

**Product Texts**

- MVR (300 °C/1.2 kg) 23 cm<sup>3</sup>/10 min
- medical devices
- suitable for sterilization with high-energy radiation
- biocompatible according to many ISO 10993-1 test requirements
- low viscosity
- easy release
- transparent parts for medical devices

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	23	cm <sup>3</sup> /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.7	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	2400	MPa	ISO 527
<sup>[C]</sup> Yield stress	67	MPa	ISO 527
<sup>[C]</sup> Yield strain	6.1	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	N	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Puncture - maximum force, +23°C	5100	N	ISO 6603-2
<sup>[C]</sup> Puncture - maximum force, -30°C	6000	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, +23°C	55	J	ISO 6603-2
<sup>[C]</sup> Puncture energy, -30°C	65	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	120	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	132	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	139	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	65	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	65	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	0.3	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.12	%	Sim. to ISO 62
<sup>[C]</sup> Density	1200	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	2 - 3	h	-
Processing humidity	≤0.02	%	-

Melt temperature	<b>280 - 320</b>	°C	-
Mold temperature	<b>80 - 100</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Delivery form**

Pellets

**Additives**

Release agent

**Special Characteristics**

Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Steam sterilization, Gamma irradiation sterilization

**Certifications**

Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

**Applications**

Medical

**Regional Availability**

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

**Other text information****Injection molding**

## PREPROCESSING

Max. Water content: 0.01 - 0.02 %

Drying temperature: 120 °C

Drying time:

Circulating air drying oven (50 % fresh air) 4-8 h

Fresh air dryer (high speed dryer) 2-4 h

Dry air dryer 2-3 h

## PROCESSING

Melt temperature: 280-320 °C

Mold temperature: 80-100 °C

Use open nozzle.