



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:

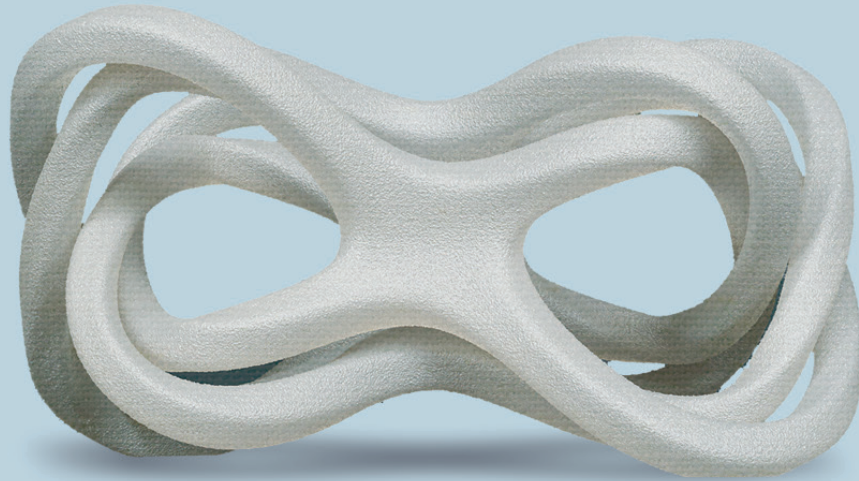
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



ABS ESD-R KIMYA



The ABS ESD-R is ideal for applications that require protection against electrostatic discharges. Only available in black.

| STIFFNESS | EASY TO PRINT

| ELECTROSTATIC DISCHARGE PROTECTION

FILAMENT PROPERTIES

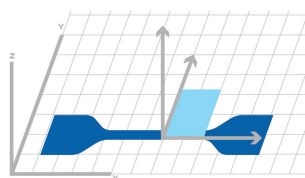
PROPERTIES	TESTS METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Specific gravity	ISO 1183	g/cm ³	1.06
Humidity rate	INS-6711	%	<0.5
MFI (@260°C – 10 kg)	ISO 1133	g/10min	4 - 8
Glass temperature T _g	DSC	°C	107

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINT AXIS	XY
PRINT SPEED	40 mm/s
INFILL	100% - rectilinear
INFILL ANGLE	45°/-45°
EXTRUSION TEMPERATURE	260°C
PLATFORM TEMPERATURE	100°C

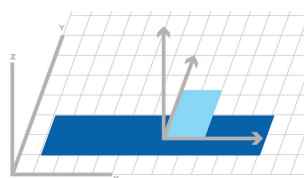
RESULTS

TENSILE TEST



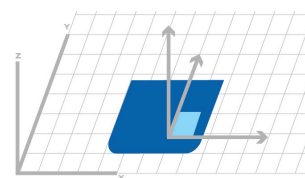
Dim.(mm) : 75x12.5x2
Specimen type ISO 527-5A

BENDING TEST - CHARPY IMPACT



Dim. (mm) : 80x10x4

HARDNESS



Dim.(mm) : 45x45x4

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
ELECTRICAL PROPERTIES	Surface resistivity	ASTM D257	Ohms/m2	10 ⁶ - 10 ⁹
TENSILE TEST	Tensile modulus	ISO 527	MPa	1,858
	Tensile strength	ISO 527	MPa	32.8
	Elongation @ tensile strength	ISO 527	%	1.9
	Tensile stress @ break	ISO 527	MPa	26.7
	Tensile elongation @ break	ISO 527	%	4.7
BENDING TEST	Flexural modulus	ISO 178	MPa	1,515
	Flexural stress @ 3.5%	ISO 178	MPa	42,6
	Flexural stress	ISO 178	%	>5*
CHARPY IMPACT	Charpy impact strength (Notched - type A)	ISO 179	kJ/m2	4.9
HARDNESS	Hardness	ISO 868	Shore D	76,8

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

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.