



Zetamix TiO2 datasheet

PRODUCT DESCRIPTION

Zetamix TiO2 is a filament used for 3D printing. The binders mixed with TiO2 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: 1.75 mm

Post-process: debinding and sintering

IDENTIFICATION

Trade name	Zetamix TiO2
Chemical symbol	TiO2
Binder system proportion $_{vol}\%$	50
Binder system proportion $_{wt}\%$	19
TiO2 proportion $_{vol}\%$	50
TiO2 proportion $_{wt}\%$	81

PRINTING AND SINTERING RECOMMANDATION

Printing temperature	140°C
Solvent debinding	Acetone
Sintering temprature	1300°C under air
Shrinkage	18.97% $\pm$ 1% (x, y) 20.44% in z
Density	98-99%

TYPICAL PROPERTIES OF FILAMENTS

Specific Gravity [g.cm ⁻³]	2.59
Melt Flow Rate [g/10(min)]	-
Melt Volume Rate [cm ³ /10(min)]	-
Shore D hardness	-

DIELECTRIC PROPERTIES

Dielectric constant * $\rightarrow$ 75 ($\pm$ 5)

Loss tangent $\rightarrow$ 1.10^{-3} - 5.10^{-3}

* Dielectric constant at 9.4 GHz. The permittivity value depends on the printing parameters and can decrease if the part is not fully dense
 $\pm$ 5% between -50°C to +110°C

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 setting, 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.