



## **Ultrasint® PA6 LM**

### **Special PA6 Powder for High Processability** on any PBF Equipment

Ultrasint® PA6 LM is a special powder material designed to maximize production accessibility to any PBF user. Thanks to its lower melting temperature compared to the other members of the Ultrasint® PA6 family, it enables lower processing temperatures which any PBF equipment can achieve. Its balanced property profile combines superior mechanical performance with outstanding thermal resistance. This advanced material can replace injection molded PA6 parts without compromise.

#### **Benefits at a Glance**

- Easy processing on standard PBF equipment
- Processing temperature ~180 °C
- Exceptionally high impact strength
- In-particle filler technology
- Color: Black

#### **Example Applications**

**D • BASF** 

We create chemistry

- Functional prototypes for different industries, i.e. automotive
- High performance spare parts
- Multi-purpose industrial goods
- Durable and rigid jigs and fixtures

#### **Main Properties**

180 160

140 % 120 Value

100

60

40 20

0

Youna's

modulus

(MPa)

Relative 80

Tensile Strength	44 MPa
Young's Modulus	1500 MPa
Elongation at Break	17 %
Charpy Impact unnotched	52 kJ/m <sup>2</sup>
HDT B (0.45 MPa, dry)	183 °C

**Benchmark with Injection Molded PA6** 

Tensile

strength

(MPa)

HDT A

 $(^{\circ}C)$ 

Elogation

at yield

(%)

Ultrasint® PA6 LM niection molded PA6 (reference)

#### **Key Features**

Ultrasint® PA6 LM enables real-world injection molding PA6 performance and is easily processable on any PBF equipment.

#### **Easy Processing**

- Low processing temperature of approx. 180 °C
- Easy to use on any PBF equipment

#### **Benchmark with injection molded PA6**

- Ultrasint<sup>®</sup> PA6 LM exhibits enhanced mechanical performance
- Rapid substitution of injection molded PA6 parts

#### **Application Examples**

The high versatility of Ultrasint® PA6 LM enables a wide range of applications from prototyping to industrial serial production parts.



Functional Prototyping



Spare Parts



Serial Parts



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# Ultrasint<sup>®</sup> PA6 LM