POLYJET

VeroClear

Transparent Photopolymer for Multi-Material Applications

VeroClear is a rigid, transparent photopolymer material designed for PolyJet 3D printing technology. Known for its exceptional optical clarity and smooth surface finish, it is ideal for creating transparent prototypes, light guides, lenses, and visual models where transparency is critical. Perfect for multi-material applications requiring see-through properties and precise dimensional accuracy.



BUILD VOLUME	LEAD TIME	LAYER HEIGHT	TOLERANCE
342 × 342 × 200 mm	**2-4 business days**	**0.016-0.03 mm**	**±0.2% (min ±0.2 mm)**

MECHANICAL PROPERTIES

VeroClear delivers dependable strength and stiffness for concept models, design verification and functional testing of clear parts, from optical prototypes and medical visualization to fluid flow analysis.

Stratasys publishes each value as a range, so design to the low end. The rigid profile holds fine geometry through fit, snap and handling tests.

PROPERTY	VALUE	TEST STANDARD
Tensile Strength	**50–65 MPa**	ASTM D638
Modulus of Elasticity	**2000–3000 MPa**	ASTM D638
Elongation at Break	**10–25 %**	ASTM D638
Flexural Strength	**75–110 MPa**	ASTM D790
Flexural Modulus	**2200–3200 MPa**	ASTM D790
Izod Impact Strength, Notched	**20–30 J/m**	ASTM D256

THERMAL PROPERTIES

VeroClear keeps its shape for room-temperature handling, display and testing, and softens at a lower temperature than engineering thermoplastics. Heat deflection is reported at both loads and sits just below the glass transition temperature, which Stratasys measures by dynamic mechanical analysis (DMA).

For lamp housings, vehicle interiors and other parts that run warm, High Temperature resin or an engineering thermoplastic carries the heat load, while VeroClear handles the visual and fit model.

PROPERTY	VALUE	TEST STANDARD
HDT @ 0.45 MPa	**45–50 °C**	ASTM D648
HDT @ 1.82 MPa	**45–50 °C**	ASTM D648
Glass Transition Temperature	**52–54 °C**	DMA, E″

PHYSICAL PROPERTIES

Consistent density and surface quality keep critical features in tolerance and downstream finishing predictable. Water absorption is measured as weight gain after a 24-hour soak, so it shows how a model behaves when it sits in water or a humid environment.

Stratasys reports hardness on the Shore D and Rockwell M scales, which describe rigid plastics. Ash content is the residue left after burning a sample, measured to USP 281.

PROPERTY	VALUE	TEST STANDARD
Polymerized Density	**1.18–1.19 g/cm³**	ASTM D792
Water Absorption (24 h)	**1.1–1.5 %**	ASTM D570
Shore Hardness D	**83–86**	—
Rockwell Hardness M	**73–76**	—
Ash Content	**0.02–0.06 %**	USP 281

COMPLIANCE

The status comes from the Stratasys REACH statement for its PolyJet materials, so teams can start EU substance reviews from supplier documentation.

For clear parts that need supplier biocompatibility data, USP Class VI Biocompatible ClearVue is the alternative.

STANDARD	STATUS
EU REACH (EC) No 1907/2006 Stratasys REACH statement for the PolyJet resin range	Stratasys statement

MANUFACTURING

Colours & finishes	**Clear with a slight tint as printed; sanding, polishing and clear coating for full transparency**
Support options	**Waterjet-removable or soluble support for clean internal channels**