



Bilby 3D

MATERIAL DATA SAFETY SHEET

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

Section 1: AUSTRALIAN COMPANY DETAILS

In Australia the product is imported and distributed by:
Bilby 3D Pty Ltd

Mailing Address :

Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208

Head Office Address :

Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208

Contact Phone: 1800 847 333

Section 2: AUSTRALIAN EMERGENCY CONTACT

Emergency Contact

In the event of an emergency please contact:

Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



Zetamix Alumina datasheet

PRODUCT DESCRIPTION

Zetamix Alumina is an alumina filament used for 3D printing. The binders mixed with alumina 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 and 2.85 mm

Post-process: debinding and sintering

IDENTIFICATION

Trade name	Zetamix Alumina
Chemical symbol	Al_2O_3
Binder system proportion $_{\text{vol}}\%$	48
Binder system proportion $_{\text{wt}}\%$	17
Alumina proportion $_{\text{vol}}\%$	52
Alumina proportion $_{\text{wt}}\%$	83

PRINTING AND SINTERING RECOMMANDATION

Printing temperature	150°C
Solvent debinding	Acetone
Sintering temperature	1500-1550 under air
Shrinkage	19,7%
Density	98-99%

TYPICAL PROPERTIES OF FILAMENTS

Specific Gravity [g.cm ⁻³]	2,5
Melt Flow Rate [g/10(min)]	200
Melt Volume Rate [cm ³ /10(min)]	80
Moisture Absorption 24 hours [%]	<0,1%
Moisture Absorption , 7 days [%]	<0,3%
Shore D hardness	40

MECHANICAL PROPERTIES ON FINAL PART

Hardness (Hv10) GPa → 19

Bending strength → 150 to 300 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 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.