



# Ultrasint® PA11

## Bio-Derived PA11 Powder for Durable Parts with Exceptionally High Toughness

Ultrasint® PA11 is a bio-derived powder material for advanced applications where toughness matters. Due to its high impact strength, the material is especially suited to producing interior automobile parts or external fender structures. For example, its high ductility allows the production of durable film hinges in one step. Its balanced mechanical property profile makes the material a sustainable alternative to PA12 for functional prototyping, on-demand spare parts and individualized components requiring skin contact.

### Benefits at a Glance

- Easy processing on any PBF equipment
- Exceptionally high toughness
- Does not splinter in most crash cases
- Suitable for skin contact
- Colors: White, black

### Example Applications

- Car interior parts
- Bumper components
- Film hinges
- Functional prototypes and spare parts
- Medium-load serial production parts

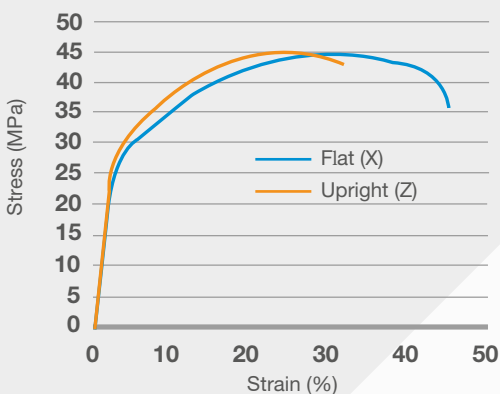
### Material Properties

Tensile Strength	45 MPa
Young's Modulus	1100 MPa
Elongation at Break	45 %
Charpy Impact unnotched	198 kJ/m <sup>2</sup>
HDT B (0.45 MPa, dry)	176 °C

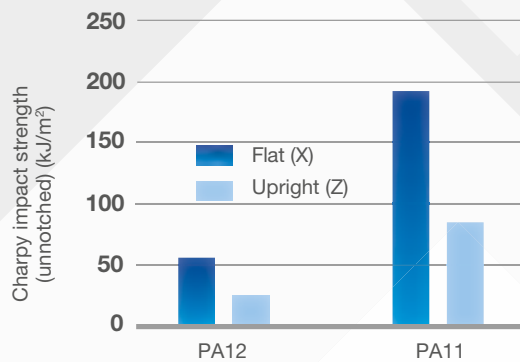
### Key Features

Ultrasint® PA11 offers exceptionally high ductility and impact strength for any application requiring deformation and toughness.

#### High Ductility



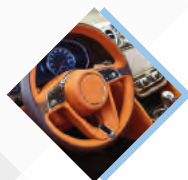
#### High Toughness



- Very high ductility and deformation capability
- High isotropy regarding build orientation
- One of the toughest materials in the industry
- Outstanding impact resistance vs. commonly used PA12

### Application Examples

Ultrasint® PA11 is suitable for a wide range of applications from automotive to medical.



Car Interior and Exterior Parts



Orthopedic Parts