



# AlphaPowders

4th DIMENSION OF ADDITIVE MANUFACTURING



Material name	AlphaPowders Polyolefin Diode
Chemical category	Polyolefin
Safety recommendations	Protective mask
Characteristics	Free-flowing powder with low dust content
Colour	Gray powder  (black printouts)
Moisture sensitivity	Little to none
Print bed temperature	120 °C
Severe caking starts	> 125-126 °C
Minimum print layer	150 µm
Bulk density	0.375 g/cm <sup>3</sup>
Taped density	0.454 g/cm <sup>3</sup>

Hausner ratio	1.21
Carr's Index	17 %
Flowability description	HR<1.28 & CI <18%: free flowing & borderline good flow properties
Printability	Verified on diode laser desktop printers
Elongation at break (printouts)	30%
Tensile strength (printouts)	15 MPa
Hardness (at 28°C) (printouts)	Shore D: 65
Printout density	0.88 g/cm <sup>3</sup>

