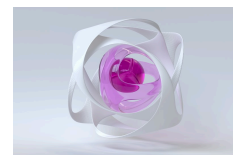


## Product Information

# INFINAM® TPC 8009 P

## UNREINFORCED POLYESTER-BASED ELASTOMER POWDER FOR 3D PRINTING



INFINAM® TPC 8009 P is an unreinforced polyester-based elastomer powder suitable for 3D printing and laser sintering. INFINAM® TPC 8009 P is an unfilled black-colored fine powder. It is opaque and can provide high-impact strength, high flexibility and toughness along with soft feeling characteristics.

### Features

- Elastomeric properties
- Dense parts without infiltration
- Nice surface finish
- Easy-to-process
- Good powder flow
- Very tight particle size distribution

The information presented resembles typical values intended for reference and comparison purposes only. Due to layer-wise construction and by variation of processing conditions the actual properties of components from additive processes will vary. Due to process-related deviations the user is responsible to ensure the characteristic values required for the respective use and to carry out additional application-related tests if necessary.

### Mechanical properties ISO

	dry	Unit	Test Standard
Charpy impact strength, +23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	<b>63</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Type of failure	<b>P</b>	-	-

### Mechanical properties ASTM

	dry	Unit	Test Standard
Tensile Modulus	<b>130</b>	MPa	ASTM D 638
Strain at break	<b>300</b>	%	ASTM D 638
Tear Strength	<b>0.149</b>	kN/m	ASTM D 624
Taber Abrasion Resistance	<b>110</b>	mg/1000 cycles	ASTM D 1044
Abrasive wheel	<b>C-17</b>	-	ASTM D 1044

## Thermal properties

	dry	Unit	Test Standard
DTUL @ 66 psi	85	°C	ASTM D 648

## Physical properties

	dry	Unit	Test Standard
Shore D Hardness	46 <sup>[a]</sup>	-	ASTM D 2240

a: 1 second

## Rheological properties

	dry	Unit	Test Standard
Melt Flow Index, MFI	35.7	g/10min	ASTM D 1238
Temperature	220	°C	-
Load	2.16	kg	-

## Characteristics

### Key Feature, Industrial Sector

Industry and Building Construction

### Key Feature, Processing

3D printing

### Key Feature, Electrical

Isolating

### Key Feature, Additives

Unfilled

### Processing

Flame spraying, Laser Sintering

### Special Characteristics

High impact strength

### Features

Soft Feel

### Color

Black, Opaque

### Additives

Antioxidant agent, Light stabilizer, Heat stabilizer, Processing aids

### Delivery form

Powder, Fine Powder (FP)

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