

Novodur® HD M203FC G3

ABS-GF16

INEOS Styrolution

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

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	16	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	5600	MPa	ISO 527
Yield stress	70	MPa	ISO 527
Yield strain	1.7	%	ISO 527
Nominal strain at break	1.7	%	ISO 527
Impact Strength (Charpy), +23°C	20	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	23	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	5	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	4.5	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	5100	MPa	ISO 178
Flexural strength	100	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	6	kJ/m²	ISO 180/1A
Ball Indentation Hardness	145	MPa	ISO 2039-1

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	104	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	107	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	105	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	45	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90	E-6/K	ISO 11359-1/-2

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	600	-	IEC 60112

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1190	kg/m³	ISO 1183
Bulk density	600	kg/m³	-

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Density of melt	1050	kg/m³	-
Thermal Conductivity of Melt	0.2	W/(m K)	-
Spec. heat capacity of melt	2130	J/(kg K)	-
Ejection temperature	97	°C	-

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

Chemical Resistance

Radiation Resistance

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Delivery form

Pellets, Granules

Certifications

Food approval

Special Characteristics

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

Applications

Medical, Packaging

Features

Laser Markable

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