ORION™ PC8051

Polycarbonate Star Plastics, LLC



Technical Data

Product Description			
Molding Grade PCFR without Release a	and UV		
General			
Material Status	 Commercial: Active 		
Literature ¹	Technical Datasheet (Eng	lish)	
UL Yellow Card ²	• E205256-101777184		
Search for UL Yellow Card	Star Plastics, LLC		
Availability	Asia Pacific	North America	
Additive	Flame Retardant		
Features	Flame Retardant		
Processing Method	Injection Molding		
Physical		Nominal Value Unit	Test Method
Density / Specific Gravity		1.20 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2	kg)	25 g/10 min	ASTM D1238
Molding Shrinkage - Flow		0.50 to 0.70 %	ASTM D955
Mechanical		Nominal Value Unit	Test Method
Tensile Modulus		2410 MPa	ASTM D638
Tensile Strength (Yield)		62.1 MPa	ASTM D638
Flexural Modulus		2410 MPa	ASTM D790
Flexural Strength (Yield)		89.6 MPa	ASTM D790
Impact		Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)		750 J/m	ASTM D256
Thermal		Nominal Value Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 3.18 mm		127 °C	
RTI Elec		80.0°C	UL 746B
RTI Imp		80.0°C	UL 746B
RTI Str		80.0°C	UL 746B
Flammability		Nominal Value Unit	Test Method
Flame Rating (1.5 mm)		V-0	UL 94
Injection		Nominal Value Unit	
Drying Temperature		121 °C	
Drying Time		4.0 hr	
Suggested Max Moisture		0.020 %	
Rear Temperature		271 to 288 °C	

277 to 299 °C 288 to 316 °C

288 to 316 °C

288 to 316 °C

0.345 to 0.689 MPa

77 to 104 °C

40 to 75 rpm

1 of 3

Middle Temperature

Front Temperature

Mold Temperature

Back Pressure

Screw Speed

Nozzle Temperature Processing (Melt) Temp

Form No. TDS-465180-en



ORION™ PC8051

Polycarbonate
Star Plastics, LLC

PROSPECTOR®

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.





Where to Buy

Supplier

Star Plastics, LLC

Ravenswood, Ravenswood USA Telephone: 304-273-5326 Web: https://www.starplastics.com/

Distributor

Formerra

Formerra is a next generation distributor of performance material solutions for the world's leading brand owners and manufacturers. Bringing you commercial and technical expertise, industry know-how, and access to more than 5,000 materials from 40+ premium suppliers faster and easier than ever before.

Telephone: 1.888.502.0951 (USA); +86-21-60284936 (China)

Web: https://www.formerra.com Availability: Global

3 of 3