



FREEPRINT® Serie

HIGH PERFORMANCE 3D POLYMERS

Premium resins for all DLP printer
378-388 nm (UV) und 405 nm

DETAX



SPLINTS & TEMPLATES

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Freeprint® splint p.6



ORTHODONTIC BASE COMPONENTS

Freeprint® ortho p.4



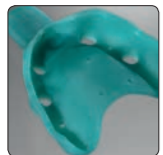
CROWNS & BRIDGES

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DENTURE BASES

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TRAYS & PLATES

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BONDING TRAYS

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FREEPRINT® 3D, the new generation of printable dental polymers, was specifically developed to satisfy the stringent requirements placed on dental models and restorations. DETAX FREEPRINT® polymers are ideal for all DLP 3D printers, whereby the FREEPRINT® UV series was specifically designed for all LED/UV printers with a light spectrum of 378-388 nm and the FREEPRINT® 405 series for all LED printers with a wavelength of 405 nm. In addition to splints and templates, the product series made up of nine materials is also suitable for printing out residue-free casting objects, models, crowns, bridges, bracket transfer trays, orthodontic base plates and gingival masks. FREEPRINT® model, special resin for digital fabrication of dental models, FREEPRINT® cast, 100% residue-free resin for casting molds and FREEPRINT® splint, the first biocompatible polymer for the generative fabrication of transparent drilling templates or occlusal splints, with Class IIa medical device approval. FREEPRINT® ortho, also with Class IIa medical device approval, biocompatible polymer for fabricating base parts of removable orthodontic appliances, drilling and X-ray templates, occlusal and fixation splints. Clear, transparent, with high mechanical strength. Customizable, allows easy fixation of orthodontic archwires and auxiliary components with freeform®. When hardened, the restorations fabricated with this material are fully odorless and tasteless and, on the basis of the Class IIa medical device approval, ready for oral/orthodontic application. In contrast to products made of comparable materials, occlusal splints or templates fabricated with FREEPRINT® can be worn for an indefinite period.

Freeprint® ortho

splints & templates
orthodontic base components



splints & templates
dent med resin

low material consumption
high mechanical stability &
detail reproduction
high building speed
MMA free
biocompatible

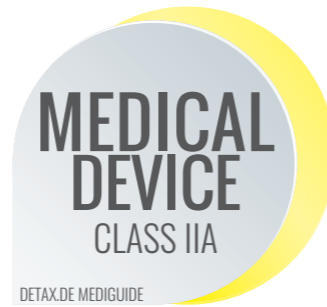
03988	Freeprint® ortho	1.000 g
03989	Freeprint® ortho UV	1.000 g

Light-curing, biocompatible 3D resin for the generative fabrication of base parts for orthodontic appliances, drilling and X-ray templates, occlusal and fixation splints. Maximum reliability of construction process, mechanical strength, easy to polish. Breaking strength, elasticity and influence of moisture following the orthodontic standard. Validated processes for sterilization in autoclaves and wet disinfection. Resistant to oral conditions, neutral odour and taste. Colour: clear transparent

FREEPRINT® ORTHO has been validated for **STERILISATION** in the autoclave according to EN ISO 17664. The wet disinfection of printed objects can be done by dipping. **FLEXURAL STRENGTH, ELASTICITY** and **INFLUENCE OF MOISTURE** following **ORTHODONTIC STANDARDS**.

Freeprint® splint

splints & templates



splints & templates

dent med resin

- max building speed
- high initial & final hardness
- highest bending & breaking strength
- non-brittle
- MMA free/ bisphenol A (BPA)-free
- biocompatible

Light-curing, biocompatible resin for the generative fabrication of drilling templates for implantology, X-ray templates and occlusal splints. Clear-transparent formulation for visual control in the working area. Process reliability through high initial hardness and final strength. Low-viscosity approach for reduced loss of material and fast cleaning. Highest mechanical bending and breaking strength, without being brittle. BPA-free, neutral odour and taste. Colour: clear-transparent

03066	Freeprint® splint	1.000 g
03709	Freeprint® splint UV	1.000 g

Freeprint® temp

crowns & bridges



crowns & bridges

dent med resin

natural tooth esthetics
max construction precision
max building speed
breaking and flexural resistant
high mechanical stability
high abrasion resistance
biocompatible

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

Light-curing, biocompatible 3D resin for the generative fabrication of temporary crowns & bridges. For all LED/UV printers with a light spectrum of 378-388 nm. Exceptional breaking and flexural resistance, high abrasion resistance. Natural tooth aesthetics, brilliant, translucent colours. Easy surface processing and polishing, can be characterized individually with the smartrepair® system or composites. Low viscosity for reduced loss of material and fast cleaning. Resistant to oral conditions, no odour or taste irritations, medical device Class IIa, colours: A1, A2, A3

Freeprint® denture

denture bases



denture bases

dent med resin

long-term stability and
biocompatible dentures
fast printing time
perfect fit
no residual monomer content
MMA-free

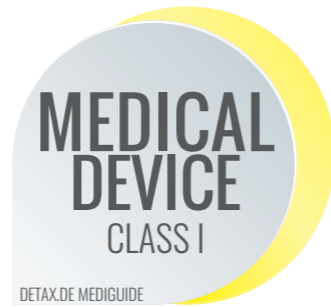
Light-curing, biocompatible 3D resin for the generative fabrication of removable denture bases. For all LED/UV printers with a light spectrum of 378-388 nm. High process reliability thanks to high initial hardness following printing. Low viscosity for reduced material consumption and faster cleaning. Displays maximum mechanical flexural and tensile strength without becoming brittle. Colour stability, odorless and tasteless. MMA-free. Colour: pink-transparent

Freeprint® denture UV 1.000 g

>> From Q4, 2018

Freeprint® tray

trays and plates



trays & plates

dent med resin

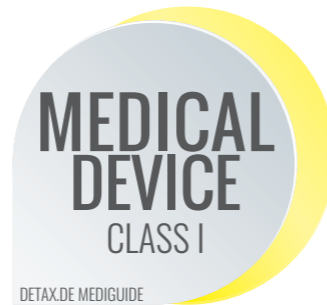
high dimensional stability
torsional rigidity
max building speed
MMA free
biocompatible

Light-curing, biocompatible 3D resin for the generative fabrication of individual impressions and functional trays, base resin plates. Low viscosity for reduced loss of material and fast cleaning. Maximum building speed, very high dimensional stability and torsional rigidity. No mechanical reprocessing of the surface necessary. Suitable for all impression materials, neutral odour and taste. Colour: green

02700	Freeprint® tray	1.000 g
04086	Freeprint® tray UV	1.000 g

Freeprint® IBT

indirect bonding tray



indirect bonding
dent med resin

elastic and tear-resistant
secure and precise fixing of brackets
easy to remove after positioning
no unpleasant sensation in the mouth

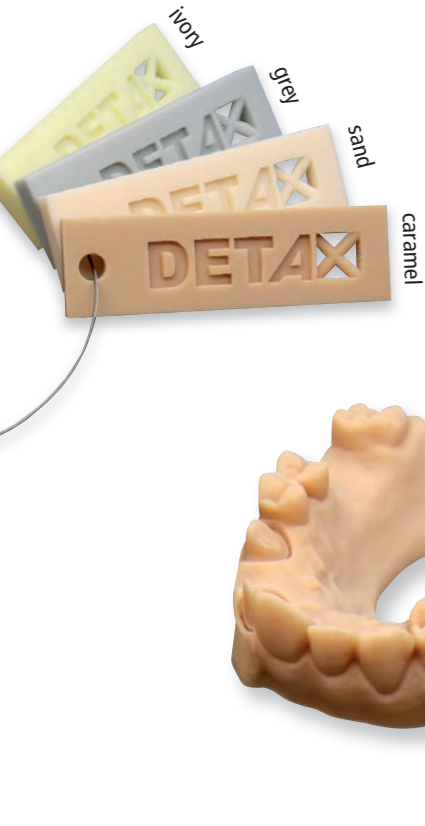
Light-curing, biocompatible 3D resin for the generative fabrication of orthodontic transfer trays for positioning brackets. For all LED/UV printers with a light spectrum of 378-388 nm. The indirect bonding trays are transparent and facilitate precise positioning. High tensile strength and flexibility allow the easy positioning of brackets in a single step. Odorless and tasteless. Colour: transparent

Freeprint® IBT UV 1.000 g

>> From Q4, 2018

Freeprint® model

model production



model production

dent tec resin

- max building speed
- max surface hardness
- highest construction precision
- dimensional stable
- pleasant tactility
- MMA free

03065	Freeprint® model sand	1.000 g
03779	Freeprint® model ivory	1.000 g
03781	Freeprint® model grey	1.000 g
03778	Freeprint® model UV sand	1.000 g
03780	Freeprint® model UV ivory	1.000 g
03782	Freeprint® model UV grey	1.000 g
02870	Freeprint® model UV caramel	1.000 g

Light-curing resin for the generative fabrication of dental models. Precise reproduction of details, maximum surface hardness and shape stability. Maximum precision in construction, feel and stability meet the high demands of model production. Opaque colour adjustment for the optical detection of surface structure, preparation margins, etc. Colours: ivory, grey, sand, caramel

Freeprint® model T

model production



model production

dent tec resin

- high temperature resistant
- max edge stability
- high construction precision
- low viscosity
- precise detail reproduction

02322	Freeprint® model T	1.000 g
02332	Freeprint® model T UV	1.000 g

Light-curing, temperature-resistant 3D resin for the generative fabrication of dental models for the deep-drawing technique. Precise reproduction of details, maximum surface hardness and edge stability of the models. Precision in construction, tactility and stability meet the high demands of model fabrication. The pronounced intrinsic stability also allows the fabrication of hollow master models. Low viscosity for considerably easier cleaning and lower material consumption. Colour: light blue

Freeprint® gingiva

gingival masks



gingival masks

dent tec resin

reproduction of functional 3D gingival-model segments
very elastic and tear-resistant
dimensional stability
no shrinkage or ageing
ductile also in case of prolonged storage
no bothering or unpleasant odors
natural gingiva esthetic

02820	Freeprint® gingiva UV	500 g
02843	Freeprint® gingiva UV	1.000 g

Light-curing 3D resin for the generative fabrication of flexible gingival masks for dental models. For all LED/UV printers with a light spectrum of 378-388 nm. For 3D reproduction of functional gingival model segments in a digital workflow in conjunction with Freeprint® model. Excellent elasticity and tear-resistance. Excellent dimensional stability, no shrinkage or aging, ductile even when stored over a long period. No annoying or unpleasant odors from fabricated gingival masks. Colour: gingiva

Freeprint® cast 2.0

castings



casting

dent tec resin



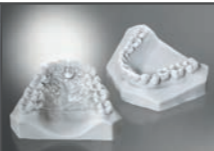


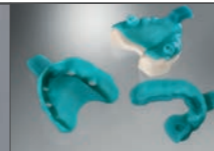












- residue-free burning out
- high dimensional stability after printing
- 3D model casting with fit check
- distortion-free & precise, also in case of delicate constructions
- high grade & accurate casting results

02548	Freeprint® cast 2.0 UV	500 g
02632	Freeprint® cast 2.0 UV	1.000 g

Light-curing 3D resin for the generative fabrication of high-precision casting objects. For all LED/UV printers with a light spectrum of 378-388 nm. Excellent dimensional stability after printing ensures safe application, in particular where cast models and molds are concerned (fit check). Printing results are precise and without any distortions, even for extremely delicate and intricate models. Any corrections or repairs after printing are possible with easyform gel LC. Low viscosity and optimized depth of cure help reduce printing time and material consumption and facilitate faster cleaning. Burns without leaving any residues in the mold and is the basis for high-grade modeling results that ensure the perfect fit. Phosphate-bonded investment materials are used as investments. Colour: red-transparent

OVERVIEW VALIDATION IN PROCESS

- Validation done / available
- Validation in the works
- old printer version, no validation planned

FREEPRINT®													
	ASIGA MAX MAX / MINI	UV	●	○	●	●	○	●	●	●	●	●	
	ASIGA PRO2	UV	●	○	●	●	○	●	●	●	●	●	
	ASIGA PICO	UV	●	○	●	●	○	●	●	●	●	●	
	RAPID SHAPE D20 / D30 / D40	405 nm	□	□	●	●	□	□	●	□	□	□	
	RAPID SHAPE D20II / D30II / D40II	UV	●	○	●	●	○	●	●	●	○	●	
	RAPID SHAPE D90II	UV	●	○	●	●	○	●	●	●	○	●	
	MIICRAFT 125 Y	UV	●	○	●	●	○	●	●	●	○	●	
	W2P	UV	●	○	●	●	○	●	●	●	○	●	
www.detax.de			MEDICAL RESINS						PREMIUM TEC RESINS				





OVERVIEW FREEPRINT® 3D RESINS

THE BUILDING SPEED depends likewise on the MATERIAL, the MOTION PARAMETERS and the LIGHT INTENSITY of the 3D printer. ! All FREEPRINT® MATERIALS are characterized by HIGH BUILDING SPEED and maximum PRECISION IN CONSTRUCTION at the same time.

DENT MED RESINS

Material type	Application	Colour / Appearance	Medical devices Class	Characteristics	378-388 nm	405 nm
temp 	temporary anterior and posterior tooth restorations	A1, A2, A3	Ila biocompatible	natural transparency and tooth aesthetics, extremely high construction precision & mechanical stability	✓	–
denture 	removable orthodontic base plates	rose-transparent	Ila biocompatible	long-term stability and biocompatible dentures, fast printing time, perfect fit	✓	–
ortho 	orthodontic base components, drilling templates for implant dentistry, occlusal splints, fixation and transfer keys	clear-transparent	Ila biocompatible	very high mechanical stability & construction precision, high printing speed, autoclavable, for wet disinfection	✓	✓
splint 	X-ray and drilling templates, splints	clear-transparent	Ila biocompatible	high mechanical flexural strength and stability, high initial hardness	✓	✓
tray 	individual impression and functional trays	green	I biocompatible	high dimensional stability, torsional rigidity, max. construction speed, compatible with all impression materials	✓	✓
IBT 	orthodontic transfer trays for positioning brackets	transparent	I biocompatible	elastic and tear-resistant, secure and precise fixing of brackets, no unpleasant sensation in the mouth	✓	–

DENT TEC RESINS

Material type	Application	Colour / Appearance	Medical devices Class	Characteristics	378-388 nm	405 nm
model 	dental master, work and situation models	grey, ivory, sand, caramel	–	maximum surface hardness and dimensional stability, pleasant tactility, very good construction precision	✓	✓
model T 	work models for the thermoforming technique	light blue	–	high temperature resistance to process-related temperature burdens, high edge strength, rational use	✓	✓
gingiva 	flexible gingival masks for dental 3D models	gingiva	–	3D reproduction of functional gingival model segments, excellent elasticity and tear-resistance, natural colour	✓	–
cast 2.0 	dental casting objects for precision casting	red-transparent	–	burns without leaving residues, excellent dimensional stability after printing, 3D model casting with fit check, precise and distortion-free results, even for extremely delicate and intricate models	✓	–



DETAX

GmbH & Co. KG

Carl-Zeiss-Str. 4 · 76275 Ettlingen/Germany
Telefon: 07243/510-0 · Fax: 07243/510-100
www.detax.de · post@detax.de

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