TIGITAL® 3D-Set | Technical Data Sheet
HPP 370/80003

General Information

Product Description

TIGITAL® 3D-Set HPP 370/80003 is a thermoset powder material for selective laser sintering (SLS). It exhibits superior rigidity and is easy to print with vastly lower printing temperatures than standard printing materials on all SLS devices. The moisture uptake is minimal, the reuse-rate is >70% and no pre drying step is necessary. The material is available in black.

Features

- High reuse-rate
- Vastly lower printing temperatures
- Ability to print high wall thickness
- Minimal moisture uptake

Applications

- Bus and Rail
- Automotive
- Aerospace and Defense

Material Properties

General Properties*	Test Method	Typical Values
Printed Part Density [kg/m³]	ISO 1183-3	1310
Particle Size d10 [µm]	Laser Diffraction	15
Particle Size d50 [µm]	Laser Diffraction	44
Particle Size d90 [µm]	Laser Diffraction	80

Thermal Properties*	Test Method	Typical Values
HDT/A (1,8 MPa) [°C]	ISO 75	65

Mechanical Properties*	Test Method	Typical Values
Tensile Strength [N/mm²]	ISO 527	52
Tensile Modulus [N/mm²]	ISO 527	3300
Elongation at Break [%]	ISO 527	2,5

** All properties are measured on printed ISO specimen (properties correspond to printing parameters)*

Product Safety

Relevant industrial safety precautions and hygiene procedures must be followed (e.g. powder handling). For additional information please read the corresponding Material Safety Data Sheet (MSDS).

Compatibility

The product is compatible with all SLS printing machines. For specific printing parameters and additional post-curing steps please read the corresponding Processing Data Sheet (PDS).

Storage

The powder should be stored at temperatures from 15-25 °C in its originally sealed package in a clean and dry environment for 6 months upon delivery date.

Disclaimer