



OVATION POLYMERS

Ovation Polymer Technology & Engineered Materials

Product Data Sheet

OpteSTAT PBT DP492x1

Electrically conductive Polybutadiene Terephthalate injection molding grade.

Properties*	Standard	Unit	Typical Value
Physical			
Specific Gravity	D 792	g/cm ³	1.29
Mechanical			
Tensile Stress @ brk, 50 mm/min	D 638	MPa.	47
Tensile Strain @ brk, 50 mm/min	D 638	%	8.8
Tensile Modulus, 50 mm/min	D 638	MPa.	2690
Flexural Stress @ brk, 1.3 mm/min, 50 mm span	D 790	MPa.	52
Flexural Modulus, 1.3 mm/min, 50 mm span	D 790	MPa.	3000
Izod Impact, notched @ 23°C	D 256	ft-lb/in.	1.70
Thermal			
HDT 66PSI (455kPa)	D 648	°C	150
HDT 264PSI (1820kPa)	D 648	°C	56
Conductivity			
Surface Resistance	D257	(Ω)	2.6e+5
Volume Resistivity	D257	(Ω-cm)	2.8e+5

*All properties are measured after 48 hours of conditioning at 23°C and 50% relative humidity. All samples are prepared according to ASTM standards. Variations within normal tolerances are possible for various types of colors and functional properties like UV resistance.

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Processing Guidelines

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Parameter	Unit	Typical Value
Drying Temperature	°C	80 – 90
Drying Time	hours	2
Maximum Moisture Content	%	0.1
Mold Temperature	°C	50 – 60
Nozzle Temperature	°C	230 – 250
Front – Zone 3 Temperature	°C	220 – 240
Middle – Zone 2 Temperature	°C	210 – 230
Rear – Zone 1 Temperature	°C	190 – 210
Melt Temperature	°C	240 – 250
Back Pressure	psi.	20 – 40
Screw Speed	rpm	60 – 80

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Safety Precautions: Ovation Polymer's thermoplastic blends and alloys, as supplied should present no toxicity problems. Because these materials can be reinforced into high modulus grades, grinding will generate dust and small levels of glass and filler fines. Consequently, direct contact with the skin and inhalation of grind dust should be avoided. As with all thermoplastics, proper ventilation around molding machine/extruder is recommended. In no case should material temperature be allowed to exceed maximums listed in the process parameter guide chart, as degradation can cause harmful vapors to be released. Consult Ovation Polymer's MSDS for detailed safety information on specific products and grades.