

# Orion™ Resins

Grade: ABS53 Range Black  
Molding Grade ABS



## TYPICAL MATERIAL PROPERTIES

Physical	Nominal Values	ASTM Test
Specific Gravity	1.05	D792
Melt Flow (230°C/3.8 kg)	4.0 g/10 min	D1238
<b>Mechanical</b>		
Tensile Modulus	300,000 psi	D638
Tensile Strength @ Yield	5,500 psi	D638
Flexural Modulus	300,000 psi	D790
Flexural Strength @ Yield	9,500 psi	D790
<b>Impact</b>		
Notched Izod Impact (73°F, 0.125 in)	3.5 ft-lb/in	D256
<b>Thermal</b>		
DTUL @ 264 PSI – unannealed (0.250 in)	180°F	D648
<b>Mold Shrinkage</b>		
Linear Flow	.004 - .008 in/in	D955

The information provided above is based upon typical values, and are intended only as guides. Star Plastics/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, 180°F - 200°F
Suggested Max Moisture	0.15%
Rear Temperature	370°F – 425°F
Middle Temperature	400°F – 450°F
Front Temperature	425°F – 475°F
Nozzle Temperature	425°F – 525°F
Processing (Melt) Temperature	425°F – 525°F
Mold Temperature	120°F – 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