



Zetamix Silicon Carbide Datasheet

PRODUCT DESCRIPTION

SiC Zetamix filament is a filament used for 3D printing. The binders mixed with SiC 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

Postprocess : chemical debinding and sintering

IDENTIFICATION

Trade name	Zetamix Silicon Carbide
Chemical name of raw material	SiC
Binding proportion (vol) %	48
Binding proportion (mass) %	22
SiC proportion (vol) %	52
SiC proportion (mass) %	78

PRINTING AND SINTERING RECOMMANDATIONS

Printing temperature	120-130°C
Debinding	Acetone
Sintering temperature	2200°C under partial vacuum (Ar 90 mb)
Shrinkage	16.8% (x and y) ; 22,6% (z)
Density	98-99%

TYPICAL PROPERTIES OF THE FILAMENT

Specific Gravity [g.cm ⁻³]	2.20
Melt Flow Index [g/10(min)] (@170°C, 5kg, half-die)	7
Melt Volume Rate [cm ³ /10(min)]	3.2

MECHANICAL PROPERTIES ON FINAL PART

Hardness (Hv10) GPa → 25

Bending strength → 400 Mpa

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.