

# Ultrafuse® Z PCTG

## The First Official ESD Safe Filament by BASF

Ultrafuse® Z PCTG filament is powered by Essentium\*. It is an ESD safe filament developed specifically for the printing of handheld tools, various assembly and electronic fixtures, robotics, automation components, and parts for explosion-proof environments.

It displays very smooth surface properties, which helps to prevent latent failures in electronics. Ultrafuse® Z PCTG is an easy-to-print material, with a significantly increased impact strength compared to PETG.

### Benefits at a Glance

- All-purpose material for ESD safe electronic jigs and fixtures
- Non-marring
- Low cost
- Easy to print, machine, and finish
- Strong enough for lightly loaded fixtures

### Example Applications

- Handheld tools
- General assembly fixtures for electronics
- Robotics and automation components
- Parts for explosion-proof environments

### Material Properties

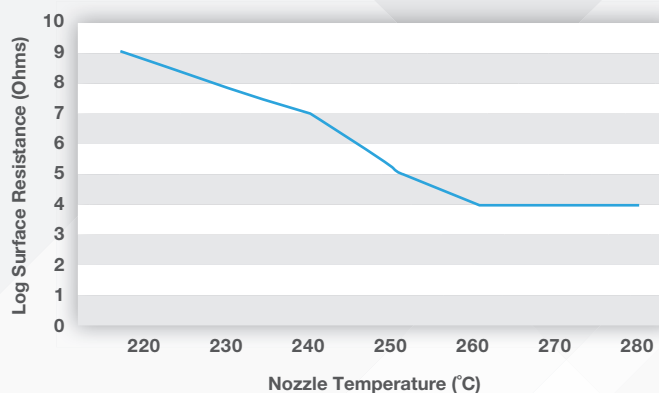
Tensile Strength (MPa)	13.6 (ZX), 37.10 (XY)
Flexural Modulus (MPa)	1492 (ZX), 1781 (XZ), 1613 (XY)
Elongation at Break	0.8% (ZX), 3.1% (XY)
Impact Strength Izod notched (kJ/m <sup>2</sup> )	3.4 (XZ)
Impact Strength Izod unnotched (kJ/m <sup>2</sup> )	3.4 (ZX), 24.2 (XZ), 14.3 (XY)
HDT @ 0.45 MPa	73 °C

### Printing Guidelines

Nozzle Temperature	250-270 °C
Build Chamber Temperature	-
Bed Temperature	70-80 °C
Bed Material	Glass bed with PVA
Nozzle Diameter	≥ 0.4 mm
Print Speed	40-80 mm / s

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### Surface Resistance



\*Essentium is an innovator in both engineering filament materials and industrial additive manufacturing platforms.

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