

Elix ABS M205FC

ABS

Elix Polymers, S.L.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	20	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2550	MPa	ISO 527
Yield stress	50.5	MPa	ISO 527
Yield strain	2.6	%	ISO 527
Nominal strain at break	20	%	ISO 527
Stress at break	36.5	MPa	ISO 527
Strain at break	15	%	ISO 527
Flexural modulus, 23°C	2600	MPa	ISO 178
Charpy impact strength, +23°C	124	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	100	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	15	kJ/m ²	ISO 180/1A
Izod notched impact strength	7	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Ball indentation hardness	106	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	94	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	98	°C	ISO 75-1/-2
Vicat softening temperature, B	98	°C	ISO 306
Coeff. of linear therm. expansion, parallel	78	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	81	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.6	mm	-
Glow Wire Flammability Index (GWFI)	650	°C	IEC 60695-2-12
GWFI - thickness tested (1)	2	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	3.04	-	IEC 62631-2-1
Relative permittivity, 1MHz	2.82	-	IEC 62631-2-1
Dissipation factor, 100Hz	53	E-4	IEC 62631-2-1
Dissipation factor, 1MHz	96	E-4	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2

Other properties	Value	Unit	Test Standard
Density	1050	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Melt temperature	240	°C	-
Mold temperature	70	°C	-
Injection speed	240	mm/s	-

Characteristics

Processing

Injection Molding

Special Characteristics

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

Certifications

Food contact, Food approval BfR, Food approval 10/2011, Food approval FDA 21 CFR, Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Long term supply assurance, RoHS compliant

Applications

Medical

Regional Availability

Europe, Asia Pacific, South and Central America, Near East/Africa