



Ultrasint® PP nat 01

Advanced Polypropylene Powder for a Wide Range of Innovative Applications

Ultrasint® PP nat 01 now harnesses the properties of polyolefins for Powder Bed Fusion (PBF) technologies, delivering the well-known characteristics of polypropylene such as excellent chemical resistance, ductility and media tightness. Thanks to the successful integration of PP material into PBF technologies, individualized and functional serial production parts can now be printed rapidly on demand. The high rigidity of Ultrasint® PP nat 01 not only makes the material especially well suited to technical applications but also makes it an economically attractive alternative to commonly used PA12.

Benefits at a Glance

- High ductility
- Exceptionally high rigidity
- Economic alternative to PA12
- Excellent chemical resistance
- Color: Natural/translucent

Example Applications

- Pipes and ducts for air and other media
- Water reservoirs and manifolds
- Economic and functional prototypes
- Multi-purpose industrial goods

Material Properties

Tensile strength	28 MPa
Young's modulus	1400 MPa
Elongation at break	30 %
Charpy impact unnotched	29 kJ/m²
HDT B (0.45 MPa, dry)	102 °C

Key Features

Ultrasint® PP nat 01 is the material of choice for durable 3D printed polypropylene parts, from prototyping through to functional parts.

Mechanical Performance

- Very high rigidity
- High ductility and toughness

Printing Quality

- Slightly translucent parts with typical PP haptics
- Easy mechanical smoothing and coloring possible

Application Examples

Ultrasint® PP nat 01 is suitable for any kind of media flow and storage parts, as well as damping structures.



**Cooling / Wash
Water Reservoirs**



**Air Ducts and
Piping**

Ultrasint® PP nat 01

