



3D FREEPRINT® DENTAL RESINS



DETAX
HIGH PERFORMANCE POLYMERS

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PRODUCT OVERVIEW

3D PRINTING MATERIALS

FREEPRINT® temp

Temporary crowns & bridges
Anterior and posterior tooth restorations



FREEPRINT® crown

Permanent crowns,
Denture teeth
Long-term temporary bridges



FREEPRINT® denture

Removable denture bases
Total prosthesis



FREEPRINT® tryin

Individual functional try-ins



FREEPRINT® ortho

Surgical guides
Orthodontic base components



FREEPRINT® splint 2.0

Hard splints



FREEPRINT® softsplint

Flexible splints
Nightguards



FREEPRINT® IBT

Transfer tray
Bracket positioning



FREEPRINT® tray 2.0

Individual impression
Functional trays
Base resin plates



FREEPRINT® model

Model production
Working models
Situation models
Control models



FREEPRINT® model 2.0

Model production
Master models
Working models
Control models



FREEPRINT® model KFO

Model production
Orthodontic models



FREEPRINT® model T

Model production
Thermoforming technique



FREEPRINT® model WW

Model production
Thermoforming technique



FREEPRINT® gingiva

Gingival masks





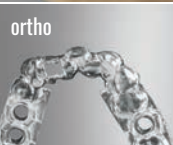

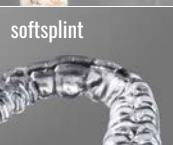




FREEPRINT® cast 2.0

Casting objects



FREEPRINT® Matrix

Material type	Application	Colour	Characteristics	Medical device Class MDR	Medical device Class FDA	Medical device Class China
 temp	<ul style="list-style-type: none"> temporary crowns & bridges anterior and posterior tooth restorations 	A1, A2, A3	<ul style="list-style-type: none"> natural transparency and tooth esthetics extremely high construction precision high mechanical stability biocompatible 	IIa	II	–
 crown	<ul style="list-style-type: none"> permanent crowns, denture teeth long-term temporary bridges 	A1, A2, A3, B1, B3, C2, D3, BL	<ul style="list-style-type: none"> natural transparency and tooth esthetics highest abrasion resistance 	in process	in process	–
 denture	<ul style="list-style-type: none"> removable denture bases total prosthesis 	pink-transparent, pink	<ul style="list-style-type: none"> long-term stable and biocompatible dentures fast printing perfect fit biocompatible 	IIa	II	–
 tryin	<ul style="list-style-type: none"> functional try-ins for complete and partial dentures 	A2	<ul style="list-style-type: none"> fast, material saving production high mechanical stability 	in process	in process	–
 ortho	<ul style="list-style-type: none"> surgical guides for implant dentistry orthodontic base components 	clear-transparent	<ul style="list-style-type: none"> very high mechanical stability & construction precision high printing speed sterilizable biocompatible 	IIa	I	I
 splint 2.0	<ul style="list-style-type: none"> hard splints 	clear-transparent	<ul style="list-style-type: none"> high mechanical flexural strength and stability high initial final hardness biocompatible 	IIa	I	I
 softsplint	<ul style="list-style-type: none"> flexible splints Nightguards 	clear-transparent	<ul style="list-style-type: none"> flexible easy to polish high tension-free wearing comfort 	in process	in process	–
 IBT	<ul style="list-style-type: none"> orthodontic transfer trays for positioning brackets 	transparent	<ul style="list-style-type: none"> elastic and tear-resistant secure and precise fixing of brackets biocompatible 	I	I	–
 tray 2.0	<ul style="list-style-type: none"> individual impression and functional trays base resin plates 	green	<ul style="list-style-type: none"> high dimensional stability, torsional rigidity max. construction speed compatible with all impression materials biocompatible 	I	I	TEC resin

Material type	Application	Colour	Characteristics	Medical device Class MDR	Medical device Class FDA	Medical device Class China
 model	<ul style="list-style-type: none"> working, situation and control models 	ivory, grey, sand	<ul style="list-style-type: none"> maximum surface hardness dimensional stability pleasant haptic very good construction precision 	TEC resin	TEC resin	I
 model 2.0	<ul style="list-style-type: none"> master, working and situation models 	caramel, grey, light grey, sand	<ul style="list-style-type: none"> high detail reproduction max. surface hardness and dimensional stability plaster-like appearance and haptic very good construction precision 	TEC resin	TEC resin	I
 model basic	<ul style="list-style-type: none"> working, situation and control models 	beige	<ul style="list-style-type: none"> high surface hardness and dimensional stability pleasant haptic good construction precision 	TEC resin	TEC resin	–
 model KFO	<ul style="list-style-type: none"> model production and orthodontic models 	white	<ul style="list-style-type: none"> plaster-like haptic distinctive edge and dimension stability highest surface quality 	TEC resin	TEC resin	–
 model T	<ul style="list-style-type: none"> working models for thermoforming technique and aligner technology 	light blue	<ul style="list-style-type: none"> high temperature resistance to process-related temperature stress high edge strength 	TEC resin	TEC resin	I
 model WW	<ul style="list-style-type: none"> working models for thermoforming technique and aligner technology 	blue-transparent	<ul style="list-style-type: none"> water-washable high temperature resistance 	TEC resin	TEC resin	–
 gingiva	<ul style="list-style-type: none"> flexible gingival masks for dental 3D models 	gingiva	<ul style="list-style-type: none"> 3D reproduction of functional gingival model segments excellent elasticity and tear-resistance natural gingiva esthetics 	TEC resin	TEC resin	I
 cast 2.0	<ul style="list-style-type: none"> dental casting objects for precision casting 	red-transparent	<ul style="list-style-type: none"> residue-free burning out high dimensional stability after printing precise and distortion-free results, even for delicate constructions 	TEC resin	TEC resin	I

MDR Medical Device Regulation EU FDA Food and Drug Administration USA NMPA National Medical Products Administration China
THF-MA-free does not contain any tetrahydrofurfuryl methacrylate [Reproductive Toxicity, Cat. 1B] **BPA-free** does not contain any raw material based on bisphenol A [Reproductive Toxicity, Cat. 1B] **MMA-free** does not contain any methyl methacrylate



MDR certified



36 Months Shelf life



Eco-Bag 3/5 kg



Medical Product Class I



Bisphenol A free
THF-MA free
MMA free



FDA listed



Registered in Russia



Technical Product



Medical Product Class IIa

FREEPRINT® temp

TEMPORARY CROWNS & BRIDGES
ANTERIOR AND POSTERIOR TOOTH RESTORATIONS

Light-curing formulation for 3D printing of temporary crowns & bridges.

Colours: A1, A2, A3

Wavelength: 385 nm

Medical Product Class IIa

- o High breaking strength
- o Short post-processing
- o Low material consumption
- o MMA & THF-MA free



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 10477 ¹⁾	MPa	> 100
Flexural modulus	DIN EN ISO 10477 ¹⁾	MPa	> 2300
Water sorption	DIN EN ISO 10477 ¹⁾	µg/mm ³	< 40
Water solubility	DIN EN ISO 10477 ¹⁾	µg/mm ³	< 7,5
Hardness	-	Barcol	> 40
Biocompatibility	DIN EN ISO 10993-1 ²⁾	-	complies

¹⁾ Polymer-based crown and bridge materials (in accordance with the norm at room temperature)

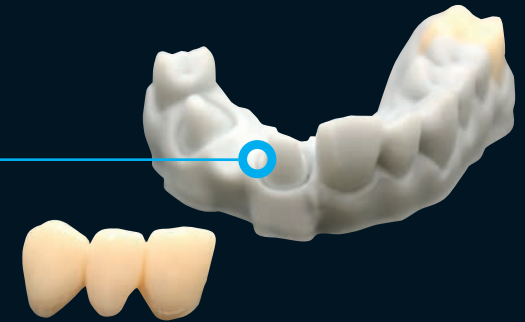
²⁾ Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

04058	FREEPRINT® temp A1	500 g
04059	FREEPRINT® temp A2	500 g
04060	FREEPRINT® temp A3	500 g
04062	FREEPRINT® temp A1	1.000 g
04063	FREEPRINT® temp A2	1.000 g
04064	FREEPRINT® temp A3	1.000 g

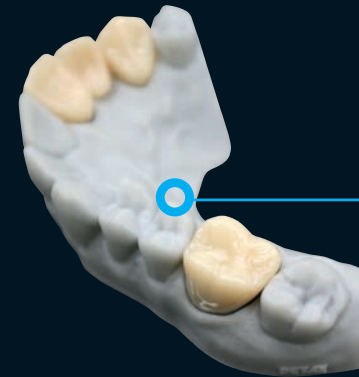


The natural-looking translucent colours (according to VITA classical A1-D4 shade guide) can be aesthetically modified for single crown and bridge restorations.

Temporary restorations provide a high level of oral stability and in conjunction with tempolink®, enable excellent marginal seal during an period of wear.



Easy polishing results in very high surface quality with exceptional abrasion resistance.



FREEPRINT® crown

PERMANENT CROWNS
DENTURE TEETH
LONG-TERM TEMPORARY BRIDGES

Light-curing formulation for 3D printing of permanent crowns, denture teeth and long-term temporary bridges.

Colours A1, A2, A3, B1, B3, C2, D3, BL

Wavelength: 385 nm

Medical Product Class IIa

- Wide range of aesthetically appealing colours
- Very high fracture strength and abrasion resistance
- Easy to grind and polish
- MMA & THF-MA free

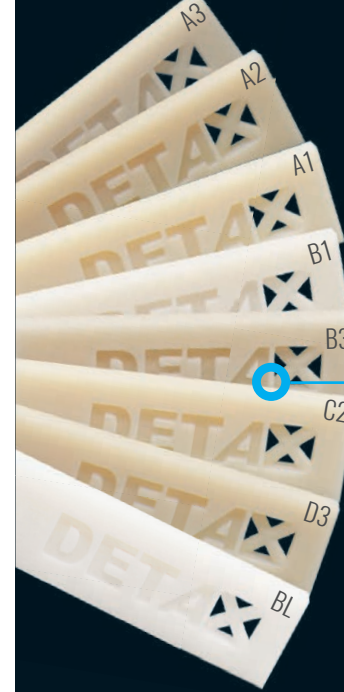


Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 10477 ¹⁾	MPa	> 100
Flexural modulus	DIN EN ISO 10477 ¹⁾	MPa	> 2800
Water sorption	DIN EN ISO 10477 ¹⁾	µg/mm ³	< 40
Water solubility	DIN EN ISO 10477 ¹⁾	µg/mm ³	< 7,5
Hardness	-	Barcol	> 50

¹⁾ Polymer-based crown and bridge materials (in accordance with the norm at room temperature)

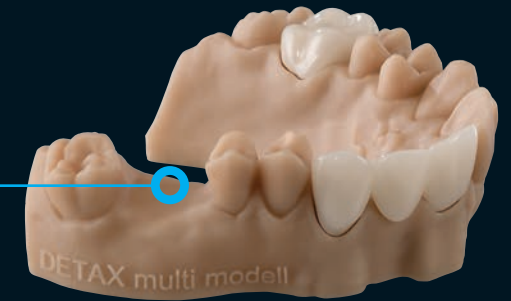
FREEPRINT® crown A1*	500g 02372	1.000g 02376
FREEPRINT® crown A2*	500g 02378	1.000g 02415
FREEPRINT® crown A3*	500g 02417	1.000g 02446
FREEPRINT® crown B1*	500g 02481	1.000g 02519
FREEPRINT® crown B3*	500g 02645	1.000g 02758
FREEPRINT® crown C2*	500g 02766	1.000g 02782
FREEPRINT® crown D3*	500g 02783	1.000g 02825
FREEPRINT® crown BL*	500g 02845	1.000g 02884

*Q4 / 21



Brilliant colors (according to VITA classical A1-D4 shade guide) thanks to perfectly matched transparency and opacity.

Maximum dimensional stability due to highest flexural strength and abrasion resistance.



No tendency to discolor thanks to low water absorption.



FREEPRINT® denture

REMOVABLE DENTURE BASES TOTAL PROSTHESIS

Light-curing formulation for the 3D printing of denture bases.

Colours: pink-transparent, pink

Wavelength: 385 nm

Medical Product Class IIa

- Very high surface quality, excellent to polish
- Extremely low shrinkage values compared to PMMA materials
- High wearing comfort
- MMA & THF-MA free, tasteless



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 20795-1 ¹⁾	MPa	> 110
Flexural modulus	DIN EN ISO 20795-1 ¹⁾	MPa	> 2500
Water absorption	DIN EN ISO 20795-1 ¹⁾	µg/mm ³	< 32
Solubility	DIN EN ISO 20795-1 ¹⁾	µg/mm ³	< 1,6
Hardness	-	Shore D	> 83
Biocompatibility	DIN EN ISO 10993-1 ²⁾	-	complies

¹⁾ Dentistry: Denture base polymers (in accordance with the norm at room temperature)

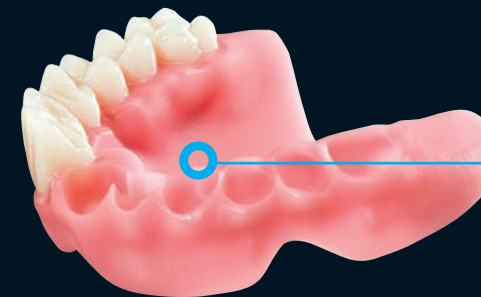
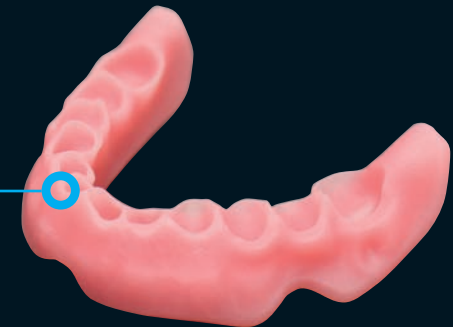
²⁾ Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

02060	FREEPRINT® denture pink-transparent	500 g
02040	FREEPRINT® denture pink-transparent	1.000 g
04092	FREEPRINT® denture pink	1.000 g



Natural aesthetics and a light transparency enable alignment with natural gingival color.

The rigid denture base withstands high loads in the oral environment.



Validated with the VITA VIONIC VIGO System. Fully compatible with prefabricated, 3D printed (FREEPRINT® crown) or milled teeth.



FREEPRINT® tryin

INDIVIDUAL FUNCTIONAL TRY-INS

Light-curing formulation for the 3D printing of individual functional try-ins of digitally manufactured denture bases.

Colour: A2

Wavelength: 385 nm

Medical Product Class IIa

- Fast material-saving production of functional try-ins
- Easy control of phonetics
- Easy to process
- MMA & THF-MA free



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 100
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 2200
Hardness	-	Shore D	> 85

¹⁾Plastics - Determination of flexural properties (in accordance with the norm at room temperature)

04101

FREEPRINT® tryin A2*

1.000 g

*Q4/21



Fast and easy generative fabrication of functional try-ins of individual tooth setups.



Easy verification of fit function and occlusion.



Functional try-ins for complete and partial dentures in esthetically pleasing tooth color.



FREEPRINT® ortho

SURGICAL GUIDES, AUTOCLAVABLE ORTHODONTIC BASE COMPONENTS

Light-curing formulation for the 3D printing of base parts for orthodontic appliances, surgical guides and X-ray templates.

Colour: clear-transparent

Wavelength: 385 nm

Medical Product Class IIa

- Validated for autoclave sterilization according to EN ISO 17664!
- Very high mechanical stability
- Compatible with FREEFORM® plast
- MMA-free, tasteless



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 20795-2 ¹⁾	MPa	> 75
Flexural modulus	DIN EN ISO 20795-2 ¹⁾	MPa	> 1650
Water sorption	DIN EN ISO 20795-2 ¹⁾	µg/mm ³	< 32
Water solubility	DIN EN ISO 20795-2 ¹⁾	µg/mm ³	< 5
Hardness	-	Shore D	> 82
Biocompatibility	DIN EN ISO 10993-1 ²⁾	-	complies

¹⁾ Dentistry - Part 2: Orthodontic base polymers (in accordance with the norm at room temperature)

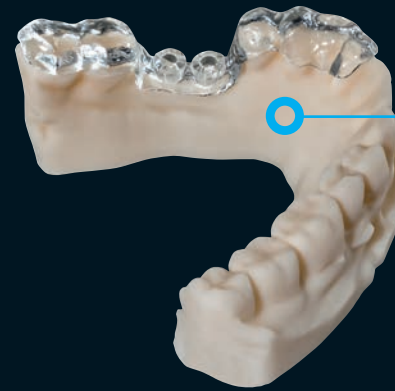
²⁾ Biological evaluation of medical devices - Part 1: Evaluation and testing within a risk management process



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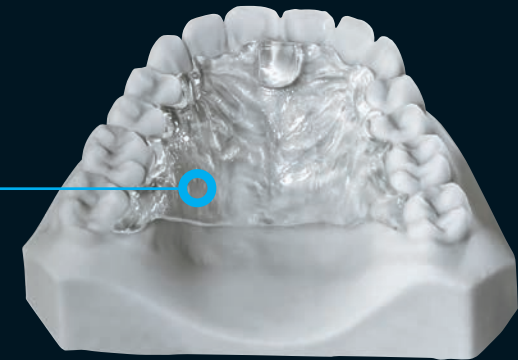
FREEPRINT® ortho

1.000 g



The crystal-clear material allows reliable control of the working area during drilling.

For printing hard plastic parts of orthodontic appliances.



Precise positioning and fixation of the drill sleeves enable safe positioning for the patient.



FREEPRINT® splint 2.0

HARD SPLINTS

Light-curing formulation for the 3D printing of hard splints.

Colour: clear-transparent

Wavelength: 385 nm

Medical Product Class IIa

- Easy to polish
- Highest bending & breaking strength
- High accuracy of fit
- MMA & THF-MA free, tasteless

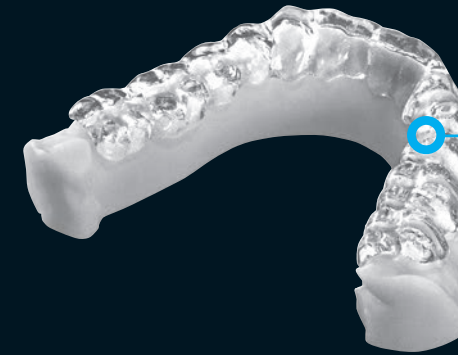


Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 20795-2 ¹⁾	MPa	> 80
Flexural modulus	DIN EN ISO 20795-2 ¹⁾	MPa	> 2000
Water sorption	DIN EN ISO 20795-2 ¹⁾	µg/mm ³	< 32
Water solubility	DIN EN ISO 20795-2 ¹⁾	µg/mm ³	< 5
Hardness	-	Shore D	> 82
Biocompatibility	DIN EN ISO 10993-1 ²⁾	-	complies

¹⁾ Dentistry - Part 2: Orthodontic base polymers (in accordance with the norm at room temperature)

²⁾ Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

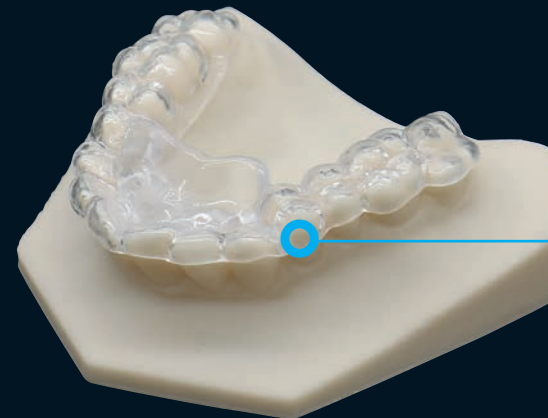
02080	FREEPRINT® splint 2.0	500 g
02076	FREEPRINT® splint 2.0	1.000 g



Hard occlusal splint, rigid type, with high efficiency.



Transparent, mouth-resistant and easy to clean.



Compatible with Freeform® plast for additional occlusal design in practice.



FREEPRINT® softsplint

FLEXIBLE SPLINTS
NIGHTGUARDS

Light-curing formulation for the 3D printing of flexible splints.

Colour: clear-transparent

Wavelength: 385 nm

Medical Product Class Ila

- Flexible
- High, tension-free wearing comfort
- Easy to polish
- MMA & THF-MA free, tasteless



Property	Standard	Unit measurement	Result
Tensile strength	DIN EN ISO 527-1 ¹⁾	MPa	> 20*
Elongation	DIN EN ISO 527-1 ¹⁾	-	> 50*
Hardness	-	Shore D	> 70*
Water sorption	DIN EN ISO 20795-2 ²⁾	µg/mm ³	< 32*
Water solubility	DIN EN ISO 20795-2 ²⁾	µg/mm ³	< 5*

¹⁾ Plastics: Determination of tensile properties (in accordance with the norm at room temperature)

²⁾ Dentistry - Part 2: Orthodontic base polymers (in accordance with the norm at room temperature)



02894

FREEPRINT® softsplint*

1.000 g

*Q4/21



Clear-transparent, flexible occlusal splints for pleasant wearing comfort.



Versatile applications, e.g. occlusal splints, mouthguards, bite planes, snoring appliances.



Splints made of FREEPRINT® softsplint are easy to clean and to polish.



FREEPRINT® IBT

TRANSFER TRAY BRACKET POSITIONING

Light-curing formulation for the 3D printing of flexible orthodontic transfer trays for positioning brackets.

Colour: transparent

Wavelength: 385 nm

Medical Product Class I

- Soft-elastic
- Secure bracket mounting
- Easy to remove from the mouth
- Bisphenol A, MMA & THF-MA free



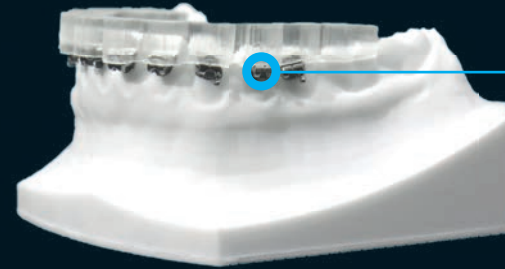
Property	Standard	Unit measurement	Result
Tensile strength	DIN EN ISO 527-1 ¹⁾	MPa	> 8
Elongation	DIN EN ISO 527-1 ¹⁾	-	> 60 %
Tear strength	DIN EN ISO 34-1 ²⁾	N/mm	> 35
Hardness	-	Shore A	> 90
Biocompatibility	DIN EN ISO 10993-1 ³⁾	-	complies

¹⁾ Plastics: Determination of flexural properties (in accordance with the norm at room temperature)

²⁾ Rubber, vulcanized or thermoplastic: Determination of tear strength (in accordance with the norm at room temperature)

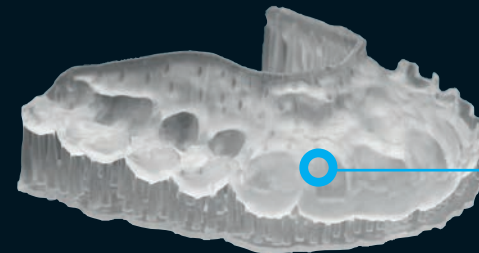
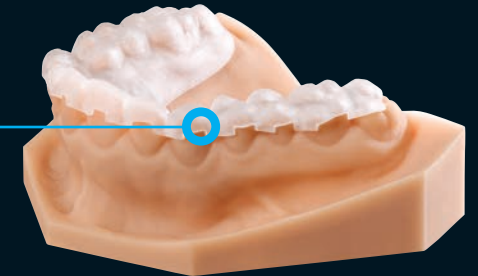
³⁾ Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

04248	FREEPRINT® IBT	500 g
04249	FREEPRINT® IBT	1.000 g

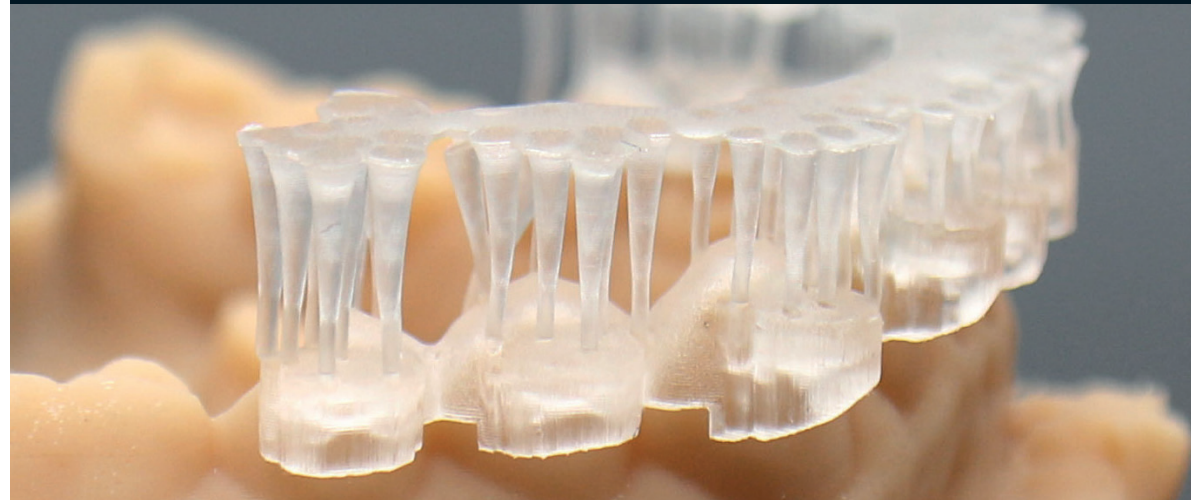


Easy, precise positioning and application of the brackets due to the indirect bonding technique.

The transparent bracket transfer templates allow easy visual control.



The high tensile strength and flexibility provide hassle-free placement and subsequent removal of the templates in one single work step.



FREEPRINT® tray 2.0

INDIVIDUAL IMPRESSION TRAYS

FUNCTIONAL TRAYS

BASE PLATES

Light-curing formulation for the 3D printing of individual impression and functional trays, base plates.

Colour: green

Wavelength: 380 – 405 nm

Medical Product Class I

- High bending and breaking strength
- Low viscosity
- Printable with 200 µm layer thickness
- MMA & THF-MA free, tasteless



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 90
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1900
Hardness	-	Shore D	> 84
Biocompatibility	DIN EN ISO 10993-1 ²⁾	-	complies

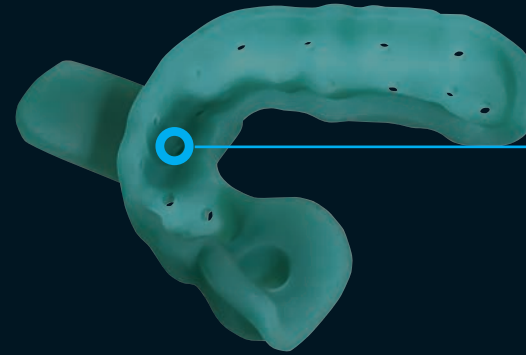
¹⁾ Plastics - Determination of flexural properties (in accordance with the norm at room temperature)

²⁾ Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

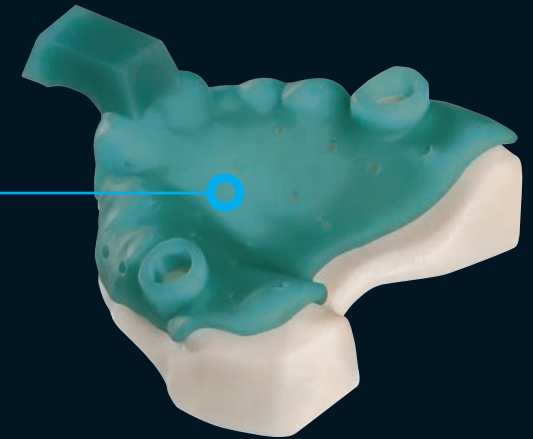
02505

FREEPRINT® tray 2.0

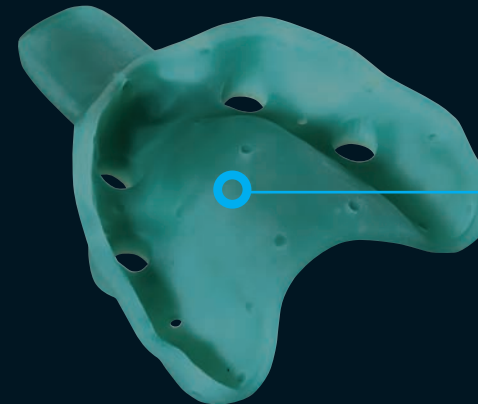
1.000 g



Highest dimensional stability and torsional rigidity for accurate and distortion-free impressions.



Perfect for implant impression taking within the digital workflow.



Compatible for all tray adhesives and impression materials.



FREEPRINT® model

MODEL PRODUCTION
WORKING MODELS
SITUATION MODELS
CONTROL MODELS

Light-curing formulation for the 3D printing of dental master and working models.

Colours: ivory, sand, grey

Wavelength: 380 – 405 nm

Technical Product

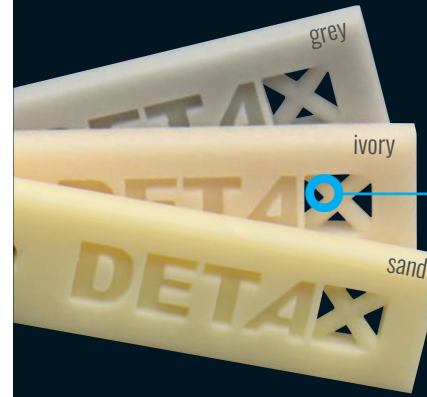
- Fast-printing
- Maximum surface hardness
- Dimensionally stable
- Bisphenol A & MMA free



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 70
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1500
Hardness	-	Shore D	> 80

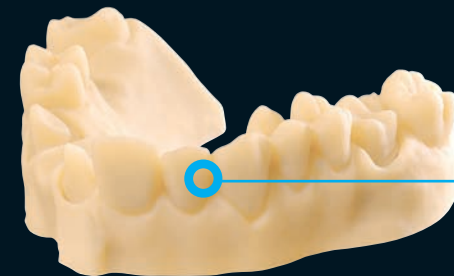
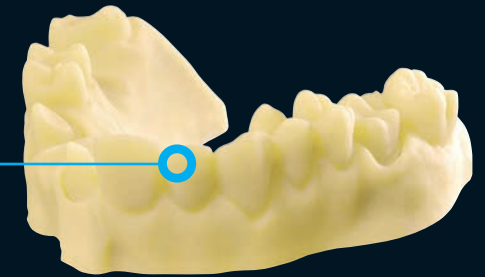
¹⁾ Plastics: Determination of flexural properties (in accordance with the norm at room temperature)

03780	FREEPRINT® model ivory	1.000 g
03778	FREEPRINT® model sand	1.000 g
03782	FREEPRINT® model grey	1.000 g

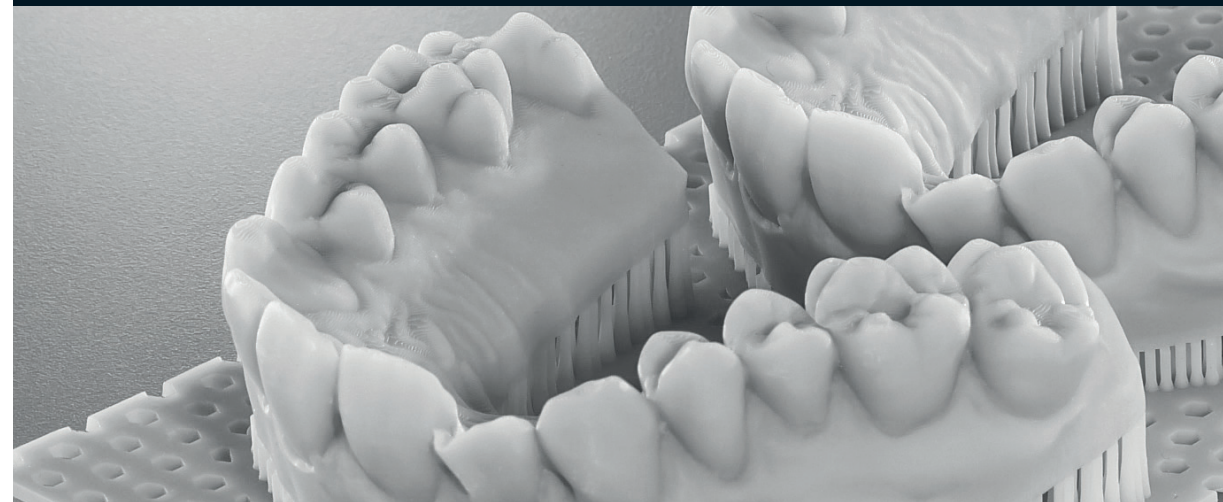


Haptics and stability meet the high requirements in model making.

The high mechanical strength ensures the functionality and loading of the models.



Perfect detail reproduction due to plaster-like colours: grey, ivory, sand.



FREEPRINT® model 2.0

MODEL PRODUCTION
MASTER MODELS
WORKING MODELS
CONTROL MODELS

Light-curing formulation for the 3D printing of dental models, master, situation and orthodontic models.

Colours: caramel, grey, light grey, sand, white

Wavelength: 380 – 405 nm

Technical Product

- High detail precision
- Shortened post-processing
- Plaster-like appearance & haptics
- MMA & THF-MA free



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 80
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1700
Hardness	-	Shore D	> 80

¹⁾ Plastics: Determination of flexural properties (in accordance with the norm at room temperature)

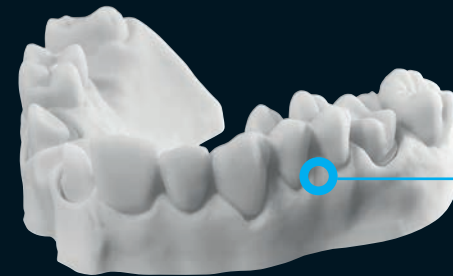
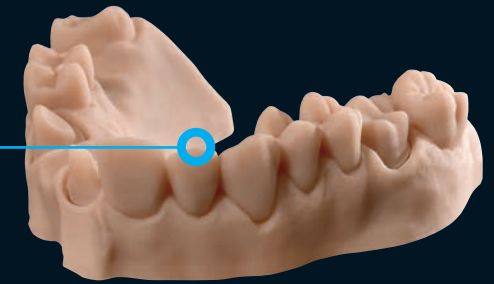
02850	FREEPRINT® model 2.0 caramel	1.000 g
02177	FREEPRINT® model 2.0 grey	1.000 g
02099	FREEPRINT® model 2.0 light grey	1.000 g
02128	FREEPRINT® model 2.0 sand	1.000 g
02148	FREEPRINT® model 2.0 white*	1.000 g
02068	FREEPRINT® model basic beige	1.000 g

* not THF-MA free



Wide range of plaster-like colours: white, caramel, grey, light grey, sand, beige.

The distinct edge stability and abrasion resistance make the models comparable to conventional plaster models in terms of handling.



The extremely durable model surfaces are functionally highly durable.



FREEPRINT® model T

MODEL PRODUCTION THERMOFORMING TECHNIQUE

Light-curing formulation for the 3D printing of dental models for the thermoforming technique.

Colour: light blue

Wavelength: 380 – 405 nm

Technical Product

- High temperature resistance
- Maximum edge strength
- Plaster-like appearance & haptics
- Precise detail reproduction
- MMA-free



Property	Standard	Unit measurement	Result
Working temperature for thermoforming foils		°C	≤ 195
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 80
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1700
Hardness	-	Shore D	> 83

¹⁾ Plastics: Determination of flexural properties (in accordance with the norm at room temperature)



02332

FREEPRINT® model T

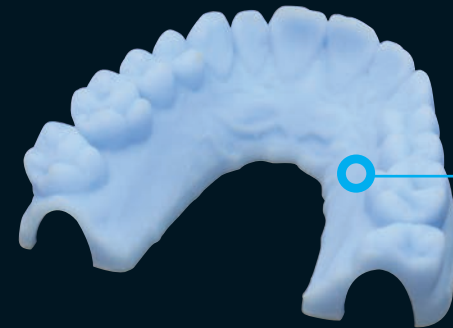
1.000 g



Maximum surface hardness and edge strength of the models.



The stability of the models is preserved even during heating in thermoforming.



The pronounced intrinsic stability enables manufacture of hollow thermoformed models.



FREEPRINT® model WW

MODEL PRODUCTION THERMOFORMING TECHNIQUE

Light-curing formulation for the 3D printing of dental models for the thermoforming technique.

Colour: blue-transparent

Wavelength: 380 – 405 nm

Technical Product

- Water-washable
- No use of solvent necessary
- High temperature resistance
- Cost-efficient model production
- MMA & THF-MA free



Property	Standard	Unit measurement	Ergebnis
Working temperature for thermoforming foils		°C	≤ 195
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 85
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1800
Hardness	-	Shore D	> 82

¹⁾ Plastics: Determination of flexural properties (in accordance with the norm at room temperature)



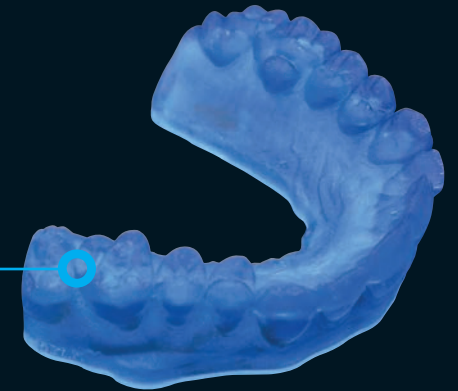
03105

FREEPRINT® model WW

1.000 g



The water-washable material meets all requirements for digitally produced models in thermoforming.



The stability of the models is not affected by the heat.



The high edge strength and good intrinsic stability of the material allow production of hollow thermoformed models.



FREEPRINT® gingiva

GINGIVAL MASKS

Light-curing formulation for the 3D printing of flexible gingival masks for dental models.

Colour: gingiva

Wavelength: 380 – 405 nm

Technical Product

- Excellent elasticity and tear-resistance
- Natural gingiva esthetics
- Dimensionally stable
- No subsequent shrinkage
- Bisphenol A, MMA & THF-MA free



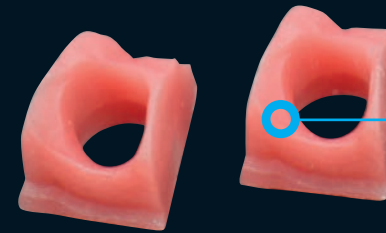
36 MONTHS



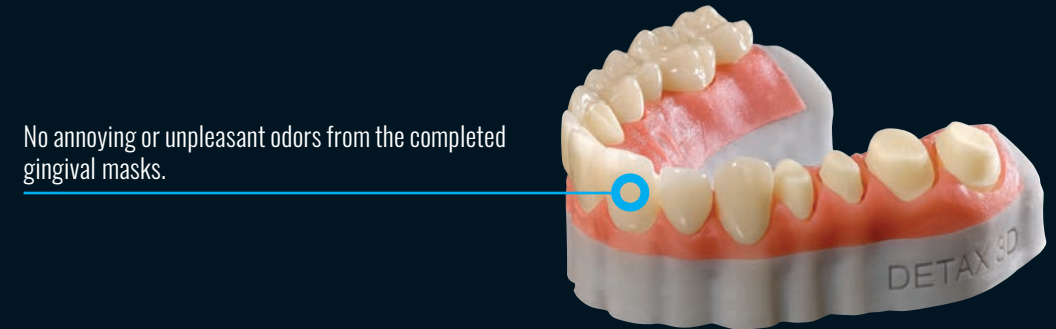
Property	Standard	Unit measurement	Result
Tensile strength	DIN EN ISO 527-1 ¹⁾	MPa	> 3
Tensile strain	DIN EN ISO 527-1 ¹⁾	-	> 90 %
Final Hardness	-	Shore A	> 70

¹⁾ Plastics: Determination of tensile properties (in accordance with the norm at room temperature)

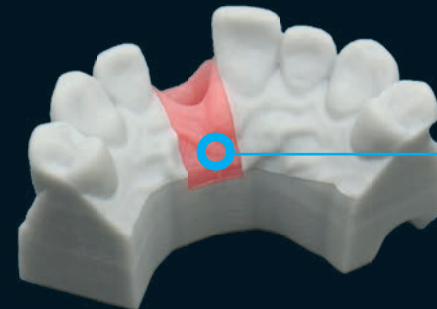
02820	FREEPRINT® gingiva	500 g
02843	FREEPRINT® gingiva	1.000 g



Permanently ductile, even during long storage.



No annoying or unpleasant odors from the completed gingival masks.



For 3D reproduction of functional gingival model segments in a digital workflow in conjunction with FREEPRINT® model.



FREEPRINT® cast 2.0

CASTING OBJECTS

Light-curing formulation for the 3D printing of high precision casting objects.

Colour: red-transparent

Wavelength: 380 – 405 nm

Technical Product

- Residue-free burning out
- Distortion-free and precise, even for delicate constructions
- Suitable for phosphate-bonded embedding materials
- Low viscosity for fast cleaning
- MMA & THF-MA free



Property	Standard	Unit measurement	Result
Flexural strength	DIN EN ISO 178 ¹⁾	MPa	> 70
Flexural modulus	DIN EN ISO 178 ¹⁾	MPa	> 1700
Heating temperature	-	-	1 h @ 800 °C
Cauterisation residual ash content	-	-	< 0,1 %

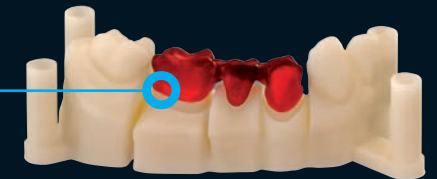
¹⁾Plastics: Determination of flexural properties (in accordance with the norm at room temperature)

02548	FREEPRINT® cast 2.0	500 g
02632	FREEPRINT® cast 2.0	1.000 g


















Reliable precision for cast objects.

Any corrections or repairs after printing are possible with easyform gel LC.



Distortion-free and stable, even with delicate frameworks. Enables direct FIT CHECK.



Qualification	385 nm													405 nm							
	ASIGA Max / Mini	ASIGA Pico2	ASIGA PRO2	ASIGA PRO 4K	MICROLAY Versus	Micraft Prime / Hyper Series	Micraft Ultra Series	Micraft Profession / Advance Series	Rapid shape D10 / D20 Series	Rapid shape D30 / D40 Series	Rapid shape D70 / D90 Series	Rapid shape D100	Straumann P series	W2P	Microlay Eye Pro	Shining Accufab D1	moonrayS100	Phrozen Sonic 4K	Flashforge Hunter	Sprint Ray Pro	
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**CERTIFIED
VALIDATED
RELIABLE**

Only the combination of high-performance resins with scientifically based expert knowledge from all areas of the digital workflow leads to cumulated expertise, to truly innovative products, and thus to an unlimited choice of materials. FREEPRINT® materials are validated for all standard DLP & LCD printers. Our validation portfolio is continuously being expanded with new materials and qualified printers. To this end, our experts check and document complete process sequences in accordance with the relevant standards and regulatory requirements. This ensures permanently reproducible results and constant product quality.

Digital Workflow requires profound material competence and a close cooperation with the technology partners in order to perfectly match individual elements of the process chain. For transparency and process reliability, all FREEPRINT® instructions for use comprise an overview of validated printers, certified finishing equipment (post-exposure, cleaning, etc.) and detailed flowcharts of the manufacturing process.

Our expert team will support you with useful tips.

Qualification

- Done
- In process
- On request

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GOOD TO KNOW ...

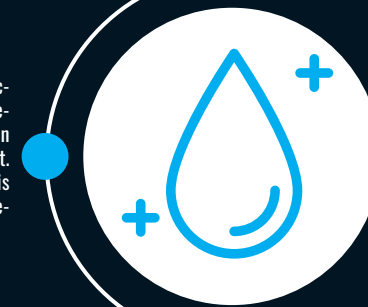


BOTTLE ROLLER

By using a bottle roller, optimum mixing of the material is achieved, thus preventing possible segregation. The Eco Bags can be homogenized with an appropriate attachment.

CLEANING

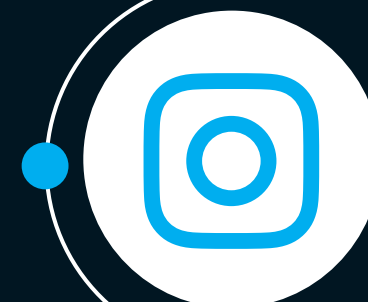
Best cleaning results of the production jobs are achieved when the pre- and post-cleaning are carried out in separate tanks in the ultrasonic unit. After cleaning with isopropanol, it is recommended to clean the bores/openings with compressed air.



POST-CURING UNIT

The post-curing units recommended in the instructions for use ensure optimum through-hardening and surface curing, thus a biocompatible end product, and ensure high color brilliance and transparency, without discoloration.

DETEX EXPERTS@

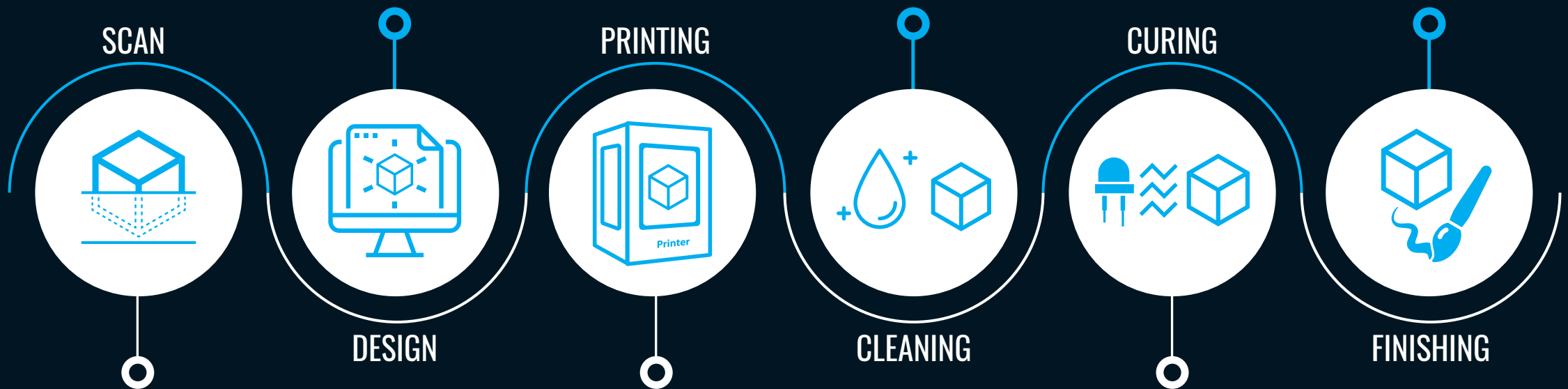


3D WORKFLOW

After completion of the design (CAD), the slicing software prepares the objects for printing. The slicing process creates the individual layers to be exposed. The software serves as an intermediary between the 3D model and the 3D printer.

After printing, the non-polymerized material on the surface must be removed so as to leave no residue before the final post-exposure. Drain the print job off in the printer, then carry out a 2-stage secondary cleaning with isopropanol in an ultrasonic device. Cleaning can also be carried out in suitable separate devices.

Finally, the surface is finished as required, e.g. mechanically polished. Perfect fit, optimal product properties and reliable reproduction are the results of a validated and certified process.



Digitization of the patient's initial situation is the basis for the digital manufacturing process. It is done using an intraoral scanner, or by scanning the model. Using the data thus generated, a three-dimensional surface structure is generated, which can then be transferred to a design software.

For a precise print job, the setting parameters of the corresponding material in the printer are necessary. These data are used not only to control the exposure process for the material, but also to determine the corresponding movement mechanics of the printers. Coordination of these processes is the prerequisite for successful DLP/LCD printing of challenging structures.

The properties of the final product depend, among other things, on the finishing process. Correct post-exposure is very important for biocompatibility. To ensure that the printed structures are fully cured, post-exposure in devices with LED lamps or xenon flashlight in an inert gas atmosphere is recommended.

CERTIFICATION



All FREEPRINT® Class IIa resins are MDR certified (October 2020). Thus, DETAX 3D materials are among the first of its sector with MDR certification.



The 3D Premium printing materials FREEPRINT® temp and FREEPRINT® denture are FDA-approved. FREEPRINT® temp and FREEPRINT® ortho are registered in Russia as well!



All DETAX 3D Premium printing materials have a shelf life of 36 months and can be used during this period without any loss of quality in the printing process.



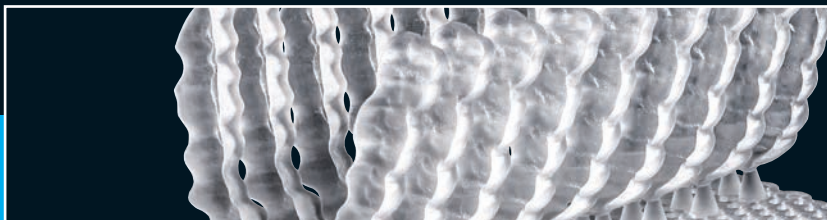
#HELLO ECOBAG

NEW: In addition to the 1-kg standard bottles, many FREEPRINT® materials will be offered in practical 3- or 5-kg Eco Bags. The bags are perfect for frequent users and are handy to use: The 2 handles (top and bottom) make it easy to fill the printer tray. Highly pigmented materials can easily be homogenized with a roller mixer (with appropriate attachment). The empty bag can be rolled up to a tiny ball, thus taking up much less waste volume and generating less plastic waste. 👍



» PRODUCTCLIPS „HOW TO“





DETAX GmbH & Co. KG Carl-Zeiss-Str. 4 · 76275 Ettlingen/Germany
Tel. +49 72 43/510-0 · Fax: +49 72 43/510-100 · www.detax.de · post@detax.de