



# 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

# PET-G MATT

## MATERIAL PROPERTIES

Density	1.35 g/cm <sup>3</sup>	ISO 1183
<b>Mechanical Properties</b>		
Charpy impact strength, unnotched	85 kJ/m <sup>2</sup>	ISO 179-1eU
Charpy impact strength, notched	3.5 kJ/m <sup>2</sup>	ISO 179-1eA
Tensile Elongation at Yield*	3.1%	ISO 527 (1)
Tensile Elongation at Break*	40,00%	ISO 527 (1)
Tensile Strength at Yield*	45 MPa	ISO 527 (1)
Tensile Strength at Break*	30 MPa	ISO 527 (1)
Elastic modulus**	3150 MPa	ISO 527 (1)
<b>Thermal Properties</b>		
VICAT Softening point***	85°C	ISO 306
Heat Deflection Temperature		
0.45 MN/m <sup>2</sup> , annealed	80°C	ISO 75
1.81 MN/m <sup>2</sup> , annealed	70°C	ISO 75

\* (speed 5mm/min), injection moulding

\*\* (speed 1 mm/min), injection moulding

\*\*\* 50 N (heating rate 50°C/h), annealed

## GUIDELINE FOR PRINT SETTINGS\*

Nozzle temperature	230-255°C
Bed temperature	60-80°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	30-70 mm/s
Closed chamber	not necessary
Dry box	not necessary
Ruby or hardened nozzle	not necessary

\* settings are based on a 0,4 mm nozzle.

\*\* depending on the geometrical complexity

## Disclaimer

The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectrum Group Sp. z o.o. materials in any particular application.

## DESCRIPTION

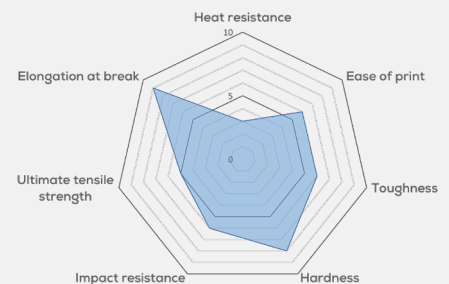
Spectrum PET-G MATT is a PET-G-based material with a chemical composition modified so that it is possible to obtain matte surfaces of printed object. The matte finish of printed items considerably improves their aesthetic properties and also minimises the visibility of layers on the side surfaces of printed items.

## FEAUTURES

- UV stabilization
- high quality matte side surface with hardly visible layers
- increased adhesion between the layers
- high durability
- high rigidity of items
- no shrinkage after cooling

## STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



## SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at [support@spectrumfilaments.com](mailto:support@spectrumfilaments.com)