Edgetek™ ET7400-8001 HG NC001

High Impact Polystyrene

Key Characteristics

Product Description	
High gloss, easy flow HIPS for injection molding application	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.04	1.04	ASTM D792
Molding Shrinkage (0.118 in (3.00 mm))	0.40 to 0.70 %	0.40 to 0.70 %	ISO 294-4
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2]	4640 psi	32.0 MPa	ASTM D638
Tensile Elongation (Break)	55 %	55 %	ASTM D638
Flexural Modulus [3]	290000 psi	2000 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	1.9 ft·lb/in	100 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	180 °F	82.0 °C	
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	ASTM D257
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.13 in (3.2 mm))	HB	HB	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	320 to 356 °F	160 to 180 °C
Middle Temperature	410 to 464 °F	210 to 240 °C
Front Temperature	410 to 464 °F	210 to 240 °C
Mold Temperature	140 to 176 °F	60 to 80 °C

Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

Notes

[1] Typical values are not to be construed as specifications.

[2] 0.20 in/min (5.0 mm/min)

[3] 0.051 in/min (1.3 mm/min)