

Preliminary Technical Data Sheet

Adsint PA12

Components

Polyamide 12 powder for Laser Sintering

Product Description

Adsint PA12 is a multi-purpose material for application in Laser Sintering. Parts produced with this material offer a balanced property profile with a very smooth part surface and excellent results for detailed prints. Typical applications are prototypes and small series functional parts. Adsint PA12 is processable on most common SLS printers. Parameters for printing will be provided.

Delivery form and warehousing

Adsint PA12 powder should be stored at 15 - 25°C in its originally sealed package in a clean and dry environment.

Product safety

Mandatory and recommended industrial hygiene procedures and the relevant industrial safety precautions must be followed whenever this product is being handled and processed. Product is sensitive to humid environment conditions. For additional information please consult the corresponding material safety data sheets.

For your information

Adsint PA12 comes in white color. Electrical properties (e.g. volume resistivity, surface resistivity), chemical properties (e.g. resistance against particular substances) and tolerance for solvents are available upon request. Generally, these properties correspond to publicly available data on polyamides.

Notice

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

The safety data given in this publication is for information purposes only and does not constitute a legally binding Material Safety Data Sheet (MSDS). The relevant MSDS can be obtained upon request from your supplier or you may contact BASF directly at 3d-printing@basf-3dps.com.

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We create chemistry

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General Properties	Test method	Typical values
Bulk Density / kg/m ³	ISO 1068-1975	550
Printed Part Density / kg/m ³	ISO 61	990
Mean particle size d50 / μm	ISO 13320	35-45
Melting Temperature / °C	ISO 11357-3 (20 K/min)	182
Crystallization Temperature / °C		
Melt Volume Flow Rate / cm ³ /10min		

Mechanical Properties	Test method	Typical values x-direction	Typical values z-direction
Tensile Strength / MPa	ISO 527-2:93-1B	46	
Tensile Modulus / MPa		1750	
Tensile Elongation at break / %		22	
Flexural Strength / MPa	DIN EN ISO 178		
Flexural Modulus / MPa		1520	
Flexural Elongation at break / %			
Charpy Impact Strength (notched) / kJ/m ²	ISO 179-1	87	
Charpy Impact Strength (unnotched) / kJ/m ²			
Izod Impact Strength (notched) / kJ/m ²	ISO 180		
Izod Impact Strength (unnotched) / kJ/m ²			

Thermal Properties	Test method	Typical values
HDT/A (1.8 MPa) / °C	ISO 75-2	70
HDT/B (0.45 MPa) / °C		150
Vicat/A (10 N) / °C	ISO 306	
Vicat/B (50 N) / °C		

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