



keyprint®
by keystone industries

What Dental Professionals Think of KeyPrint®

“Keystone’s are the highest quality materials we have seen, and we are eagerly integrating them into our digital workflow.”

- JAY COLLINS, OWNER OF CORNERSTONE DENTAL LABS

“We are loving KeySplint Soft™. Best splint material I’ve ever used!”

- CHRIS KABOT, CORE3DCENTRES

“KeyGuide® resin is a perfect fit for our laboratory. The material prints quickly and accurately in our 3D printer and polishes to a beautiful high luster shine. Our doctors are loving it!”

- KEN KINCAID, CDT, RG, TE

“KeySplint Soft™ has the unique ability to change flexural properties over the temperature range of the indicated uses. These dynamic properties add a unique characteristic that should extend the life of the splint device by preventing the degradation due to brittle fracture.”

- MARK LATTA, DMD

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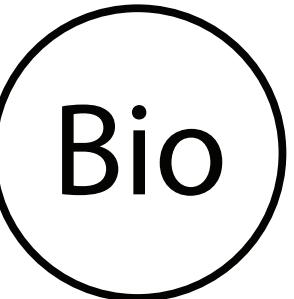
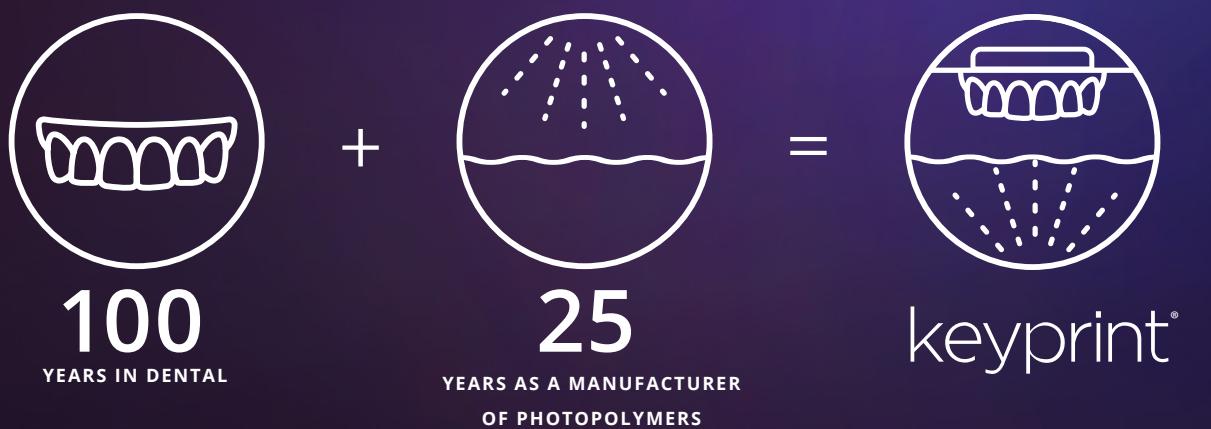
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Our KeyPrint Journey

In an industry that is increasingly defined by the ability to innovate, adapt, and produce consistent results, Keystone Industries introduced KeyPrint in 2018, a line of precision 3D resins specifically formulated for the dental industry. Keystone has combined its unique blend of dental and photopolymer expertise to deliver the highest quality 3D printing resins to the dental market.

Entirely designed and produced in the USA, the full KeyPrint line is available throughout North America, Europe, and other global territories. KeyPrint resins are compatible with DLP printers (wavelengths of 385-405 nm). Keystone is profiling 3D printers on an ongoing basis to ensure our KeyPrint resins work reliably in multiple open-source printers.

Prioritizing patient safety, KeyPrint resins are subjected to a battery of biocompatibility tests in accordance with global regulatory standards. Each biocompatible print complies with international standards to ensure efficacy and effectiveness for the patient. KeyPrint's robust formulations guarantee a 3-year shelf life, along with color stability.



SAFE AND EFFECTIVE

Biocompatible Medical Device Resins

FDA 510K CLEARED | CE MARKED (CLASS IIa) | HEALTH CANADA APPROVED

AVAILABLE IN THE USA, CANADA, EU AND AUS

KeySplint Soft™

Revolutionizing Night Guard and Splint Technology



FEATURES

- STRONG & FLEXIBLE; NOT BRITTLE
- BIOCOMPATIBLE
- TRANSLUCENT
- UNIQUE TECHNOLOGY

PROPERTY	PROCEDURE	KEYSPLINT SOFT
Ultimate Flexural Strength	ISO 20795-2	2.6–4.4 MPa
Flexural Modulus	ASTM D790	1356
Tensile Strength	ASTM D638	52
Young's Modulus Tensile	ASTM D638	1790
Water Sorption	ISO 20795-2	< 18 ug/mm ³
Elongation at Break	ASTM D638	110%
Biocompatibility	ISO 10993-1 and USP Class VI	Pass



KeySplint Soft™

"I honestly believe this will change printed splints forever. It has unbelievable fracture resistance and mind blowing elastic memory." – JAY PATRICK, DENTAL DEVICES BY JASON

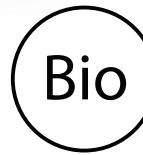


Utilizing unique patent-pending technologies, Keystone Industries has developed a one-of-a-kind 3D printing resin for the fabrication of flexible dental splints and nightguards. This DLP-optimized resin is an exceptional printing material that combines the strength needed to protect teeth against disorders like bruxism, with added flexibility for better patient comfort.



#4220005 (1kg bottle)

*Currently available from multiple dealers.
Please contact us



BIOCOMPATIBLE



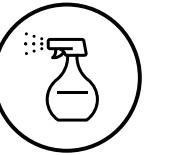
STRONG



FLEXIBLE



EASY TO POLISH



EASILY CLEANED

KeySplint Soft™ Clear for Carbon®

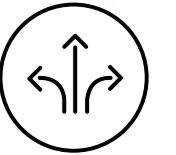
"We are loving KeySplint Soft™. Best splint material I've ever used!" - CHRIS KABOT, CORE3DCENTRES



BIOCOMPATIBLE



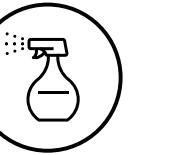
STRONG



FLEXIBLE



EASY TO POLISH



EASILY CLEANED

Keystone has collaborated closely with Carbon to optimize a clear formulation of KeySplint Soft exclusively for Carbon M-Series printing platforms. The combination of this unique resin and Carbon's robust printers yields 6x the splint production compared to traditional methods.



#4220155 (1kg bottle)

*Available exclusively through Henry Schein, Inc. and its affiliates

AVAILABLE IN THE USA, CANADA, EU AND AUS

“When we tested this material in the beginning, I was surprised. It prints really well and the fit was very precise. It was really easy to use. We are definitely impressed with it. We will no longer be outsourcing our surgical guides.” - JESSICA BIRRELL, CDT

Class I

#4220001 (1kg bottle)



BIOCOMPATIBLE



STRONG



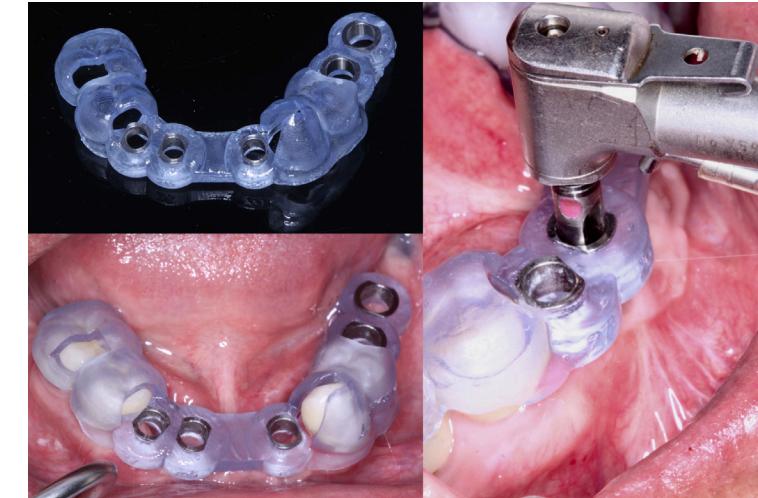
EASY TO POLISH



AUTOCLAVABLE

KeyGuide®

KeyGuide is ideal for fabricating transparent and stable surgical guides, which enable the placement of implants at a precise angle and depth.

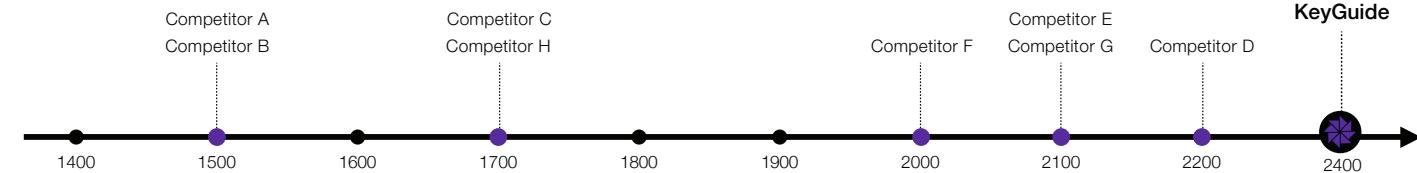


Photos courtesy of August De Oliveria, DDS.

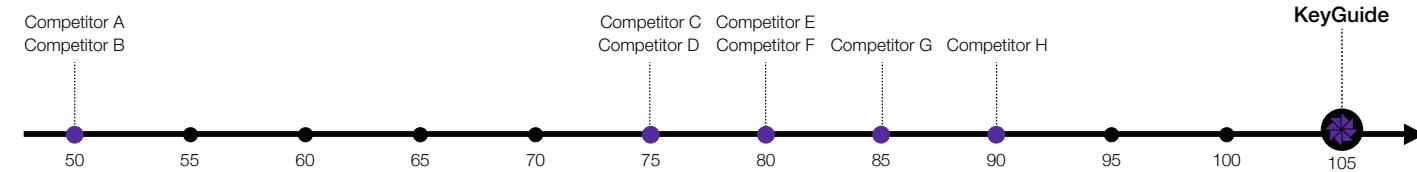
FEATURES

- STRONG
- BIOCOMPATIBLE
- EASY TO POLISH
- AUTOCLAVABLE AND COLOR STABLE

FLEXURAL MODULUS (MPa)



FLEXURAL STRENGTH (MPa)



AVAILABLE IN THE USA, CANADA AND EU

Class I

#4220007 (1kg bottle)



KeyTray™

KeyTray is a strong, biocompatible (Class I) 3D printing resin designed to create customized, individual impression trays quickly and with precision. The material is strong and durable to withstand the forces of taking a patient impression and removing the tray from the oral cavity. It is compatible with all types of impression material.

FEATURES

- NO PRELIMINARY CAST REQUIRED
- SAVES TIME BY ELIMINATING STONE MODELS
- IMPROVED IMPRESSION ACCURACY
- COMPOUND WAXES AND BORDER MOLDING MATERIALS WILL ADHERE TO TRAY

PROPERTY	PROCEDURE	KEYTRAY
Flexural Strength (MPa)	ASTM D790	84.7
Flexural Modulus (MPa)	ASTM D790	1913
Tensile Strength (MPa)	ASTM D638	62.1
Tensile Young's Modulus (MPa)	ASTM D638	2056
Elongation at Break (%)	ASTMD638	26.4
Shore D Hardness		86.5 D

PAIRS PERFECTLY WITH:



TAC®



Consistency VPS



Dispensing Gun



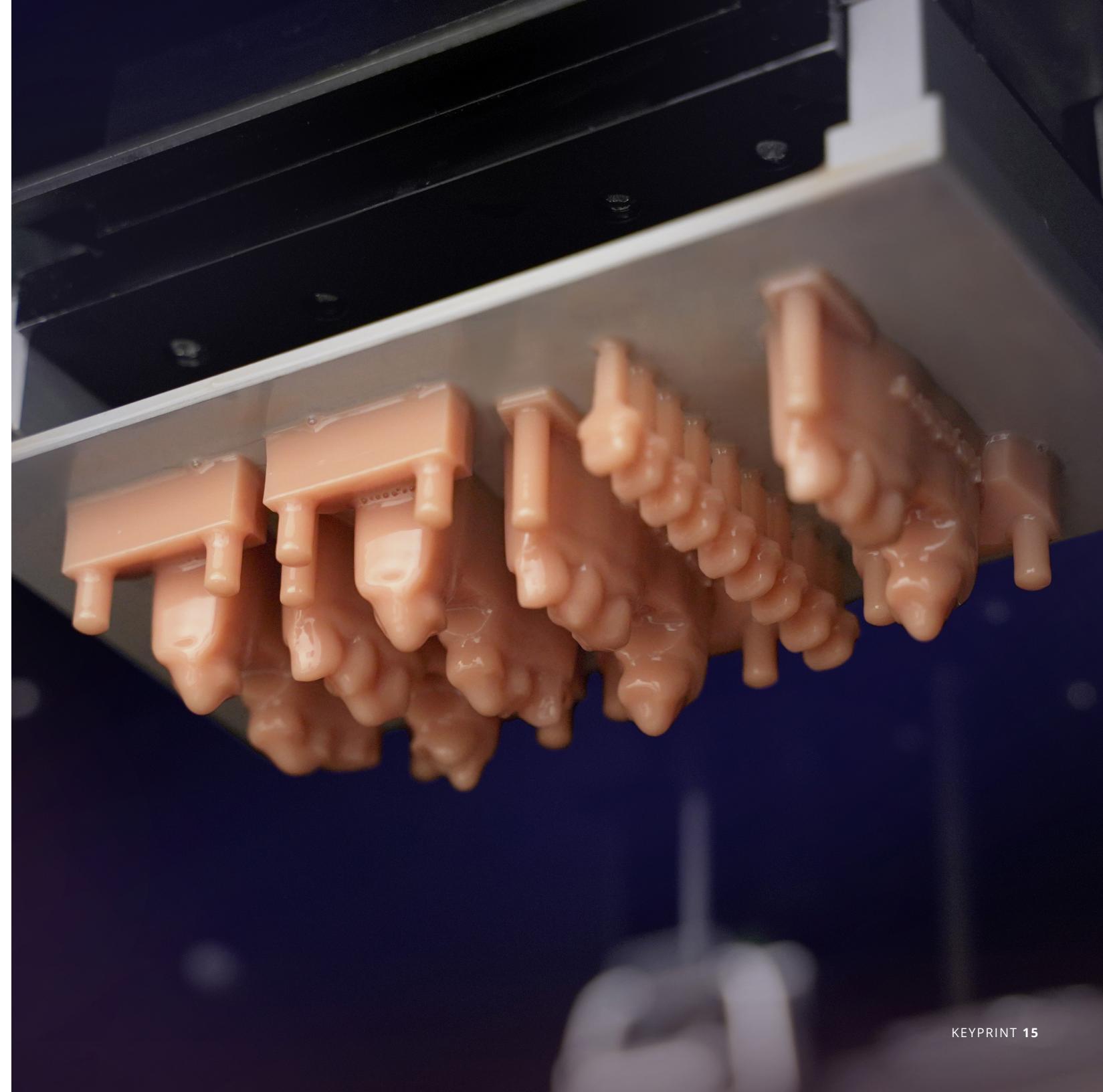
Bosworth Rimseal™

Check out our full line of impression materials at dental.keystoneindustries.com.

Lab

ACCURATE, RELIABLE AND CONSISTENT

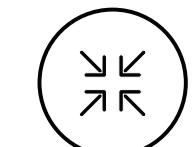
Laboratory Resins



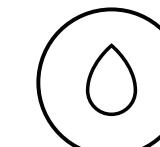
#4220006 (1kg bottle)



ACCURATE



LOW SHRINKAGE



EASY VISIBILITY

KeyModel®

KeyModel produces highly precise and accurate dental models. Its low shrinkage formulation makes it an ideal resin for crown, bridge, and implant models, orthodontic clear aligner models, and diagnostic modeling.

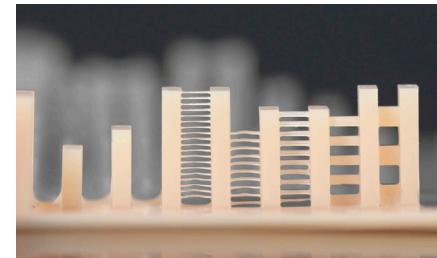
FEATURES

- CARVABLE WITHOUT CHIPPING
- COLORED FOR EASY VISIBILITY OF MARGINS AND TOOTH ANATOMY



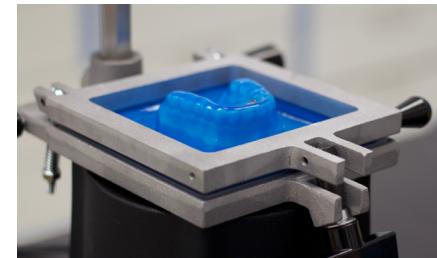
OPTIMAL SCANNING

Models have smooth, hard surfaces for optimal scanning



ACCURATE & PRECISE

Highly accurate detail in printing



PAIRS WITH: PRO-FORM®

Check out our line of Pro-form thermoforming materials at dental.keystoneindustries.com

PROPERTY	PROCEDURE	KEYMODEL
Flexural Strength (MPa)	ASTM D790	79.6
Flexural Modulus (MPa)	ASTM D790	2293
Tensile Strength	ASTM D638	51
Young's Modulus (MPa)	ASTM D638	1850
Elongation at Break (%)	ASTM D638	5.60%
Shore Hardness	Scale D	86

#4220003 (1kg bottle)



KeyOrthoModel[®]

KeyOrthoModel is designed for high-speed and accurate prints. Perfect for thermoforming aligners and orthodontic devices.



FEATURES

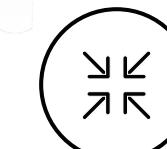
- OPTIMIZED TO PRINT @ 100 AND 200 μ m LAYER THICKNESS FOR HIGH THROUGHPUT
- PRINTS IN 1/2 THE TIME OF KEYMODEL AT SAME LAYER THICKNESS
- PAIRS WITH PRO-FORM[®]
- PERFECT FOR MAKING ALIGNERS
- WITHSTANDS THERMOFORMING TEMPERATURES

PROPERTY	PROCEDURE	KEYORTHOMODEL
Flexural Strength (MPa)	ASTM D790	79.6
Flexural Modulus (MPa)	ASTM D790	2293
Tensile Strength	ASTM D638	51
Young's Modulus (MPa)	ASTM D638	1850
Elongation at Break (%)	ASTM D638	5.60%
Shore Hardness	Scale D	86

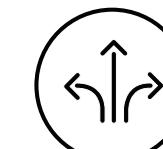
#4220002 (0.5kg bottle)



ACCURATE



LOW SHRINKAGE



FLEXIBLE



SIMULATES
GUM TISSUE

KeyMask®

Flexible yet firm gingival mask that simulates the look and feel of gum tissue.
Incorporate KeyMask into your digital restoration planning.



FLEXIBLE YET FIRM

This gingival mask simulates the look and feel of gum tissue



EASILY TRIMMED

Creates a proper emergence profile for pontic shape

PROPERTY	PROCEDURE	KEYMASK
Tensile Strength (MPa)	ASTM D638	2
Young's Modulus (MPa)	ASTM D638	4.6
Elongation at Break (%)	ASTM D638	41%

#4220000 (1kg bottle)

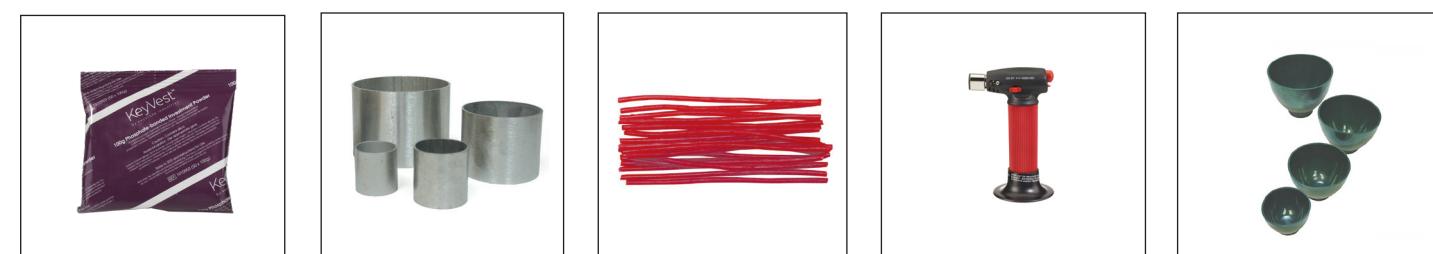


KeyCast®

KeyCast's low shrinkage formula controls thermal expansion to yield porous-free and accurate castings. KeyCast is compatible with rapid burnout and gradual temperature ramp workflows, with no residual ash. It is used with chrome, cobalt, gold, and silver.

PROPERTY	PROCEDURE	KEYCAST
Flexural Strength (MPa)	ASTM D790	15
Flexural Modulus (MPa)	ASTM D790	340
Tensile Strength (MPa)	ASTM D638	9.1
Young's Modulus (MPa)	ASTM D638	220
Elongation at Break (%)	ASTM D638	16%
CTE 0-150 °C (32-302 °F)	ASTM E831	168 x 10-6m/(m. °C)
CTE 150-250 °C (302-482 °F)	ASTM E831	64 x 10-6m/(m. °C)
CTE >250 °C (>482 °F)	ASTM E831	<0m/(m. °C)
Shrinkage	ASTM D792	<2%
Burnout		<0.05%

PAIRS PERFECTLY WITH:



KeyVest™

Casting Rings

Sprue Wax

Microtorch

Green Flexiboles

Check out our full line of dental casting rings, waxes, mixing bowls and other accessories at dental.keystoneindustries.com.

Lab Resin Intro Kit

Experience everything our laboratory resins have to offer, now in one convenient kit. The kit includes 4 (16 oz) bottles:



KIT: #4200010

1



KeyMask®

Flexible yet firm gingival
mask that simulates the
look and feel of gum tissue

2



KeyCast®

Low shrinkage formula
controls thermal expansion to
yield porous-free and
accurate castings

3



KeyModel®

Produces highly
precise and accurate
dental models

4



KeyOrthoModel®

Designed for high-speed
and accurate prints



Accessories



KeyVest™



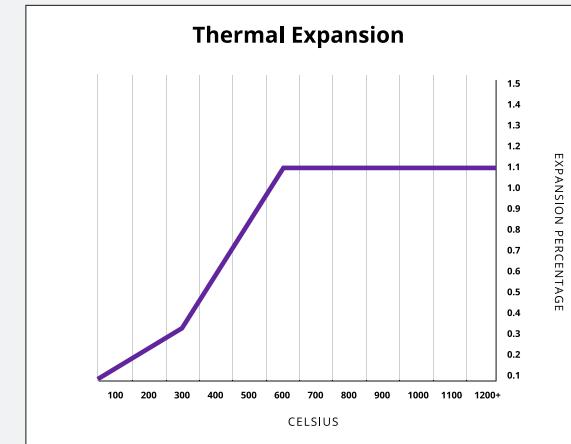
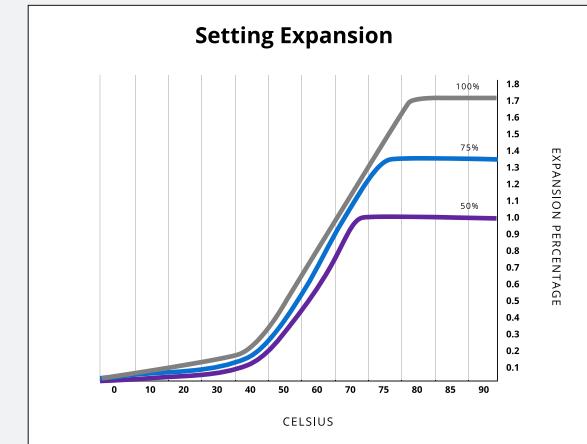
DESCRIPTION	COMPONENTS	ITEM NUMBER
KeyVest Universal Expansion Liquid	1 Liter Bottle	1910901
KeyVest Universal Expansion CASE	5 x 1 Liter Bottle	1910902
KeyVest Precision All in One Investment Powder	50 x 100g Bag	1910903
KeyVest Precision All in One KIT	42 x 100g Bag & 1 Liter Bottle	1910904
KeyVest Digital Precision All in One Kit	42 x 100g Bag & 1 Liter Bottle with 1Kg KeyCast®	1910905

KeyVest is a universal dental investment that is compatible with all dental alloys and pressable ceramic systems. Its fine, phosphate-bonded formula gives you the accuracy and consistency you need for your lab to keep up with modern standards.

KeyVest's smooth consistency and long working time allows for multiple rings to be poured at once, without forming bubbles. You'll never have to worry about time constraints, since rings can be placed in an autoclave or furnace any time after bench-set without fear of cracking.

FEATURES

- COMPATIBLE WITH ALL PRESSABLE CERAMIC SYSTEMS AND DENTAL ALLOYS
- OPTIMAL FOR 3D PRINTING MATERIALS, LIKE KEYCAST
- EASY INVESTING WITH MINIMAL VIBRATION
- DEVESTS WITH MINIMAL BLASTING
- LONG WORKING TIME



Physical Properties

- Liquid Powder Ratio: 22-24ml/100g
- Setting Expansion: 1.7%
- Working Time: ca. 6 minutes
- Thermal Expansion: 1.1%

Finishing and Polishing Materials

ITEM NAME	ITEM NUMBER	PHOTO
Miniature Scotch Brite - Medium	1670092	
Abrasion Discs - Fine Blue	1670099	
Course Grit Pumice	1700010	
Muslin Buffs	1180190 for 5X45 1180170 for 4X42	
Tripoli Pre-Polishing Compound	1660030	
Beige 90g Polishing Bar	1670110	
Wooden "Acrylic-High-Shine Polishing" Cotton Buff	1670140 or 1670510	
High-Shine Pink 150 g	1670546	



VIEW KEYSPLINT SOFT
FINISHING AND POLISHING
RECOMMENDATIONS



KeyPrint® Kit Accessories



DENTURE 3D
BASKETS

#1220207



MICROFIBER
CLOTH

#1220201



PROFESSIONAL
SPRUCE CUTTER

#1220200



1 1/2" STIFF
PUTTY KNIFE

#1220210



1 1/2" PRO CHISEL

#1220209



WASH BOTTLE
250 ML.

#1655413



SMALL BOWL
SCRAPER

#1220202



TEKTON
MALET 8 OZ.

#1220208



1 1/2" BRISTLE
BRUSH

#1220205 #1220206



SCRATCH .016
NYLON BRUSH

#1220203



6" POINT CURVED
TWEEZERS

#1220204



ALL PURPOSE
UTILITY SCISSORS

#9139720

#4220010 Accessories Kit



Our Open Source Philosophy

Keystone is always profiling new printers to ensure that KeyPrint resins work reliably in as many open-source printers as possible. We can work with you to optimize your printer settings to work with KeyPrint, but Keystone does not guarantee high-quality print results from non-validated printers.

KeyPrint resins are designed to work in 385-405nm DLP printers to best yield detailed parts faster and with superior accuracy. Additionally, for customers looking to purchase resins designed for SLA, LED, or LCD printers, Keystone is willing and able to discuss developing specialized resins for your system.



PRINTER VALIDATION LIST

PLEASE SEE OUR VALIDATED PRINTERS AT
KEYPRINT.KEYSTONEINDUSTRIES.COM



ISO 13485 REGISTERED

Keystone Industries maintains ISO 13485 (medical device) certifications, and international product registrations.



PRECISION 3D RESINS

KEYPRINT.KEYSTONEINDUSTRIES.COM

HEADQUARTERS

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INTERNATIONAL

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Singen, Germany
+49 77 31 91 21 01



FDA registered and ISO 13485 certified

For more information, please call 1.800.333.3131. To view a full list of our validated printers and post-cure units, please visit: keyprint.keystoneindustries.com/printer-validation