



# 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:

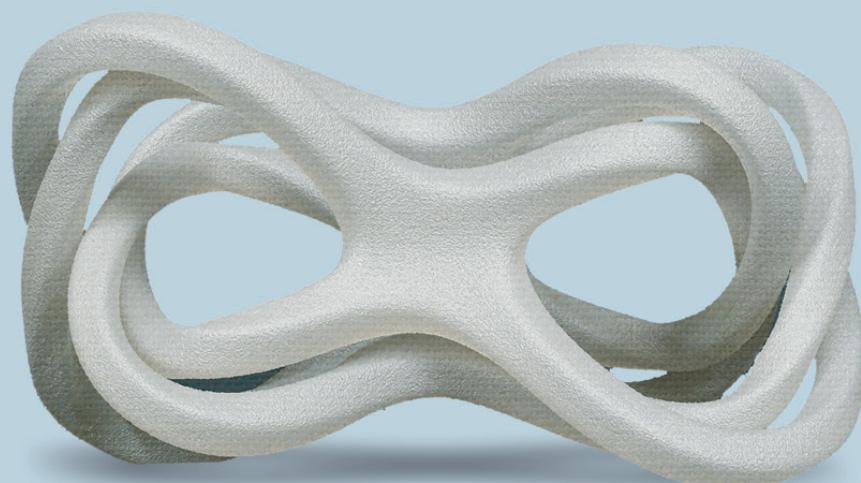
Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

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

**Date of Issue** : 1 March 2020



## ABS ESD-S KIMYA



**The ABS ESD-S** is ideal for applications that require protection against electrostatic discharges. This material can be coloured on request.

| **IMPACT RESISTANT** | **EASY TO PRINT**  
| **ELECTROSTATIC DISCHARGE PROTECTION**

### FILAMENT PROPERTIES

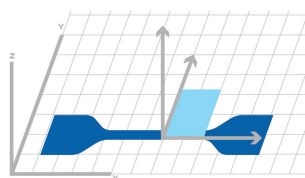
PROPERTIES	TESTS METHODS	UNITS	VALUES
Diameter	INS-6712	mm	1.75 ± 0.1 2.85 ± 0.1
Specific gravity	ISO 1183	g/cm <sup>3</sup>	1.03
Humidity rate	INS-6711	%	<0.5
MFI (@220°C – 10 kg)	ISO 1133	g/10min	15 - 20
Glass temperature T <sub>g</sub>	DSC	°C	107

## PRINT PARAMETERS AND SPECIMENS DIMENSIONS

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

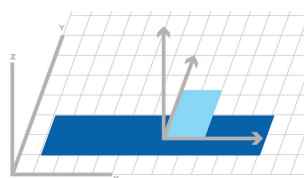
## RESULTS

### TENSILE TEST



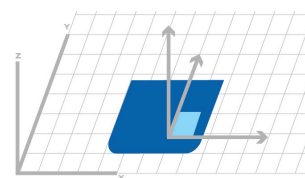
Dim.(mm) : 75x12.5x2  
Specimen type ISO 527-5A

### BENDING TEST - CHARPY IMPACT



Dim. (mm) : 80x10x4

### HARDNESS



Dim.(mm) : 45x45x4

## PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	UNITS	VALUES
<b>ELECTRICAL PROPERTIES</b>	Surface resistivity	ASTM D257	Ohms/m2	10 <sup>7</sup> - 10 <sup>9</sup>
<b>TENSILE TEST</b>	Tensile modulus	ISO 527	MPa	1,121
	Tensile strength	ISO 527	MPa	24.3
	Elongation @ tensile strength	ISO 527	%	3.1
	Tensile stress @ break	ISO 527	MPa	19.8
	Tensile elongation @ break	ISO 527	%	6.4
<b>BENDING TEST</b>	Flexural modulus	ISO 178	MPa	856
	Flexural stress @ 3.5%	ISO 178	MPa	27.3
	Flexural stress	ISO 178	%	>5*
<b>CHARPY IMPACT</b>	Charpy impact strength (Notched - type A)	ISO 179	kJ/m2	10.9
<b>HARDNESS</b>	Hardness	ISO 868	Shore D	66.7

\*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-S 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.