerly known as EnCounter 1814UXR-HR

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Impact Modifier	• UV Stabilizer	
Features	• Good Mold Release	• Hydrolysis Resistant	• UV Stabilized
	• High Impact Resistance	• Impact Modified	
Uses	• Automotive Applications	• Lawn & Garden Equipment	
Appearance	• Black	• Colors Available	• Natural Color
Processing Method	• Injection Molding	• Profile Extrusion	

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19		ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	16 g/10 min		ASTM D1238
Molding Shrinkage - Flow (0.126 in)	8.0E-3 to 0.010	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	7500	psi	ASTM D638
Tensile Elongation (Break)	150	%	ASTM D638
Flexural Modulus	320000	psi	ASTM D790
Flexural Strength	10000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°F	7.0	ft·lb/in	
73°F	14	ft·lb/in	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	225	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	210	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	220 to 250	°F
Drying Time	3.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	480 to 540	°F
Middle Temperature	490 to 550	°F
Front Temperature	500 to 570	°F
Nozzle Temperature	525 to 575	°F
Processing (Melt) Temp	530 to 585	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 75	rpm



Vent Depth	1.5E-3 to 3.0E-3 in
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Injection Notes

Maximum Drying Time 7.0 hrs

Notes

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

