

SINTRATEC PA12

Material Data Sheet

Industrial-grade polyamide powder
for robust, durable and precise work pieces



SINTRATEC PA12

GENERAL PROPERTIES

	Test Standard	Value
Sintered Part Density [g/cm ³]	ISO 1183	0.98
Bulk Density [g/cm ³]	ISO 60	0.43
Powder Color		Dark Gray
Refresh Ratio		70%

MECHANICAL PROPERTIES

	Test Standard	Value (X / Y)	Value (Z)
Tensile Modulus [MPa]	ISO 527-2	1966	1978
Tensile Strength [MPa]		53	48
Elongation at Break [%]		8	
Charpy Impact <i>Unnotched</i> [kJ/m ²]	ISO 179-1	27.98	
Charpy Impact <i>Noched</i> [kJ/m ²]	ISO 179-1	2.67	
Flexural Strength [MPa]	ISO 178	65	
Flexural Modulus [MPa]	ISO 178	1784	1664
Shore D Hardness	ISO 868	76	

THERMAL PROPERTIES

	Test Standard	Value
Melting Temperature [°C]	ISO 11357-1	185

SURFACE ROUGHNESS

	Test Standard	Value (X / Y)	Value (Z)
Surface Roughness Ra [µm]	ISO 4288	13	20
Surface Roughness Rz [µm]		128	215

Last updated: 07/2022 | Disclaimer: The given values were obtained by independent testing of parts printed on a Sintratec S2 Fusion Module. Results may vary according to factors such as part geometry, part orientation, used system and printing parameters. Sintratec does not make guarantees on material properties. This data sheet represents the current state of development of the Sintratec products and loses its validity once a new version is published. Misprints, changes and errors are reserved. Pictures and listed specifications may vary from the final products.