



# 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:

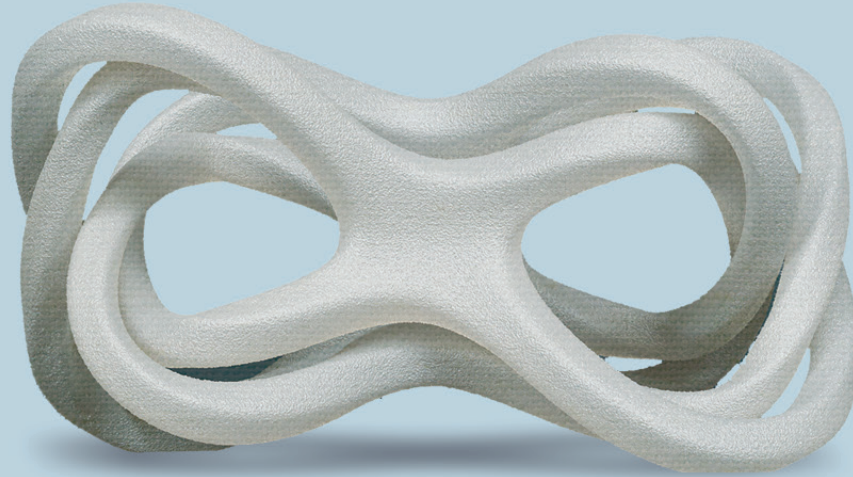
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

### **Section 3: AUSTRALIAN ISSUE DATA**

**Date of Issue** : 1 March 2020



## HIPS-R KIMYA



**KIMYA BREAKAWAY SUPPORT MATERIAL HIPS-R IS MADE OF 100% RECYCLED MATERIAL.**

**| BREAKAWAY SUPPORT MATERIAL FOR HIGH PERFORMANCE MATERIALS**

**| 100% RECYCLED MATERIAL**

### FILAMENT PROPERTIES

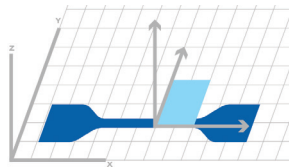
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 +/- 0.1
Density	ISO 1183-1	g/cm <sup>3</sup>	1.03
Moisture rate	INS-6711	%	<0.5
Melt Flow Index (MFI)	ISO 1133-1 (200°C - 5 kg)	g/10min	4.7 - 7.1
Glass transition temperature Tg	ISO 11357-1 (10°C/min - 20 à 260°C)	°C	97

## PRINT PARAMETERS AND SPECIMENS DIMENSIONS

<b>PRINTING DIRECTION</b>	XY
<b>PRINTING SPEED</b>	50 mm/s
<b>INFILL</b>	100% - rectilinear
<b>CHAMBER TEMPERATURE</b>	N/A
<b>BED TEMPERATURE</b>	95°C
<b>NOZZLE TEMPERATURE</b>	250°C

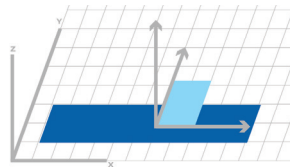
## RESULTS

### TENSILE TEST



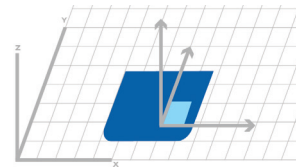
Dim.(mm): 75x12.5x2  
Specimen type: ISO 527-5A

### BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

### HARDNESS



Dim.(mm): 45x45x4

## PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
<b>TENSILE TEST</b>	Tensile Modulus	ISO 527-2/5A/50	MPa	1,273
	Strength	ISO 527-2/5A/50	MPa	23.7
	Strain at Strength	ISO 527-2/5A/50	%	1.5
	Stress at break	ISO 527-2/5A/50	MPa	16.7
	Strain at break	ISO 527-2/5A/50	%	11.5
<b>BENDING TEST</b>	Flexural modulus	ISO 178	MPa	1,533
	Flexural stress at conventional deflection (3,5% strain)*	ISO 178	MPa	36.2
<b>CHARPY IMPACT</b>	Charpy impact resistance	ISO 179-1/1EA	kJ/m <sup>2</sup>	7.3
<b>HARDNESS</b>	Shore Hardness	ISO 868	Shore D	76.6

\*According to ISO 178, end of the test at 5% strain even if there is no specimen break.