



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%
316L proportion (vol) %	55%
316L proportion (mass) %	91%

PRINTING AND SINTERING RECOMMANDATIONS

Printing temperature	180-190°C
No solvent debinding	-
Sintering temperature	1300°C, under hydrogenated argon
Shrinkage	x,y = 14.2% ±1% / z = 16.7% ±1%
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.