



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

TECHNICAL DATA SHEET

Spectrum Filaments PET-G FX120

The material offered by Spectrum Group Sp. z o.o. has been developed and adapted to general modeling. Tests performed by Spectrum Group Sp. z o.o. have showed that it is feasible to use the offered product in most 3D printers operating in FDM/FFF technology. Before the first use, it is advisable to print out a hard proof to check if the filament is compatible with user's printer. All shown data are typical properties. The information were processed with the best knowledge of the manufacturer and it is for information only. Users should confirm results by their own tests.

Identification	
Trade name	Spectrum Filaments PET-G FX120
Chemical name	Copolyester
Use	Additive Manufacturing
Origin	Spectrum Group Sp. z o.o.

Filament specification	
Diameter	1.75mm ± 0.05mm
Verify your spool	Yes

Material properties		
Properties	Typical value	Test method
Density	1.13 g/cm ³	D792
Tensile Stress at Yield	14 MPa	D638
Tensile Stress at Break	22 MPa	D638
Elongation at Yield	38%	D638
Elongation at Break	400%	D638
Flexural Modulus	150 MPa	D790
Tear Strength	350 N	D1004
Brittleness temperature	<70°C	D746
Izod Impact Strength, notched	40 J/m (@-40°C)	D256
Vicat Softening Temperature	170°C	D1525
Heat Deflection Temperature	120°C	N/A
Hardness (Shore A)	95A	D2240
Hardness (Shore D)	55D	D2240

Guideline for print settings*

Nozzle temperature	240 - 260°C
Bed temperature	80°C
Active cooling fan	Yes (up to 100%)
Layer height**	0.10 - 0.25mm
Shell thickness**	0.40-1.60mm
Print speed**	30-70mm/s
Bed adhesive	3DLac, Dimafix, buildTak
Heated chamber	recommended

* settings are based on a 0.4mm nozzle

** the range depends on the geometrical complexity

Key features:

- Dimensional stability
- Chemical resistance to lubricants and oils
- Excellent temperature resistance
- Excellent durability
- Low odour
- Steam sterilizable
- Styrene-free
- 95A Shore hardness