



TECHNICAL DATA SHEET PEARL

DESCRIPTION

Extrudr PEARL is made from renewable resources and is developed for rapid prototyping applications. The material offers excellent tensile stretch properties. The raw material is approved according to the REACH-, RoHS- and FDA-Standards.

FEATURES

- Very good printing and flow properties
- uniquely smooth surface
- Low warping tendency
- Biodegradable (DIN EN ISO 14855)

PROPERTIES ¹

| TEST | METHOD | UNIT | VALUE |
|---------------------|-----------|-------------------|-------|
| Flexural modulus | ISO 527 | MPa | 2500 |
| Tensile strength | ISO 527 | MPa | 34 |
| Breaking stress | ISO 527 | % | 3 |
| Elongation at break | ISO 527 | % | 6.9 |
| E-Modulus | ISO 178 | MPa | 1800 |
| Flexural strength | ISO 527 | MPa | 30.1 |
| MFR | ISO 1133 | g/10min | 4 |
| VICAT A (VST) | ISO 306 | °C | 58* |
| HDT/B | ISO 75 | °C | 51 |
| Shrinking | ISO 294-4 | % | 0.67 |
| Density | ISO 2781 | g/cm ³ | 1.25 |

*Temperature resistance tested at a minimum wall thickness of 4 mm.

CERTIFICATIONS & ADDITIONAL INFORMATION ²



STORAGE AND SHELF LIFE

Store in a dry room at room temperature (18-27°C / 65-80°F). Keep out of direct heat and sunlight. When stored correctly, this material has a shelf life of 2 years.

1. Additional info in our regulatory, additional information and chemical resistance data sheets.
 2. Certifications depend on colors in final product. More info in the additional information sheet.

| | | |
|--|------------------------|----|
| | TEMPERATURE RESISTANCE | 4 |
| | EASE OF PRINTING | 7 |
| | VISUAL QUALITY | 10 |
| | LAYER ADHESION | 8 |
| | IMPACT RESISTANCE | 7 |
| | MAXIMUM STRESS | 4 |
| | ELONGATION AT BREAK | 5 |

PRINT SETTINGS

| | |
|----------|--------------|
| Nozzle | 140-210°C |
| Heatbed | 20-60°C |
| Adhesive | not required |
| Speed | 40-60mm/s |
| Cooling | 30-100% |

Recommended settings for printers with a 0.4mm Nozzle. Max. 50% layerheight. Optimal print settings may vary between different printers and also depend on environmental factors.

NEED HELP?

If you have any question about the product and/or you are experiencing an issue, please contact us via support@extrudr.com