

Technical Data Sheet



Product name: Volcano PLA

Version: v3

Volcano PLA is an industrial grade PLA which is engineered for professional applications that require high printing speeds and improved heat resistance and mechanical properties similar to ABS.

Volcano PLA offers the same mechanical and thermal properties - after annealing - as most ABS filaments, but with the biodegradability and ease of printing of PLA. Volcano PLA combines a high heat resistance with high printing speeds and high impact resistance into a PLA-based filament engineered for industrial applications.

| Properties | Typical value | Test Method | Test condition |
|---|-------------------------|-------------|-------------------------------|
| Physical | | | |
| Specific gravity | 1.27 g/cc | ASTM D792 | - |
| Melt flow rate | 6 g/10 min* | ISO 1133 | 210° C/2.16Kg |
| <i>* Higher melt flow rate at a higher printing temperature (240°C ±10°C), which increases the printing speed capabilities.</i> | | | |
| Mechanical | | | |
| Impact strength | 22 KJ/m ² | ISO 179 | Charpy Notched @23° C (73° F) |
| Tensile strength | 39 Mpa | ISO 527 | - |
| Tensile modulus | 3900 Mpa | ISO 527 | - |
| Elongation at break | 58% | ISO 527 | - |
| Flexural strength | - | - | - |
| Flexural modulus | - | - | - |
| Hardness | - | - | - |
| Thermal | | | |
| Print temperature | ± 220 - 255° C | - | - |
| Melting temperature | ± 190 - 220° C | - | - |
| Viscat softening temp. | ≥ 95° C After annealing | ISO 75 | - |
| Optical | | | |
| Haze | - | - | - |
| Transmittance | - | - | - |
| Gloss | - | - | - |

| Product details, certifications and compliance | Diameter | Tolerance | Roundness |
|--|----------|-----------------|-----------|
| HS Code | 39169090 | 1.75mm ± 0.05mm | ≥ 95% |
| REACH compliant | Yes | 2.85mm ± 0.10mm | ≥ 95% |
| RoHS certified | Yes | | |

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