

Date of issue: 28 maart, 2023  
Version: v1.0

Our allPHA 3D printing pellet (pronounced as Alpha) is the ultimate bioplastic. PolyHydroxyAlkanoates abbreviated PHA, is created by a naturally occurring process called fermentation. By feeding bacteria natural sugars and oils, the bacteria create “fat” cells (the PHA). The best thing about PHA? Micro-organisms can eat it again at the end of the products’ lifetime.

### TYPICAL MATERIAL PROPERTIES – FFF 3D Printed

Physical properties	Unit	Value	Method
Tensile modulus	MPa	2510	ISO 527
Yield strength	MPa	26	ISO 527
Yield strain	%	3,5	ISO 527
Tensile strength	MPa	26	ISO 527
Tensile strain at tensile strength	%	3,5	ISO 527
Tensile stress at break	MPa	24	ISO 527
Tensile strain at break	%	4,5	ISO 527
Flexural modulus	MPa	1820	ISO 178
Flexural strain at standard deflection	MPa	37	ISO 178
Flexural strength	MPa	41	ISO 178
Flexural strain at flexural strength	%	6,4	ISO 178
Flexural stress at break	MPa	-	ISO 178
Flexural strain at break	%	-	ISO 178
Charpy unnotched impact strength	kJ/m <sup>2</sup>	25,4	ISO 179-1/1 eU
Charpy notched impact strength	kJ/m <sup>2</sup>	3,4	ISO 179-1/1 eU
Shore D	Shore D	62	ISO 7619
HDT	°C	153	ISO 75

### GUIDELINES FOR PROCESSING

Processing temperature 170-180°C  
Drying advice 70°C for 6-9 hours

#### Disclaimer

The product- and technical information provided in this datasheet is correct to the best of our knowledge. The information given is provided as a guidance for good use, handling and processing and is not to be considered as a quality specification. The information only relates to the specific product and the material properties.