

## Product Data Sheet

### **OpteSTAT™ NC TPU 9020** 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 TPU 9020 is a Thermoplastic Polyurethane-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
<b>Physical</b>			
Specific Gravity	D 792	-	1.23
<b>Mechanical</b>			
Tensile Stress @ yield, 50 mm/min	D 638	MPa.	7
Tensile Strain @ yield, 50 mm/min	D 638	MPa.	6.5
Izod Impact, notched @ 23°C	D 256	ft-lb/in.	0.9
<b>Electrical</b>			
Surface Resistivity	D 257	Ohms/sq.	1E4 - 1E7

\*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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