

Product Texts

Novodur® HD M203FC G3 acrylonitrile butadiene styrene (ABS) polymer features high surface quality and good impact strength. Novodur® HD M203FC G3 is a glass fiber reinforced injection molding grade. Medical and food contact statements are available upon request.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
^[C] Density of melt	1050	kg/m ³	-
^[C] Thermal conductivity of melt	0.2	W/(m K)	-
^[C] Spec. heat capacity of melt	2130	J/(kg K)	-
^[C] Ejection temperature	97	°C	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	5600	MPa	ISO 527
^[C] Yield stress	70	MPa	ISO 527
^[C] Yield strain	1.7	%	ISO 527
^[C] Nominal strain at break	1.7	%	ISO 527
Flexural modulus, 23°C	5100	MPa	ISO 178
Flexural strength	100	MPa	ISO 178
^[C] Charpy impact strength, +23°C	20	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	23	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	5	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	4.5	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	6	kJ/m ²	ISO 180/1A
Ball indentation hardness	145	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	104	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	107	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	105	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	45	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Comparative tracking index	600	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1190	kg/m ³	ISO 1183
Bulk density	600	kg/m ³	-

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	230 - 260	°C	-

Mold temperature	60 - 80	°C	-
Injection speed	240	mm/s	-

Characteristics**Processing**

Injection Molding

Delivery form

Pellets, Granules

Special Characteristics

High impact or impact modified, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

Features

Laser Markable

Chemical Resistance

Radiation Resistance

Certifications

Food contact

Applications

Medical, Packaging

Regional Availability

Europe, 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