

# Nanovia PETG ESD :

*AntiStatic Discharge*

Protect your sensitive electronic devices with this ceramic charged ESD FFF filament. Nanovia PETG ESD prevents the accumulation of static electricity by gradually discharging it. It can house circuits and components that go up to 80 °C and doesn't leave any residue in the case of friction unlike carbon based ESD filaments.



## Advantages :

*Discharges static electricity • Easy to print • Useable in clean rooms*

### 3D Printing

Extrusion temperature	245 - 255	°C
Plate temperature	85 - 90	°C
Enclosure temperature	20	°C
Nozzle (minimal)	all	mm

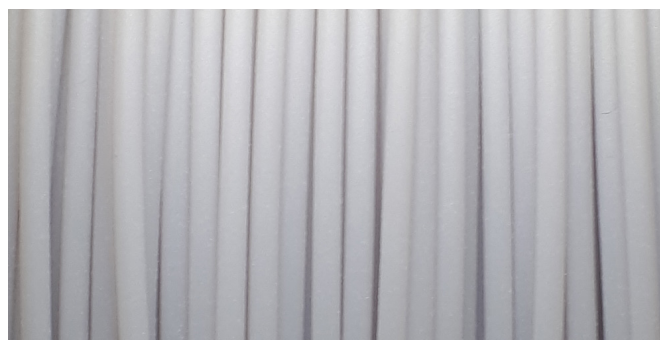
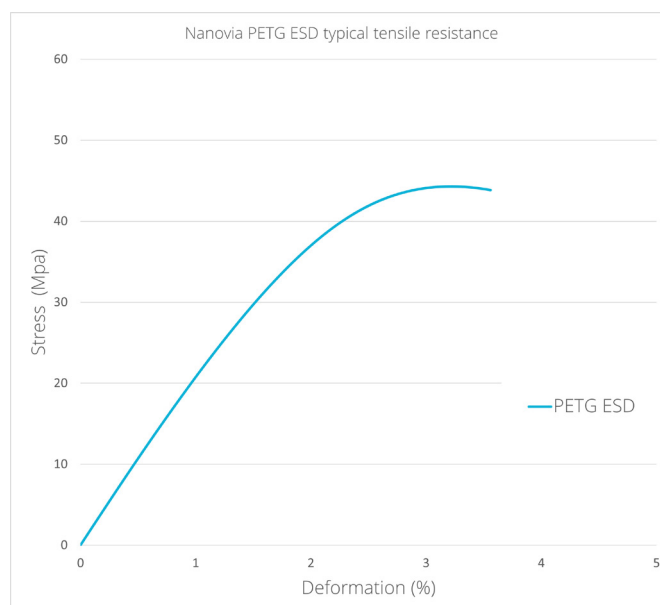
### Mechanical properties

	Physical		
Density	1.32	g/cm <sup>3</sup>	ISO 1183

	Traction (0°)		
Young's modulus	2265	MPa	ISO 527
Ultimate strength	44	MPa	ISO 527
Elongation ultimate strength	3.2	%	ISO 527

	Traction (+45° -45°)		
Young's modulus	2130	MPa	ISO 527
Ultimate strength	43	MPa	ISO 527
Elongation ultimate strength	3.4	%	ISO 527

	Traction (90°)		
Young's modulus	1835	MPa	ISO 527
Ultimate strength	24	MPa	ISO 527
Elongation ultimate strength	1.5	%	ISO 527



COMPOSITE MATERIALS for  
ADVANCED INDUSTRIALS

For more information on this filament, please visit :

**[www.nanovia.tech/petg-esd](http://www.nanovia.tech/petg-esd)**

## Thermal properties

Tg	80	°C
----	----	----

## Electronical properties

Electrical resistivity	$10^{10}$	$\Omega$
------------------------	-----------	----------

## Application

### Storage

- Store Nanovia PETG ESD in a dry and dark location, if possible with a desiccant.
- In order to guarantee good printing conditions, dehydrate at 60 °C for 4 hours or longer, when the spool has been exposed to moisture for an extended period.

### Post treatment

- For the ESD properties to be active, Nanovia PETG ESD parts should not be covered with paints.

## Health and safety

### Post treatment

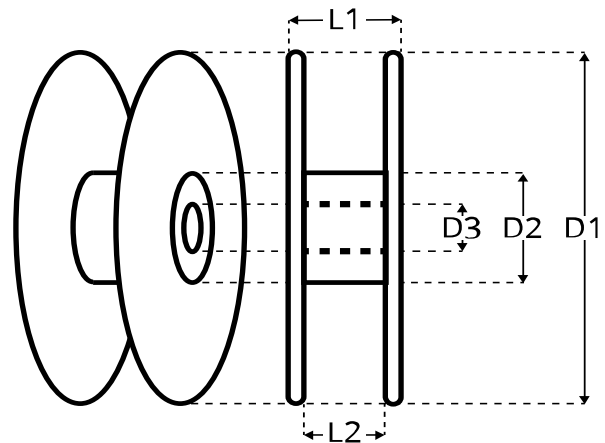
- We recommend wearing standard safety equipment during the post treatment of your prints.



## Packaging

- Spools are equipped with both a material traceability and a production series number.
- Spools are packed in individual boxes, vacuum sealed with desiccant.
- Nanovia PETG ESD is also available in pellet form for plastic extrusion and 3D FGF pellet printing.

Spool	L1	L2	D1	D2	D3	Weight
500 g	50	45	200	105	52	182 g
2 kg	93	87	300	195	52	668 g



COMPOSITE MATERIALS *for*  
ADVANCED INDUSTRIALS

last updated : 16/02/23