

AuroraTec™ 3018U

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

Impact Modified, UV Stabilized, Molding Grade PC/PBT

Formerly known as EnCounter 3018U

General

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

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Melt Mass-Flow Rate (MFR)	18	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)	7700	psi	ASTM D638
Tensile Elongation (Break)	> 120	%	ASTM D638
Flexural Modulus	295000	psi	ASTM D790
Flexural Strength	12300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	13	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	210	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	230	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	50 to 80	%
Rear Temperature	470 to 510	°F
Middle Temperature	480 to 520	°F
Front Temperature	490 to 530	°F
Nozzle Temperature	490 to 520	°F
Processing (Melt) Temp	500 to 530	°F
Mold Temperature	150 to 190	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 80	rpm
Vent Depth	5.0E-3 to 8.0E-3	in

Injection Notes

Maximum Drying Time 8.0 hrs

