



Zetamix Stainless steel datasheet

PRODUCT DESCRIPTION

Zetamix Stainless Steel is a 316L stainless steel filament used for 3D printing. The binders mixed with stainless steel powder enables to have a flexible and resistant filament usable with classical FFF printers (Fused Filament Fabrication). Printed parts need to be debinded and sintered.

Diameter available: 1,75mm and 2,85mm
Postprocess : debinding and sintering

IDENTIFICATION

Trade name	Zetamix Stainless steel
Chemical name of raw material	316 L stainless steel
Binding proportion (vol) %	45%
Binding proportion (mass) %	9%
Zirconia proportion (vol) %	55%
Zirconia proportion (mass) %	91%

PRINTING AND SINTERING RECOMMANDATIONS

Printing temperature	170°C
No solvent debinding	-
Sintering temperature	1300°C, under hydrogenated argon
Shrinkage	10%
Density	90-95%

TYPICAL PROPERTIES OF THE FILAMENT

Specific Gravity [g/cm ³]	4,5
MFR [g/10(min)]	250
MVR [cm ³ /10(min)]	56
Moisture Absorption 24 hours [%]	<0,05%
Moisture Absorption , 7 days [%]	<0,1%
Shor D	35

MECHANICAL PROPERTIES ON FINAL PART

Strength limit → 100 MPa

Breaking strength → 300 – 600MPa

Disclaimer : The results presented above are for information and do not constitute a legally binding Material Safety Data sheet (MSDS). Moreover, values are significantly dependent on printing and debinding parameters, operators experience and surrounding conditions. Any descriptions, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product.