ELIX™ ABS M205FC

Acrylonitrile Butadiene Styrene

ELIX Polymers, S. L.

Message:

ELIX 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. Easy flowing, high gloss, standard impact strength.
ISO Shortname: ISO 2580-ABS 0,MG,095-30-16-25

General Information			
Features	Biocompatible		
	Food Contact Acceptable		
	Good Flow		
	Good Impact Resistance		
	High Gloss		
Uses	Medical/Healthcare Applications		
Agency Ratings	BfR Food Contact, Unspecified Rating		
	DMF Unspecified Rating		
	FDA Food Contact, Unspecified Rating		
	ISO 10993-Part 1		
	USP Class VI		
Forms	Pellets		
Processing Method	Injection Molding		
Part Marking Code (ISO 2580)	ABS 0,MG,095-30-16-25		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.06	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	20.0	cm³/10min	ISO 1133
Molding Shrinkage [1]			ISO 2577
Across Flow	0.50	%	
Flow	0.50	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness	106	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2550	MPa	ISO 527-2/1
Tensile Stress			ISO 527-2/50
Yield, 23°C	50.5	MPa	
Break, 23°C	36.5	MPa	
Tensile Strain			ISO 527-2/50

Yield, 23°C	2.6	%	
Break, 23°C	> 15	%	
Nominal Tensile Strain at Break (23°C)	20	%	ISO 527-2/50
Flexural Modulus [2] (23°C)	2600	MPa	ISO 178
Flexural Stress [3] (23°C)	75.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	7.0	kJ/m²	
23°C	16	kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	100	kJ/m²	
23°C	120	kJ/m²	
Notched Izod Impact Strength			ISO 180/1A
-30°C	7.0	kJ/m²	
23°C	15	kJ/m²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	98.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	94.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	98.0	°C	ISO 306/B50
--	101	°C	ISO 306/B120
CLTE			ISO 11359-2
Flow : 23 to 55°C	7.8E-5	cm/cm/°C	
Transverse : 23 to 55°C	8.1E-5	cm/cm/°C	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	2.0E+17	ohms	IEC 60093
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Relative Permittivity			IEC 60250
23°C, 100 Hz	3.04		
23°C, 1 MHz	2.82		
Dissipation Factor			IEC 60250
23°C, 100 Hz	5.3E-3		
23°C, 1 MHz	9.6E-3		
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.60 mm)	HB		UL 94
Glow Wire Flammability Index (2.00 mm)	650	°C	IEC 60695-2-12
Injection	**Nominal Value**	**Unit**	**Test Method**
Processing (Melt) Temp	240	°C	
Mold Temperature	70.0	°C	
Injection Velocity	240	mm/sec	ISO 294
NOTE			

1.	150x105x3; 500 bar
2.	2.0 mm/min
3.	2.0 mm/min

Recommended distributors for this material

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