



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:

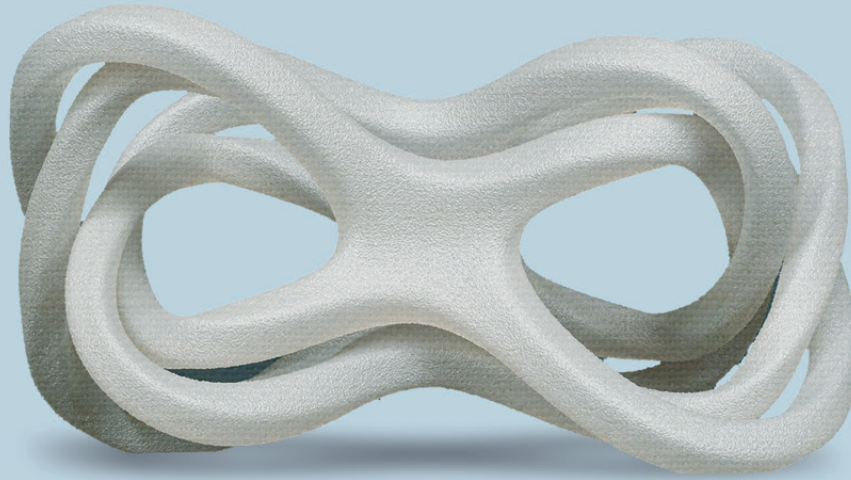
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



TPC-91A KIMYA



KIMYA FLEXIBLE FILAMENT OF THE FAMILY OF THERMOPLASTIC ELASTOMERS COPOLYESTERS

| FLEXIBILITY | EASY TO PRINT | LENGTHENING > 500%

FILAMENT PROPERTIES

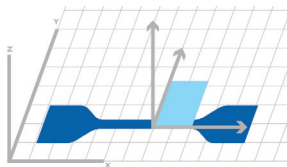
PROPERTIES	TESTS METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183	g/cm ³	1.22
Humidity rate	INS-6711	%	< 1
MFI (@210°C – 2,16 kg)	ISO 1133	g/10min	18 - 20
Melting temperature tf	ISO 11357 DSC (10°C/min – 20 à 220°C)	°C	160

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINT AXIS	XY
PRINT SPEED	44 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	260°C
PLATFORM TEMPERATURE	60°C

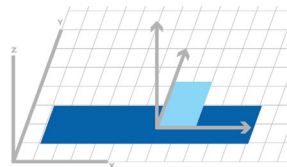
RESULTS

TENSILE TEST



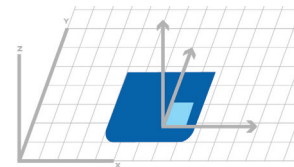
Dim.(mm) : 75x12.5x2
Specimen type ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm) : 80x10x4

HARDNESS



Dim.(mm) : 45x45x4

PRINTED SPECIMENS PROPERTIES

PROPERTIES	TEST METHODS	UNITS	VALUES
TENSILE TEST			
Tensile modulus	ISO 37	MPa	67
Tensile strength	ISO 37	MPa	17.7
Elongation tensile strength	ISO 37	%	> 500
Tensile stress break	ISO 37	MPa	17.5
Tensile elongation break	ISO 37	%	> 500
BENDING TEST			
Flexural modulus	ISO 178	MPa	66
Constraint to 3,5%	ISO 178	MPa	2.6
*According to ISO 178, end of the test at 5% deformation even if there is no specimen break			
CHARPY IMPACT			
Charpy impact strength (notched type A)	ISO 179	kJ/m ²	No break
HARDNESS			
Hardness	ISO 868	Shore A	91

The results presented are the averaged values of the ABS ESD-R range 1.75 mm

For each test, 5 specimens per reference, previously placed at least 24 hours in climatic chambers (23 °C - hygrometry: 50%), have been tested.