



# Ultrasint® PA11 ESD

## Bio-Derived, Electrostatic Discharging PA11 Powder for Highest Process Safety in Application

Ultrasint® PA11 ESD is a bio-derived powder material with electrostatic discharging properties for increased process safety in application. Components printed with this material discharge unwanted electrostatic from sensitive components and systems, thereby reducing the risk of electrostatically induced damage or failures. The material lends itself to the rapid construction of individualized tools and fixtures for the electronics industry, as well as to the manufacture of end-use parts for any application where ESD safety matters.

### Benefits at a Glance

- Processing on any PBF equipment
- Electrostatic discharging behavior
- Highest application safety
- Outstanding mechanical performance
- Color: Gray

### Example Applications

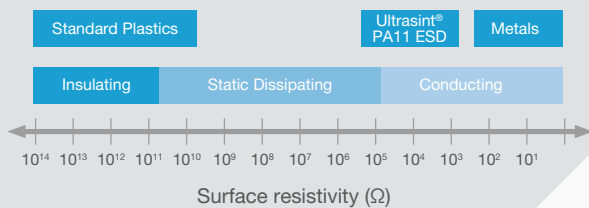
- Durable jigs, fixtures and tools for the electronics industry
- Electronic housings
- Chemical system components
- ESD-safe prototypes and end-use parts

### Material Properties

Tensile Strength	55 MPa
Young's Modulus	2300 MPa
Elongation at Break	22 %
Charpy Impact unnotched	101 kJ/m <sup>2</sup>
HDT B (0.45 MPa, dry)	186 °C

### Key Features

The electrical resistivity of Ultrasint® PA11 ESD is significantly lower than standard 3D printing materials.



- Surface resistivity of Ultrasint® PA11 ESD is even lower than typical electrostatic dissipating materials
- Combination of superior mechanical and thermal characteristics with outstanding electrostatic discharging properties

### Application Examples

Ultrasint® PA11 ESD is the optimal material for the production of individualized ESD-safe prototypes, tools, and small series parts.



Tools, Jigs and Fixtures for Electronics Industry



Process Safety Equipment