

# 123-3D JUPITER SERIES

## Data sheet

### High definition, no shrinkage and good adherence

Easy printable, biodegradable PLA filament that's suitable for all 3D-printers. The exceptional surface finish and vivid colours bring every piece to life. The filament has excellent adherence and no shrinkage, which make this an ideal choice for small and big prints.



| PHYSICAL PROPERTIES                 | AVERAGE VALUES | UNITS                   | STANDARDS  |
|-------------------------------------|----------------|-------------------------|------------|
| Density                             | 1,24           | g/cm <sup>3</sup>       |            |
| Flow rate (210°C /2.16KG)           | 8              | g/10 min                | ISO 1133-A |
| Flow rate (190°C /2.16KG)           | 3              | g/10 min                | ISO 1133-A |
| Stereochemical purity               | 96             | (% L-isomero)           |            |
| Residual monomer                    | 0.3% (max)     |                         |            |
| Moisture (Coulometric Karl Fischer) | 400 (max)      | ppm                     |            |
| Melting temperature                 | 155 °C         | °C T <sub>m</sub> (DSC) |            |
| Glass transition temperature        | 55 - 60 °C     | °C T <sub>g</sub> (DSC) |            |

| MECHANICAL PROPERTIES       | AVERAGE VALUES | UNITS             | STANDARDS   |
|-----------------------------|----------------|-------------------|-------------|
| Tensile modulus             | 3500           | MPa               | ISO 527-I   |
| Tensile strength            | 45             | MPa               | ISO 527-I   |
| Strain at yield             | 5% (max)       |                   | ISO 527-I   |
| Charpy notched impact, 23°C | ≤5             | kJ/m <sup>2</sup> | ISO 179-1eA |

| PRINTING PROPERTIES | AVERAGE VALUES | UNITS | STANDARDS |
|---------------------|----------------|-------|-----------|
| Nozzle temperature  | 195 - 235      | °C    |           |
| Hot bed temperature | 55 - 75        | °C    |           |
| Cooling fan         | ON (100)       | %     |           |

| SPOOL SIZE | DIAMETER       | ON REQUEST | COLOUR  | PACKAGING                        |
|------------|----------------|------------|---------|----------------------------------|
| 1.1 Kg     | 1,75 - 2,85 mm |            | Various | Cardboard box, vacuum and silica |
| 3 Kg       | 1,75 - 2,85 mm |            | Various | Cardboard box, vacuum and silica |
| 5 Kg       | 1,75 - 2,85 mm | Yes        | Various | Cardboard box, vacuum and silica |
| 8 Kg       | 1,75 - 2,85 mm | Yes        | Various | Cardboard box, vacuum and silica |



\*The indicated parameters are valid for correctly calibrated printers (PID, mechanical and fuser).

\* Supervised and tested manufacturing process (diameter, color and winding) to guarantee the quality of the product.