



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



Kimya ABS-EC 3D Filament

The ABS-EC 3D filament has many features:

- Temperature resistance
- Impact resistance

Warranty ARMOR 2 years.

FILAMENT PROPERTIES

PROPERTIES	TEST METHODS	VALUES
Diameter	INS-6713	1.75 ± 0.05 mm 2.85 ± 0.05 mm
Density	ISO 1183-1	1.035 g/cm ³
Moisture rate	INS-6711	< 0.5 %
Melt flow index (MFI)	ISO 1133-1 (@260°C – 10 kg)	8 - 16 g/10min
Glass transition temperature (T_g)	ISO 11357-1 DSC (10°C/min - 20-300°C)	108 °C

PRINT PARAMETERS AND SPECIMENS DIMENSIONS

PRINTING DIRECTION	XY
Printing Speed	45 mm/s
Infill	100% - rectilinear
Infill Angle	45°/-45°
Nozzle Temperature	260°C
Bed T°	95°C

PRINTED SPECIMENS PROPERTIES

	PROPERTIES	TEST METHODS	VALUES
ELECTRICAL PROPERTIES	Surface resistivity	ASTM D257	< 10 ⁶ Ohms/m ²
MECHANICAL PROPERTIES	Tensile modulus	ISO 527-2/5A/50	2,398 MPa
	Tensile Strength	ISO 527-2/1A/50	36.7 MPa
	Tensile strain at strength	ISO 527-2/1A/50	2,3 %
	Tensile Stress at Break	ISO 527-2/5A/50	29.2 MPa
	Tensile strain at break	ISO 527-2/5A/50	5,2 %
	Flexural modulus	ISO 178	1,393 MPa
	Flexural stress at conventional deflection (3,5% strain)*	ISO 178	49.3 MPa
	Flexural strain at flexural strength	ISO 178	>5 %
	Charpy impact resistance	ISO 179-1/1eA	27,6 kJ/m ²
	Shore Hardness	ISO 868	67,2
Note 1	*According to ISO 178, end of the test at 5% deformation even if there is no specimen break.		
Note 2	The data should be considered as indicative values - Properties can be influenced by production conditions.		

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