



# CALIBRE™ 2061S-15

## Trinseo - Polycarbonate Resin

### General Information

#### Product Description

CALIBRE™ 2061S-15 is a medical grade polycarbonate resin containing silicone. This resin is designed to have easy flow and reduced coefficient of friction for applications where lubricity is important. CALIBRE 2061S-15 has been tested according to ISO 10993 (Biological Evaluation of Medical Devices). It is suitable for radiation, ethylene oxide, and steam sterilization as needed in the health care industry.

#### Main Characteristics:

- Tested under ISO 10993
- Lubricious
- Easy Flow

#### Applications:

- Medical applications
- Surgical Device Handles
- Drug Delivery Devices

#### General

Additive	• Mold Release	• Silicone Lubricant
Features	• Biocompatible • Ethylene Oxide Sterilizable • Good Processability	• High Heat Resistance • High Impact Resistance • Lubricated
Uses	• Medical Devices	• Radiation Sterilizable • Steam Sterilizable • Wear Resistant
Agency Ratings	• Medical/Healthcare Applications	• Surgical Instruments
Appearance	• ISO 10993 <sup>1</sup>	
Forms	• Colors Available	• Opaque
Processing Method	• Pellets	
	• Injection Molding	

### Properties <sup>2</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.19		ASTM D792
Density	1.19	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	15	g/10 min	ISO 1133
Molding Shrinkage - Flow	6.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>3</sup>	334000	psi	ASTM D638
Tensile Modulus	319000	psi	ISO 527-1/1
Tensile Strength <sup>4</sup> (Yield)	8400	psi	ASTM D638
Tensile Stress (Yield)	8410	psi	ISO 527-2/50
Tensile Strength <sup>4</sup> (Break)	9100	psi	ASTM D638
Tensile Stress (Break)	9430	psi	ISO 527-2/50
Tensile Elongation <sup>4</sup> (Yield)	5.9	%	ASTM D638
Tensile Strain (Yield)	5.8	%	ISO 527-2/50
Tensile Elongation <sup>4</sup> (Break)	100	%	ASTM D638
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus	355000	psi	ASTM D790

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Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus <sup>5</sup>	377000	psi	ISO 178
Flexural Strength	12300	psi	ASTM D790
Flexural Stress <sup>5</sup>	11700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	12	ft·lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	29	ft·lb/in <sup>2</sup>	ISO 180/1A
Instrumented Dart Impact <sup>6</sup> (73°F, Total Energy)	443	in·lb	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	280	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	280	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	255	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	253	°F	ISO 75-2/A
Vicat Softening Temperature	302	°F	ASTM D1525 <sup>7</sup>
Vicat Softening Temperature	291	°F	ISO 306/B50

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	545 to 599	°F
Mold Temperature	176 to 212	°F

### Notes

<sup>1</sup> Biocompatibility testing following ISO Guidelines 10993 has been completed on select classic resins in this series. Please consult Trinseo for details. ISO guidelines include a sensitization test.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 0.039 in/min

<sup>4</sup> 2.0 in/min

<sup>5</sup> 0.079 in/min

<sup>6</sup> 21.7 ft/sec

<sup>7</sup> Rate B (120°C/h), Loading 1 (10 N)