# **INFINAM**<sup>®</sup>

### Product Information INFINAM® TPC 8008 P

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



**INFINAM® TPC 8008 P** is an unreinforced polyester-based elastomer powder suitable for 3D printing and laser sintering. INFINAM® TPC 8008 P is a fine powder specifically designed for use in additive manufacturing processes. Our product is suitable for manufacturing of functional prototypes, manufacturing of individual units as well as serial parts. It is particularly characterized by a high toughness and softness.

#### 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	Ν	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	88	kJ/m²	ISO 179/1eU
Type of failure	Р	-	-
Mechanical properties ASTM	dry	Unit	Test Standard
Tensile Modulus	131	MPa	ASTM D 638
Strain at break	440	%	ASTM D 638
Tear Strength	130	kN/m	ASTM D 624
Taber Abrasion Resistance	117	mg/1000 cycles	ASTM D 1044
Abrasive wheel	C17	-	ASTM D 1044



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DTUL @ 66 psi85°CASTM D 648Physical propertiesdryUnitTest StandardShore D Hardness46 <sup>[a]</sup> -ASTM D 2240a: 1 seconddryUnitTest StandardMelogical propertiesdryUnitTest StandardMelt Flow Index, MFI35.7g/10minASTM D 1238Temperature220°C-	Thermal 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	DTUL @ 66 psi	85	°C	ASTM D 648
Shore D Hardness   46 <sup>[a]</sup> -   ASTM D 2240     a: 1 second				
a: 1 second Rheological properties dry Unit Test Standard Melt Flow Index, MFI 35.7 g/10min ASTM D 1238	Physical properties	dry	Unit	Test Standard
Rheological propertiesdryUnitTest StandardMelt Flow Index, MFI35.7g/10minASTM D 1238	Shore D Hardness	<b>46</b> <sup>[ª]</sup>	-	ASTM D 2240
Melt Flow Index, MFI 35.7 g/10min ASTM D 1238	a: 1 second			
	Rheological properties	dry	Unit	Test Standard
Temperature 220 °C -	Melt Flow Index, MFI	35.7	g/10min	ASTM D 1238
	Temperature	220	°C	-
Load <b>2.16</b> kg -	Load	2.16	kg	-

#### Characteristics

Key Feature, Industrial Sector Instustry and Building Construction

Key Feature, Processing 3D printing

Key Feature, Electrical Isolating

Key Feature, Additives Unfilled

Processing Laser Sintering Special Characteristics High impact strength

Features Soft Feel

**Color** Natural Color, Opaque

Additives Antioxidant agent, Light stabilizer, Heat stabilizer, Processing aids

**Delivery form** Powder, Fine Powder (FP)



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