

BASF Ultraform® S1320 003 PRO AT

BASF's Ultraform POM S1320 003 PRO AT, a Polymer Copolymer, is characterized by high flow, high stiffness, and a high heat distortion temperature, reaches FR HB flammability level, and is particularly suitable for manufacturing thin - wall products.

Physical property	Standard	Value	Unit
Density	ISO 1183	1410	kg/m ³
Shrinkage Flow	ISO 294	2.1	%
Shrinkage xFlow	ISO 294	2.1	%
Water Absorption	ISO 62	0.9	%
Melt Index 190°C 2.16kg	ISO 1133	11	cm ³ /10min
Mechanical behavior	Standard	Value	Unit
Tensile Modulus	ISO 527	3000	MPa
Tensile Strength Yield	ISO 527	67	MPa
Elongation Yield	ISO 527	10.5	%
Elongation Break	ISO 527	25	%
Tensile Creep Modulus 1000hr	ISO 899	1450	MPa
Charpy Notch Impact 23°C	ISO 179	6	kJ/m ²
Charpy Notch Impact -30°C	ISO 179	5.5	kJ/m ²
Charpy Un-notch Impact 23°C	ISO 179	230	kJ/m ²
Charpy Un-notch Impact -30°C	ISO 179	210	kJ/m ²
Thermal	Standard	Value	Unit
HDT 1.8MPa	ISO 75	100	°C
HDT 0.45MPa	ISO 75	159	°C
Vicat Softening Temperature 50°C/hr 50N	ISO 306	150	°C
Melting Temperature 10°C/min	ISO 11357	170	°C
CLE Flow	ISO 11359	0.00011	m/m/K
Electrical properties	Standard	Value	Unit
Volume Resistivity	IEC 62631	1E+11	Ω .m
Surface Resistivity	IEC 62631-3-2	1E+15	Ω
Dielectric Strength	IEC 60243	40	KV/mm
Dielectric Constant 100Hz	IEC 62631-2-1	3.7	
Dielectric Constant 1MHz	IEC 62631-2-1	3.7	
Dissipation Factor 100Hz	IEC 62631-2-1	0.002	
Dissipation Factor 1MHz	IEC 62631-2-1	0.005	
CTI	IEC 60112	600	V
Flammability	Standard	Value	Unit
Flame Rating 1.6mm	UL94	HB	
Flame Rating 0.8mm	UL94	HB	
Limiting Oxygen Index	ISO 4589	15	%