

TIGITAL® 3D-Set | Technical Data Sheet

TPP 371/80006



General Information

Product Description

TIGITAL® 3D-Set TPP 371/80006 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	60

Mechanical Properties*	Test Method	Typical Values
Tensile Strength [N/mm ²]	ISO 527	50
Tensile Modulus [N/mm ²]	ISO 527	3200
Elongation at Break [%]	ISO 527	6

* 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

Our verbal and written recommendations for the use of our products, including the information provided in this Product Data Sheet, are based upon experience and in accordance with present technological standards. These are only given in order to support the buyer or user. They are non-committal and do not create any additional commitments to the purchase agreement. The buyer is solely responsible for verifying the suitability and/or fitness of our products for the intended use and application. Further, the buyer is solely responsible for the appropriate, safe and legally compliant use, processing, handling and application of our products.

As a part of our product information program each of our Product Data Sheets are periodically updated, so that the latest version shall prevail. Therefore, please contact our sales team to make sure that this Product Data Sheet is the most current version. The information in our Product Data Sheets is subject to change without notification.

This standard form substitutes any and all previous standard forms and notes for customers published on this subject matter. The Technical Information Sheets, if any, and our Terms of Delivery and Payment, each in their latest version form an integral part of this Product Data Sheet.