

**Product Texts**

Novodur® HD 15 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® HD 15 is an easily processable ABS grade with well-balanced mechanical properties and an excellent chemical and stress cracking resistance. Medical and food contact statements are available upon request.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	15	cm <sup>3</sup> /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
<sup>[C]</sup> Density of melt	940	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.241	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2230	J/(kg K)	-
<sup>[C]</sup> Ejection temperature	90	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	2300	MPa	ISO 527
<sup>[C]</sup> Yield stress	48	MPa	ISO 527
<sup>[C]</sup> Yield strain	2.5	%	ISO 527
<sup>[C]</sup> Nominal strain at break	10	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	170	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	90	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	14	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	6	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	93	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	99	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	100	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	90	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Electric strength	37	kV/mm	IEC 60243-1
<sup>[C]</sup> Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Water absorption	1	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	0.22	%	Sim. to ISO 62
<sup>[C]</sup> Density	1050	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	220 - 260	°C	-
Mold temperature	30 - 60	°C	-

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Special Characteristics**

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

**Chemical Resistance**

Radiation Resistance

**Certifications**

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Drug Master File, Long term supply assurance

**Applications**

Medical

**Regional Availability**

Europe, Asia Pacific, Near East/Africa

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

## PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

## PROCESSING

Melt temperature, range: 230 - 260°C

Mold temperature, range: 60 - 80°C