

Product Data Sheet

OpteSTAT™ NC PK 8010 Nanotechnology-based Conducting Compounds

OpteSTAT™ master batches are Ovation Polymers' line of nano-compounds based on carbon nanotubes. Our proprietary dispersion technology debundles and disentangles carbon nanotubes without compromising their integrity. **OpteSTAT™** compounds exhibit good conductivity at minimal nanotube loadings, achieving exceptional cleanliness and physical property retention.

OpteSTAT™ NC PK 8010 is PEEK-based carbon nanotube compound. The material resistivity can be tailored to the application, while retaining the physical and thermal properties of the base polymer.

Target applications include components of disk drives, business machines or other electronic assemblies where ESD control is required while retaining exceptional cleanliness, dimensional control and physical properties.

Properties*	Standard	Unit	Typical Value
Physical			
Specific Gravity	D 792	-	1.34
Mechanical			
Tensile Stress @ yield, 50 mm/min	D 638	MPa.	95
Tensile Modulus, 50 mm/min	D 638	MPa.	2900
Flexural Modulus, 1.3 mm/min, 50 mm span	D 790	MPa.	2800
Izod Impact, notched @ 23°C	D 256	ft-lb/in.	1.5
Thermal			
HDT @ 264 psi, 3.2 mm, unannealed	D 648	°C	150
Electrical			
Surface Resistivity	D 257	Ohms/sq.	1.0E4 – 1.0E7

*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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