

I-Forward Technology Co., Limited

Static Control Polymer TAS8001

Product Description

TAS8001 is static dissipative material formed by Poly Ether Ether Ketone (PEEK) and Carbon Nano Tube (CNT), which can provide super permanent ESD protection performance, good cleanness as well as good wearing performance.

Properties(typical)	TAS8001	Units	Test Method
Host polymer	PEEK		
Filler	CNT		
Color	Black		
Specific Gravity	1.3	g/cc	ISO 1183
Mechanical Properties			
Tensile Strength @ yield	91	Mpa	ISO 527
Elongation at Break	4.5	%	ASTM D638
Flexural Strength	160	Mpa	ISO 178
Flexural Modulus	4200	Mpa	ISO 178
Izod notched impact strength Notched	7	KJ/m ²	ISO 180/1A
Izod unnotched impact strength Notched	30	KJ/m ²	ISO 180/1U
Melting Temperature, DSC	343	°C	ISO11357-3
HDT at 1.8MPa	154	°C	ISO75-2
Water absorption, 24hrs @23°C	0.5	%	ISO 62
Water absorption, at saturation @23°C	0.5	%	ISO 62
Electrical properties:			
Surface resistance	10E5~10E10	Ω	ESD S11.11
Volume resistance	10E5~10E9	Ω -cm	ASTM D257
Static decay time	<0.7	seconds	FTMS-101C
Static charge	<2	volt	
Tribo-charge	<6	volt	
Cleanliness:			
Non volatile residue	≤ 4.0	ug/cm sq.	
Out-gassing(SHS)	≤ 8	ug/g	
Ionic:			
Chloride	<0.02	ug/cm sq	
Fluoride	<0.02	ug/cm sq	
Sulfate	<0.02	ug/cm sq	
Nitrate	<0.02	ug/cm sq	
Phosphate	ND	ug/cm sq	
Bromide	ND	ug/cm sq	
Organic contamination (Silicone oil, amide and DOP)	ND	ug/cm sq	