

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	1.9	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	1450	MPa	ISO 527
<sup>[C]</sup> Yield stress	35	MPa	ISO 527
<sup>[C]</sup> Yield strain	5	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	203	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	168	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	88	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	9	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	225	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	70	°C	ISO 11357-1/-2
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	50	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	125	°C	ISO 75-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	130	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	134	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.45	%	Sim. to ISO 62
<sup>[C]</sup> Density	1250	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

## Characteristics

### Processing

Injection Molding

### Additives

Lubricants

### Delivery form

Pellets

### Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## Other text information

### Injection molding

To avoid hydrolytic degradation during processing, Vandar resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-30°F (-34°C) at 250°F (121°C) for 4 hours.

Rear Temperature 450-480(230-250) deg F (deg C)

Center Temperature 460-490(235-255) deg F (deg C)

Front Temperature 470-500(240-260) deg F (deg C)

Nozzle Temperature 470-510(240-265) deg F (deg C)

Melt Temperature 470-510(240-265) deg F (deg C)

Mold Temperature 100-200(40-95 deg F (deg C)

Back Pressure 0-50 psi

Screw Speed Moderate

Injection Speed Fast

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.