



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:

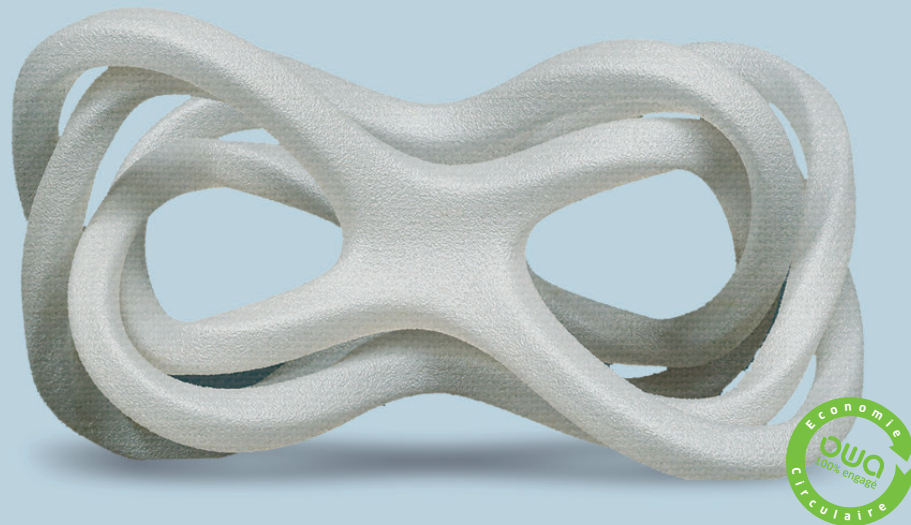
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



PLA-R



PLA-R is a recycled filament for prototypes, design printings. PLA-R Natural is biodegradable eligible.

| **EASY TO PRINT** | **SHINY APPEARANCE**
| **≥ 97 % RECYCLED MATERIAL** | **NO ODOR**

FILAMENT PROPERTIES

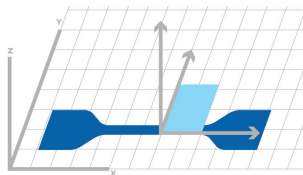
DESCRIPTION	TEST METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Density	ISO 1183	g/cm3	1.24
Humidity rate	INS-6711	%	< 1
MFI (@210°C – 2,16 kg)	ISO 1133	g/10min	9 - 12
Glass temperature tg	ISO 11357 DSC (10°C/min – 20 à 220°C)	°C	61

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINT AXIS	XY
PRINT SPEED	50 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	200°C
PLATFORM TEMPERATURE	60°C

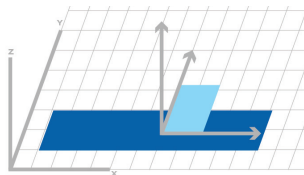
RESULTS

TENSILE TEST



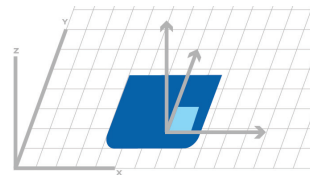
Dim.(mm): 75x12.5x2
Specimen type: ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm): 80x10x4

HARDNESS



Dim.(mm): 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
TENSILE	Tensile modulus	ISO 527	MPa	2,963
	Tensile strength	ISO 527	MPa	57.9
	Elongation @tensile strength	ISO 527	%	2.2
	Tensile stress @break	ISO 527	MPa	47.3
	Tensile elongation @break	ISO 527	%	4.0
BENDING	Flexural modulus	ISO 178	MPa	2,675
	Flexural stress @3.5%	ISO 178	MPa	88.8
	Flexural strength	ISO 178	MPa	91.6
	Deformation @flexural strength	ISO 178	%	4.3
CHARPY IMPACT	Charpy impact strength (notched type A)	ISO 179	kJ/m2	3.22
HARDNESS	Hardness	ISO 868	Shore D	79.1

CERTIFICATION

% RECYCLED	≥ 97 % Recycled
% RECYCLED (FOR PLA-R NATURAL ONLY)	100 % Recycled
BIODEGRADABILITY (FOR PLA-R NATURAL ONLY)	NF EN 13432 & NF EN14995 (for a thickness of 1mm)

The results presented are the averaged values of the PLA-R 1.75mm range.
For each test, 5 specimens per reference, previously placed at least 24 hours in climatic chamber (23°C - hygrométrie : 50%) have been tested.