

## FEATURES

- **Tougher and less brittle compared to regular PLA**
- **Easy to print at low temperature**
- **Low warping**
- **Biodegradable unlike ABS filament – PLA is derived from crops such as corn and sugar cane**
- **Limited smell**
- **Good shelf life**

## RS PRO 1.75mm Red PLA 3D Printer Filament, 2.3kg

RS Stock No.: 125-4341



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

Poly Lactic Acid (PLA) is a biodegradable plastic made from renewable natural resources and one of the most popular materials for 3D printing. Plastics such as PLA are the most popular 3D printing material due to its simplicity, dimensional accuracy and low cost. PLA can be printed at a low temperature and does not require a heated bed and is one of the most environmentally friendly filaments available

[125-4335](#) - Black

[125-4337](#) - White

[125-4339](#) – Dark Blue

[125-4341](#) - Red

[125-4343](#) - Silver

## General Specifications

|                            |   |
|----------------------------|---|
| <b>Printing Technology</b> | FDM   |
| <b>Printing Material</b>   | PLA   |
| <b>Machine Specific</b>    | No  |
| <b>Colour</b>              | Red   |
| <b>For Use With</b>        | Common Desktop 3D Printers  |
| <b>Material Type</b>       | PLA   |
| <b>Application</b>         | General printing, Hobbyist Medical, Education, Prototyping, Jewellery, Architecture models, Aviation, Engineering, Automotive |

### Mechanical Specifications

|                            |                               |
|----------------------------|-------------------------------|
| <b>Diameter</b>            | 1.75mm                        |
| <b>Weight</b>              | 1kg                           |
| <b>Specific gravity</b>    | 1,24 g/cc                     |
| <b>MFI</b>                 | 6,0 g/10 min                  |
| <b>Tensile strength</b>    | 110 MPa (MD) / 145 MPa (TD)   |
| <b>Elongation at break</b> | 160% (MD) / 100% (TD)         |
| <b>Tensile Modulus</b>     | 3310 MPa (MD) / 3860 MPa (TD) |
| <b>Impact strength</b>     | 7,5 KJ/m <sup>2</sup>         |
| <b>Tolerance</b>           | ± 0.05mm                      |
| <b>Roundness</b>           | ≥ 95%                         |

### Operation Environment Specifications

|                                    |               |
|------------------------------------|---------------|
| <b>Printing Temperature</b>        | 180 °C -210°C |
| <b>Melting Temperature</b>         | 210°C ± 10 °C |
| <b>Melting Point</b>               | 145 °C -160°C |
| <b>Vicat Softening Temperature</b> | ± 60°C        |
| <b>Storage Temperature</b>         | 15 °C -25°C   |

### Approvals

|                                  |   |
|----------------------------------|---|
| <b>Compliance/Certifications</b> | ASTM D1505, ASTM D882,ASTM D3418,ISO 306, 2011/65/EU and 2015/863 |
|----------------------------------|---|

