

INEOS Styrolution® 147F

Features: Medium flow, Rapid moldability, General purpose grade, Good processability, High heat resistance, Good moldability
Application: Stationery, Appliance components, Containers, Housewares application, Packaging

Physical property	Standard	Value	Unit
Density	ISO 1183	1046	kg/m ³
Shrinkage	ISO 294	0.3~0.6	%
Melt Index 200°C 5kg	ISO 1133	6.5	cm ³ /10min
Hardness	Standard	Value	Unit
Ball Indentation Hardness	ISO 2039	150	MPa
Mechanical behavior	Standard	Value	Unit
Tensile Modulus	ISO 527	3300	MPa
Tensile Strength Yield 23°C	ISO 527	50	MPa
Elongation Break 23°C	ISO 527	3	%
Flexural Strength 23°C	ISO 178	98	MPa
Flexural Modulus 23°C	ISO 178	2280	MPa
Charpy Notch Impact 23°C 1eA	ISO 179	3	kJ/m ²
Charpy Un-notch Impact 23°C	ISO 179	17	kJ/m ²
Optical performance	Standard	Value	Unit
Transmittance 550nm	ASTM D1003	90	%
Haze	ASTM D1003	2	%
Refractive Index Sodium D line	ISO 489	1.57	
Thermal	Standard	Value	Unit
HDT 1.8MPa Annealed at 80°C for 4 hours	ISO 75	85	°C
HDT 0.45MPa Annealed at 80°C for 4 hours	ISO 75	93	°C
Vicat Softening Temperature 50°C/hr 50N	ISO 306	95	°C
Vicat Softening Temperature 50°C/hr 10N	ISO 306	100	°C
Electrical properties	Standard	Value	Unit
Volume Resistivity	IEC 62631	1E+16	Ω.m
Surface Resistivity	IEC 62631-3-1	1E+14	Ω
Dielectric Strength 1.5mm Short Time	IEC 60243	135	KV/mm
Dielectric Constant 100Hz	IEC 62631-2-1	2.5	
Dielectric Constant 1MHz	IEC 62631-2-1	2.5	
Injection molding		Value	Unit
Melt Temperature		180~260	°C
Mould Temperature		10~60	°C
Injection Speed		200	mm/s