

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 H13 steel datasheet

PRODUCT DESCRIPTION

Zetamix H13 steel is a filament used for 3D printing. The binders mixed with H13 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: thermal debinding and sintering

IDENTIFICATION

Trade name	Zetamix H13 steel
Other designation	X40CrMoV5-1
Binder system proportion vol%	48
Binder system proportion wt%	10
H13 steel proportion vol%	52
H13 steel proportion wt%	90



PRINTING AND SINTERING RECOMMANDATION

Printing temperature	180°C
No chemical debinding	-
Sintering temprature	1400°C under Ar/H ₂ (97.5/2.5) gas
Shrinkage	16-17%
Density	90-91%

TYPICAL PROPERTIES OF FILAMENTS

Specific Gravity [g.cm ⁻³]	4.5
Melt Flow Rate [g/10(min)] (180°C - 875g – half die)	3,5
Melt Volume Rate [cm ³ /10(min)] (180°C - 875g – half die)	0,8
Moisture Absorption 24 hours [%]	<0,1%
Moisture Absorption 7 days [%]	<0,3%
Shore D hardness	50

Disclaimer: The results presented above are for information and do not constitute a legally binding Material Safety Data sheet (MSDS). Moreover, values are significally 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.

