

PLA Metal Copper

MATERIAL PROPERTIES

Physical

Specific Gravity	2.36 g/cm ³
MFI (210°C, 2.16kg)	41.3 g/10min

Mechanical Properties

Tensile Strength at Break	27 MPa
Tensile Strength at Yield	35 MPa
Impact Strength - Charpy method 23°C	3.8 kJ/m ²

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	195-230°C
Bed temperature	40-50°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	≥ 0.20 mm
Closed chamber	not necessary
Dry box	no
Ruby or hardened nozzle	Yes
Recommended nozzle	≥ 0.4 mm
Adhesive	not necessary
(if you need increased adhesion or prevent warping: glue stick, Dimafix, 3DLac, Magigoo)	

* settings are based on a 0.4 mm nozzle.

Tip: Due to the high metal powder content in the PLA Metal series filaments, it is recommended to use nozzles larger than the standard 0.4mm. The high metal content may cause accelerated wear of standard brass nozzles; therefore, it is advisable to use hardened steel or ruby nozzles.

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

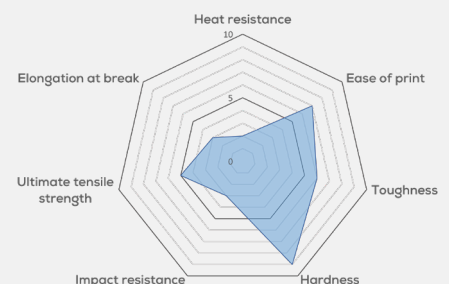
Spectrum PLA Metal Copper, enriched with copper powder, is an advanced material that combines the ease of printing typical of PLA with the aesthetics of metal. Due to the high copper powder content, prints made with this filament achieve a natural look and feel of genuine brass, including its weight and characteristic cool surface.

FEATURES

- High copper powder content
- Authentic copper appearance
- Approximately two to three times heavier than standard PLA
- Enhanced durability
- Ease of printing
- Extensive post-processing possibilities

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