



OVATION POLYMERS

Ovation Polymer Technology & Engineered Materials

Product Data Sheet

Nemcon™ H PC/ABS DP182

Polycarbonate/Acrylonitrile Butadiene Styrene, thermally and electrically conducting grade.

Properties*	Standard	Unit	Typical Value
Physical			
Specific Gravity	D 792	-	1.69
Mold Skrinkage Parallel to Flow	D 955	in./in.	0.002
Mold Skrinkage Perpendicular to Flow	D 955	in./in.	0.003
Mechanical			
Tensile Stress @ brk, 50 mm/min	D 638	MPa.	35
Tensile Strain @ brk, 50 mm/min	D 638	%	1.44
Tensile Modulus, 50 mm/min	D 638	MPa.	4875
Flexural Stress @ brk, 1.3 mm/min, 50 mm span	D 790	MPa.	57
Flexural Modulus, 1.3 mm/min, 50 mm span	D 790	MPa.	3690
Izod Impact, notched @ 23°C	D 256	ft-lb/in.	0.36
Conductivity			
Thermal Conductivity (through plane)	Internal Method	W/m-K	0.8 – 1.1
Thermal Conductivity (in plane)	Internal Method	W/m-K	4.0 – 8.0
Electrical Properties			
Surface Resistivity	D 257	Ohms/sq	3.0E+06

*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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operations of any kind may alter some or all of the properties of these materials. Flammability information included herein indicates only the potential for meeting UL listing criteria and does not necessarily mean that UL listings for any given material have been secured.



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Processing Guidelines

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Parameter	Unit	Typical Value
Drying Temperature	°C	80 – 90
Drying Time	hours	2 – 4
Maximum Moisture Content	%	0.05
Mold Temperature	°C	90 – 100
Nozzle Temperature	°C	260 – 270
Front – Zone 3 Temperature	°C	250 – 260
Middle – Zone 2 Temperature	°C	240 – 250
Rear – Zone 1 Temperature	°C	230 – 240
Melt Temperature	°C	255 – 265
Back Pressure	psi.	20
Screw Speed	rpm	60 – 80
Injection Speed	-	Medium to Slow

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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.