

## Lustran ABS M205FC

Injection Moulding grade for medical applications (e.g. inhalers, roller clamps, spikes, etc.)/ Biocompatible with up to 30 days human contact duration according to USP Class VI and ISO 10993-1. Food contact acc. to BfR and FDA, DMF registered. Good flowing, standard impact strength

Property	Test Condition	Unit	Standard	Value
<b>Rheological properties</b>				
C Melt volume-flow rate	220 °C; 10 kg	cm <sup>3</sup> /(10 min)	ISO 1133	20
Molding shrinkage, parallel	150x105x3; 500 bar	%	acc. ISO 2577	0.5
Molding shrinkage, normal	150x105x3; 500 bar	%	acc. ISO 2577	0.5
<b>Mechanical properties (23 °C/50 % r. h.)</b>				
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	50.5
Tensile Stress at break	50 mm/min	MPa	ISO 527-1,-2	36.5
Tensile Strain at break	50 mm/min	%	acc. ISO 527-1,-2	> 15
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2550
Flexural strength	2 mm/min	MPa	ISO 178	75
Flexural modulus	2 mm/min	MPa	ISO 178	2600
Izod notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 180-1A	15
Izod notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 180-1A	7
C Yield strain	50 mm/min	%	ISO 527-1,-2	2.6
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	20
C Charpy impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eU	124
C Charpy impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eU	100
C Charpy notched impact strength	23 °C	kJ/m <sup>2</sup>	ISO 179-1eA	16
C Charpy notched impact strength	-30 °C	kJ/m <sup>2</sup>	ISO 179-1eA	7
Ball indentation hardness		N/mm <sup>2</sup>	ISO 2039-1	106
<b>Thermal properties</b>				
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	94
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	98
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	101
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	98
C Burning behavior UL 94 (1.6 mm)	1.6 mm	Class	UL 94	HB
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.78
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 <sup>-4</sup> /K	ISO 11359-1,-2	0.81
Glow wire test (GWFI)	2.0 mm	°C	IEC 60695-2-12	650
<b>Electrical properties (23 °C/50 % r. h.)</b>				
C Relative permittivity	100 Hz	-	IEC 60250	3.04
C Relative permittivity	1 MHz	-	IEC 60250	2.82
C Dissipation factor	100 Hz	10 <sup>-4</sup>	IEC 60250	53
C Dissipation factor	1 MHz	10 <sup>-4</sup>	IEC 60250	96
C Volume resistivity		Ohm·m	IEC 60093	2E+14
C Surface resistivity		Ohm	IEC 60093	2E+17

# INEOS ABS

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Property	Test Condition	Unit	Standard	Value
<b>Other properties (23 °C)</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1055
<b>Processing conditions for test specimens</b>				
C Injection molding-Melt temperature		°C	ISO 294	240
C Injection molding-Mold temperature		°C	ISO 294	70
C Injection molding-Injection velocity		mm/s	ISO 294	240

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.