Dental Materials

Advanced materials for superior digital dentistry and orthodontics.

Stratasys® offers an impressive array of dental materials for one of the most innovative 3D printing technologies, PolyJet™. Combining superior accuracy, high precision and dimensional stability, the Stratasys Dental Series of 3D printers uses these materials to create a range of dental appliances, restorations and models with consistency and exactness.

Clear Bio-compatible
(MED610)

Transparent, bio-compatible material that is medically approved for temporary in-mouth placement.

Ideal for:
• Orthodontic appliances
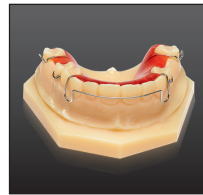• Delivery and positioning trays
• Surgical guides

VeroGlaze™
(MED620)

Opaque white material with A2 shading designed to provide the best color match in the industry. VeroGlaze is medically approved for temporary in-mouth placement up to 24 hours.
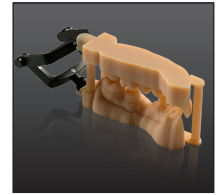
Ideal for: Veneer try-ins and diagnostic wax-ups

VeroDent™
(MED670)

Natural peach-tone material with high-quality detail, strength and durability.

Ideal for: Dental and orthodontic models

VeroDentPlus™
(MED690)

Dark beige material that creates amazingly fine features and finish. VeroDentPlus also offers excellent strength and durability, and delivers a higher level of opacity than VeroDent.

Ideal for: Dental and orthodontic models

Triple-jetting technology

In addition, standard 3D printing materials provide composites with these advanced features:

• Gum-like textures
• Range of colors to represent natural tooth and gum shades
• Ability to render anatomy such as nerve canal, jaw and teeth in contrasting materials, all in one print

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THE **3D PRINTING SOLUTIONS** COMPANY

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PROPERTY	STANDARD/ PROCEDURE	CLEAR BIO-COMPATIBLE MED610	VEROGLAZE MED620	VERODENT MED670	VERODENTPLUS MED690
Tensile Strength (MPa)	D-638-03	50 – 65	55 – 65	50 – 60	54 – 65
Elongation at break (%)	D-638-05	10 – 25	15 – 25	10 – 25	15 – 25
Modulus of elasticity (MPa)	D-638-04	2,000 – 3,000	2,300 – 3,300	2,000 – 3,000	2,200 – 3,200
Flexural Strength (MPa)	D-790-03	75 – 110	80 – 100	75 – 110	80 – 110
Flexural Modulus (MPa)	D-790-04	2,200 – 3,200	2,300 – 3,200	2,200 – 3,200	2,400 – 3,300
HDT 0.45 MPa (ºC)	D-648-06	45 – 50	45 – 50	45 – 50	45 – 50
HDT 1.82 MPa (ºC)	D-648-07	45 – 50	45 – 50	45 – 50	45 – 50
Izod Notched Impact (J/M)	D-256-06	20 – 30	20 – 30	20 – 30	20 – 30
Water Absorption (%)	D-570-98 24HR	1.1 – 1.5	.1 – 1.5	1.1 – 1.5	1.2 – 1.5
Tg (ºC)	DMA E	52 – 54	52 – 54	52 – 54	52 – 54
Shore Hardness (D)	Scale D	83 – 86	83 – 86	83 – 86	83 – 86
Rockwell Hardness (scale M)	Scale M	73 – 76	73 – 76	73 – 76	73 – 76
Polymerized density (gr/cm³)	ASTM D792	1.17 – 1.18	1.17 – 1.18	1.17 – 1.18	1.17 – 1.18
Bio-compatibility	DIN EN ISO 10993-1:2009	Approved	Approved	—	—
Support Removal Type	—	WaterJet	WaterJet or soluble*	WaterJet or soluble*	WaterJet or soluble*

For detailed material specifications of non-dental materials, please see the PolyJet Materials Data Sheet. All data provided herein, which is related to consumables, was collected from specific specimens and test conditions and is provided for information only. Characteristics may vary if different specimens and test conditions are applied. Unless expressly provided in writing, no warranties are made and warranties of merchantability or fitness for a particular purpose are expressly disclaimed.

*Soluble support is available on the Eden260VS Dental Advantage. No full bio-compatibility on soluble support.