

TEHNICAL DATA SHEET

PLA BRONZE 80%

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Product description:

PLA Bronze 80% is a specialty composite filament that combines PLA with 80% bronze powder. This material offers a distinctive metallic finish and heft, making it ideal for decorative items, artistic sculptures, and parts requiring a metal-like appearance. The high metal content also provides increased weight and some degree of conductivity, while still being biodegradable like standard PLA.

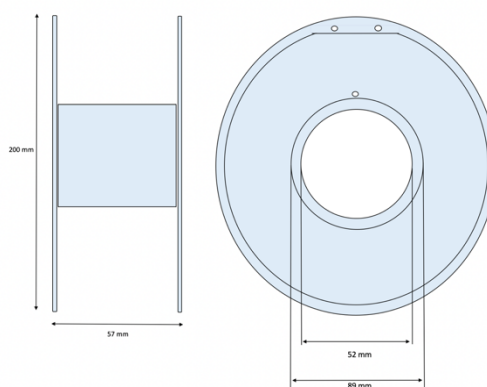
Storage:

Store in dry area, in a closed container away from moisture.

PRODUCT PARAMETERS

| Parameter | Value |
|-------------------------|----------|
| Filament diameter [mm] | 1.75 |
| Diameter tolerance [mm] | +/- 0,01 |
| Oval tolerance [mm] | +/- 0,01 |

| | |
|---|-----------------|
| Spool dimensions [mm] (ø / height / hole ø) | 200/57/52 |
| Spool weight [g] | 204 |
| Spool material | Transparent SAN |
| Weight with packaging [g] | 1 550 |
| Net weight [g] | 1 000 |
| Box dimensions [mm] | 203/207/70 |



RECOMMENDED PRINTING PARAMETERS

| Parameter | Value |
|--------------------------|------------------------|
| Print temperature [°C] | 200-220 |
| Bed temperature [°C] | 50-70 |
| Cooling [%] | 50-100 |
| Closed chamber | Not required |
| Chamber temperature [°C] | - |
| Printing Speed [mm/s] | 20-40 |
| Nozzle type | Hardened steel or ruby |

PHYSICAL PARAMETERS OF THE MATERIAL

| Parameter | Value | Unit | Test method |
|-----------------------|-------|---------|-------------------------------------|
| Density | 4,20 | g/cc | D792 |
| Melt flow rate | 5-8 | g/10min | D1238 |
| Vicat softening temp. | 60-70 | °C | ISO 306 VST/A/50 (50°C/h,10N) |
| Tensile modulus | 4 000 | MPa | D882 |
| Tensile strength | 25-35 | MPa | D882 |
| Elongation at break | 1-3 | % | D882 |
| Impact strength | 2-4 | KJ/m2 | ISO 179 Charpy Notched @23°C (73°F) |

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of PLA BRONZE 80% parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use.