



# Ultrasint® PA11 GB30

## Bio-derived, Glass-bead Filled PA11 Powder for Rigid Parts with Enhanced Thermal and Abrasion Resistance

Ultrasint® PA11 GB30 is a bio-derived, glass-bead filled powder material ideally suited for all applications requiring thermal stability, rigidity and precise feature control of production components. It offers a balanced property profile that comprises rigidity, toughness and easy processability on any PBF machine with high dimensional accuracy. Ultrasint® PA11 GB30 is especially suited to manufacturing robust jigs and fixtures, rigid housings and all parts subject to abrasion and wear.

### Benefits at a Glance

- Easy processing on any PBF equipment
- Filled with glass beads for enhanced rigidity, Heat Deflection Temperature and dimensional stability
- High abrasion resistance
- Color: Natural

### Example Applications

- Housings and covers
- Thermally loaded parts, i.e. close to the engine compartment
- Splinter-proof jigs and fixtures
- Durable gears and bearings

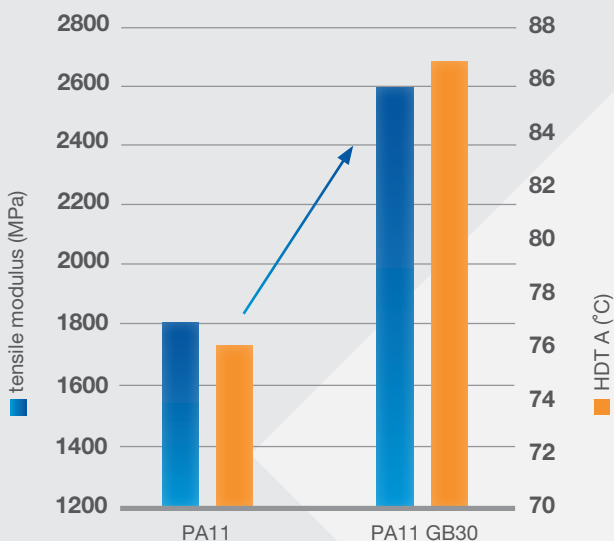
### Material Properties

Tensile strength	47 MPa
Young's modulus	2600 MPa
Elongation at break	7 %
Charpy impact unnotched	40 kJ/m <sup>2</sup>
HDT B (0.45 MPa, dry)	176 °C

### Key Features

Ultrasint® PA11 GB30 offers exceptional rigidity and thermal distortion resistance for demanding applications.

### Increased rigidity and thermal distortion performance through glass filling



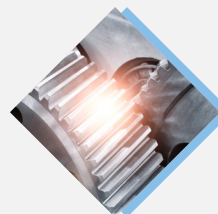
- Significantly increased modulus compared to unfilled PA11 ensures highest dimensional stability
- Higher thermal distortion temperature enables new applications in hot environments

### Application Examples

Ultrasint® PA11 GB30 is ideally suited to manufacturing rigid housings and covers, individualized gears, as well as robust jigs and fixtures.



Housings and covers



Gears and bearings



Jigs, fixtures and tooling

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