

HEYGEARS

HeyGears was founded in 2015 as an innovation-driven company, devoted to providing digital manufacturing solutions in various industries. The company bases its core competencies in 3D printing, software development, materials, and big-data handling. We have a global presence with teams across the US, UAE and China.

HeyGears believes in a product development process rooted deeply into vertical applications, and our vision goes beyond just 3D printing technology. We strive to create vertically integrated solutions through the solid establishment of hardware, software, material, and service platforms, delivering our goal to bring advanced technology into daily life.

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MATERIALS FORMULATED FOR DENTISTRY

ULTRAPRINT DENTAL SERIES



ULTRAPRINT DENTAL SERIES

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C O N T E N T S

On-X Teeth UV 1.0

- ✓ High Flexural Strength
(Outstanding occlusal load capacity and fracture resistance)
- ✓ High Abrasion Resistance
- ✓ Anti-corrosion



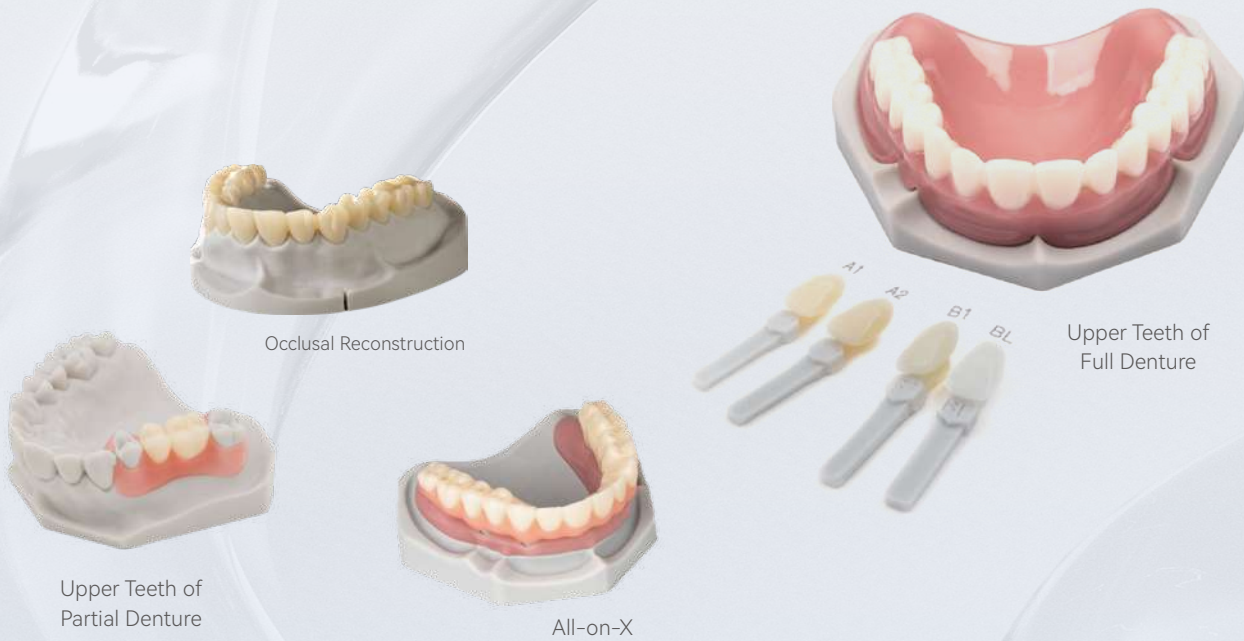
All-on-X
(Hybrid Denture)

Colors A1 A2
Specifications 500g/Bottle

Applications

Properties	Standard	Units	HeyGears On-X Teeth	Other Brands
Flexural Strength	ASTM D790	MPa	170	/
Flexural Strength	ISO20795	MPa	117	72
Flexural Modulus	ISO20795	MPa	3200	2388
Work of Fracture	ISO20795	J/m ²	2636	1033
Determination of MMA Content	ISO20795	/	Pass	Pass
Hardness	ASTM D2240	Shore D	91	90

Tough Teeth UV 1.0



Occlusal Reconstruction

Upper Teeth of
Partial Denture

All-on-X

Upper Teeth of
Full Denture

Applications

Colors A1 A2 B1 BL
Specifications 500g/Bottle

- ✓ Superior Resistance to Breakage
(Work of fracture > 7500 J/m²)
- ✓ Long-term Storage

Properties	Standard	Result	Units
Work of Fracture*	ISO 20795-1	7586	J/m ²
Flexural Strength	ASTM D790	73	MPa
Flexural Modulus	ASTM D790	1809	MPa

*The higher the Work of Fracture is, the less likely the finished product is to break during use and the more durable it is.

Temp C&B UV 2.0

- ✓ High Precision
- ✓ Fast Printing Speed
- ✓ High Abrasion Resistance
- ✓ Low Viscosity
- ✓ Odorless
- ✓ Natural tone
- ✓ Color Tone Stability
- ✓ Anti-corrosion

Colors A1 A2 B1 BL
Specifications 500g/Bottle
Certifications FDA / CE / MDA

Applications



The updated Temp C&B UV 2.0 is a bio-compatible material developed to manufacture temporary crowns & bridges. The material provides greater pressure and impact resistance, wear resistance and corrosion resistance, allowing for excellent marginal adaptation and dimensional stability. It also features a greater range of translucent color tone options for natural tooth aesthetics, and it can maintain high color stability even with corrosion. It is odorless and can be used intraorally for extended periods.

Properties	Standard	Result	Units
Tensile Strength	ASTM D638	63-70	MPa
Tensile Modulus	ASTM D638	1774-1925	MPa
Flexural Strength	ASTM D790	94-105	MPa
Flexural Modulus	ASTM D790	1846-2021	MPa
Impact Strength (Notched)	ASTM D256	29-40	J/m
Hardness	ASTM D2240	84	Shore D

Try-in UV 2.0

- ✓ Easy to Polish
- ✓ Dimensional Stability
- ✓ Smooth Surface

Colors A1 A2 B1 BL
Specifications 500g/Bottle
Certifications FDA / CE / TGA / NMPA / MDA

Applications



Properties	Standard	Result	Units
Impact Strength (Notched)*	ASTM D256	34	J/m
Flexural Strength	ASTM D790	91	MPa
Flexural Modulus	ASTM D790	2340	MPa

*High impact strength reduces the probability of product fracture

Flexible Denture UV 1.0



Invisible Denture Base

- ✓ Semi-transparent, Invisible Inside the Mouth
- ✓ Perfect Fit

Applications

Colors Pink ● Dark Pink ● Transparent ●
Specifications 500g/Bottle
Certifications MDA

Properties	Standard	Result	Units
Tensile Strength	ASTM D638	31-36	MPa
Flexural Strength	ASTM D790	47-52	MPa
Flexural Modulus	ASTM D790	1000-1100	MPa

Denture UV 2.0

- ✓ Perfect Fit
- ✓ Long-term Stability
- ✓ Biocompatible



Partial Denture Base

Full Denture Base

Colors DY6 ● DR6 ● DB6 ● DP6 ●
Specifications 500g/Bottle

Applications

Properties	Standard	Result	Units
Tensile Strength	ASTM D638	74-80	MPa
Flexural Strength	ASTM D790	137-138	MPa
Flexural Modulus	ASTM D790	3180-3210	MPa
Impact Strength (Notched)	ASTM D256	13-27	J/m
Hardness	ASTM D2240	85	Shore D

Model GP 1.0



Applications

- Colors** Grey ● Caramel ●
- Specifications** 1000g/Bottle
- Certifications** FDA / CE / TGA / NMPA

- ✓ Fast Printing Speed
- ✓ High Precision
- ✓ High Surface Hardness
- ✓ Dimensional Stability
- ✓ Exceptional Surface Quality
- ✓ Cost Effective



Model GP is a 405nm 3D printing resin designed for the production of high-precision dental models. This material has a fast forming speed, exceptional accuracy, and high surface hardness. Its excellent detail reproduction, dimensional stability, and surface quality make it suitable for high-precision dental model production across a variety of applications. It also features a lower viscosity that helps minimize material consumption and assists with easier cleaning. It is a resin material that balances affordability, efficiency, and performance.

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	91-97	MPa
Flexural Modulus	ASTM D790	2785-2895	MPa
Hardness	ASTM D2240	84	Shore D
Impact Strength(Notched)	ASTM D256	10-13	J/m

Model WW 1.0



Applications

- Colors** Grey ●
- Specifications** 1000g/Bottle
- Certifications** FDA / CE / TGA / NMPA

- ✓ Water Washable
- ✓ Fast Printing Speed
- ✓ High Precision
- ✓ Low Viscosity
- ✓ Outstanding Edge Stability
- ✓ High Surface Hardness



Model WW is a water-washable 405nm 3D printing resin designed for the production of dental models. The printed dental models can be cleaned with just water to remove any residual resin on the surface. This material features a fast forming speed and high precision. With excellent detail reproduction and margin dimensional stability, as well as good heat resistance, Model WW is able to meet the production requirements across a variety of dental applications. Its low viscosity helps minimize material consumption and assists with easier cleaning.

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	75.3	MPa
Flexural Modulus	ASTM D790	1590.7	MPa
Hardness	ASTM D2240	83.5	Shore D
Impact Strength(Notched)	ASTM D256	17.4	J/m



Gingiva UV 2.0

- ✓ Elastic and Tear-resistant
- ✓ Dimensional Stability During Print
- ✓ Limited Shrinkage
- ✓ Aging Resistant
- ✓ Long-term Storage
- ✓ Odorless
- ✓ Natural Tone



Gingiva

Colors Pink ●
Specifications 500g/Bottle
Certifications FDA / CE / PMPA

Applications



Gingiva UV 2.0 has excellent dimensional stability, elasticity, and high tear resistance for 3D printing of gingival model segments. It remains elastic after extended use without shrinking or degrading over time and is odorless once the printing process is complete.

Properties	Standard	Result	Units
Hardness	ASTM D2240	38	Shore A
Elongation at Break	ASTM D638	135-143	%
Tear Resistance	ASTM D624	8-11	N/mm

Surgical Guide UV 1.0

- ✓ Low Material Consumption
- ✓ Autoclaving Verified
- ✓ High Mechanical Stability
- ✓ Vivid Detail Restoration
- ✓ Fast Printing Speed
- ✓ High Yield Rate
- ✓ High Transparency
- ✓ Biocompatible
- ✓ MMA Free

Colors Clear ○
Specifications 500g/Bottle
Certifications FDA / CE / PMPA / MDA / NMPA / ANVISA

Applications



Surgical Guide UV is an odorless, biocompatible material for surgical guides, fixed splints, X-ray templates, occlusal splints and fixation splints. It is easy to polish, has high mechanical strength, low water sorption, and can be used intraorally for extended periods.

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	75-84	MPa
Flexural Modulus	ASTM D790	1660-1830	MPa
Impact Strength (Notched)	ASTM D256	20-24	J/m

Cast UV 3.0

- ✓ Clean Burn-out
- ✓ Dimensional Stability
- ✓ Vivid Detail Restoration
- ✓ High Precision Casting

Colors Red ●
Specifications 500g/Bottle
Certifications FDA / CE / PMPA

Applications



Cast UV 3.0 is developed for the production of high-precision dental casts. Its low viscosity and optimized cure depth help reduce print time, material consumption, and wash time. Printing results are precise and without any misshapes. The burnout process leaves no residue in the mold, which facilitates removable partial dentures (RPD), post and core, and crowns with metal casts. It also works for crowns with zirconia, veneers, and ceramic inlays.

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	72-85	MPa
Sintering Temperature	/	900-950	°C
Sintering Time	/	1-1.5	Hours
Wall Thickness	/	≥0.35	mm
Storage Time	/	< 10	Hours
Ash Value	/	< 0.03%	/

Tray UV 3.0

- ✓ Economical
- ✓ Fast Printing Speed
- ✓ Biocompatible



Applications

Colors Green ●
Specifications 500g/Bottle
Certifications FDA / CE / TGA / PMPA / TFDA

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	70-77	MPa
Flexural Modulus	ASTM D790	1454-1612	MPa
Impact Strength (Notched)	ASTM D256	25-30	J/m
Hardness	ASTM D2240	82	Shore D

keystone
industries

KeySplint Soft®

- ✓ High Precision
- ✓ Thermo-reactive
- ✓ Easy to Put On/Take Off
- ✓ Biocompatible
- ✓ Anti-corrosion
- ✓ High Stability



Colors Transparent ○ Clear ○
Specifications 1000g/Bottle
Certifications FDA / CE

Applications



Soft Splint UV is a biocompatible material used for bite plates and night guards. The material can be worn safely inside the mouth for extended periods. Its unique formulation makes the material thermo-reactive and softens at temperatures below 113 °F (45 °C), making night guards easier to put on or take off.

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	47	MPa
Flexural Modulus	ASTM D790	1356	MPa
Elongation at Break	ASTM D638	66	%
Hardness	ASTM D2240	82	Shore D
Impact Strength (Notched)	ASTM D256	45-48	J/m

keystone
industries

KeySplint Hard™

- ✓ High Precision
- ✓ High Toughness
- ✓ Dimensional Stability
- ✓ Biocompatible
- ✓ High Abrasion Resistance
- ✓ Easy to Clean

Colors Transparent ☐ Clear ☐
Specifications 1000g/Bottle
Certifications FDA / CE



Applications

Hard Splint UV is a biocompatible, easy-to-clean material used for bite plates, occlusal splints, and retainers. It can print with high accuracy and dimensional stability. The material is abrasion resistant with high flexural strength and impact strength

Properties	Standard	Result	Units
Flexural Strength	ASTM D790	100-110	MPa
Flexural Modulus	ASTM D790	2300-2400	MPa
Impact Strength (Notched)	ASTM D256	29	J/m
Elongation at Break	ASTM D638	9	%
Hardness	ASTM D2240	89	Shore D

