

# Orion™ RESINS

Grade: ABS450FR

Molding Grade ABSFR RoHS Compliant FR ABS



## TYPICAL MATERIAL PROPERTIES

Physical	Nominal Values	ASTM Test
Specific Gravity	1.20	D792
Melt Flow (230°C/3.8 kg)	8.0 g/10 min	D1238
<b>Mechanical</b>		
Tensile Modulus	320,000 psi	D638
Tensile Strength @ Yield	5,500 psi	D638
Flexural Modulus	330,000 psi	D790
Flexural Strength @ Yield	9,500 psi	D790
<b>Impact</b>		
Notched Izod Impact (73°F, 0.125 in)	3.0 ft-lb/in	D256
<b>Thermal</b>		
DTUL @ 264 psi-unannealed (0.125 in)	170 °F	D648
<b>Mold Shrinkage</b>		
Linear Flow	.005 - .008 in/in	D955
<b>UL Rating</b>		
	V0 (1.5 mm); V-0 5VA (3.0 mm)	UL 94

The information provided above is based upon typical values, and are intended only as guides. Star Plastics, LLC/SDR Inc. assumes no obligation or liability for any advice furnished or for any results obtained with respect to this information. *No guarantees or warranties are expressed or implied.*

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## RECOMMENDED PROCESSING GUIDELINES

	Nominal Values
Drying Time and Temperature	2.0 - 4.0 hrs at 170 - 190°F
Suggested Max Moisture	0.15%
Rear Temperature	330 – 360°F
Middle Temperature	350 – 400°F
Front Temperature	375 – 450°F
Nozzle Temperature	375 – 450°F
Processing (Melt) Temperature	375 – 450°F
Mold Temperature	120 – 170°F
Back Pressure	25 – 100 psi
Screw Speed	25 – 75 RPM

The conditions listed above are only guidelines. You may want to adjust conditions to meet your requirements.

Rev0

Technical Data Sheet  
StarPlastics.com

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# Navigating Custom Compounds