

FORTRON® MT9203HS | PPS | Medical Technology

Description

A very easy flowing, heat stabilized unfilled grade designed for melt blown processing suitable for medical/FDA applications.. This grade demonstrates excellent chemical resistance and thermal stability. Intended for extrusion applications that do not require high melt strength and for compounding with various fillers.

Physical properties	Value	Unit	Test Standard
Density	1350	kg/m ³	ISO 1183
Water absorption (23°C-sat)	0.02	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	4200	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	30	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	1	%	ISO 527-2/1A
Flexural modulus (23°C)	3900	MPa	ISO 178
Flexural stress @ break	130	MPa	ISO 178
Unnotched impact str (Izod) @ 23°C	8	kJ/m ²	ISO 180/1U
Notched impact strength (Izod) @ 23°C	2.0	kJ/m ²	ISO 180/1A
Rockwell hardness	100	M-Scale	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	280	°C	ISO 11357-1,-2,-3
Glass transition temperature (10°C/min)	90	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	120	°C	ISO 75-1/-2
DTUL @ 8.0 MPa	95	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	0.55	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	0.53	E-4/°C	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Relative permittivity - 1 MHz	4	-	IEC 60250
Volume resistivity	1E9	Ohm*m	IEC 60093
Electric strength	17	kV/mm	IEC 60243-1
Comparative tracking index CTI	100	-	IEC 60112

Test specimen production	Value	Unit	Test Standard
Injection molding melt temperature	295 - 330	°C	ISO 294
Injection molding mold temperature	135 - 160	°C	ISO 294

Rheological Calculation properties	Value	Unit	Test Standard
Specific heat capacity of melt	1830	J/(kg K)	Internal

Contact Information

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General Disclaimer

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values.

Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use.

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We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed (+49 (0) 69 30516299 for Europe and +1 859-372-3244 for the Americas) for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

The products mentioned herein are not intended for use in medical or dental implants.

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