

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

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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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