



SHINING 3D
DENTAL

SHINING DENT

3D Printing Material Catalogue

SS01



Splint Soft Resin

Splint Soft is an ideal choice for printing soft splint with perfect performance in transparent, morphology, occlusion, etc. This material is featuring in TPO-free, MMA&THF-MA free, which is even safer for sensitive users. The high tensile strength, optimum elongation, high flexural strength with low water absorption paired with CEL HyperClear system offering excellent transparency for different applications, such as splint, nightguards, etc. Splint Soft has been tested with real anti-aging performance and resulted in high performance >98% industry leading accuracy and high degree of shrinkage control.

Printed splints is a real polish free material with high gloss.

SS01 is recommended to place at room temperature 23±2 in the retainer storage box.



- TPO-free
- MMA & THF-MA free
- Polish-free using HyperClear system
- Transparent, high flexural strength, high tensile strength

■ Physical Properties - Liquid Status

Colour	Transparent
Viscosity	1050
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Reference/Standard
Ultimate flexural strength	> 5 MPa	ISO 20795-2
Flexural modulus	> 200 MPa	ISO 20795-2
Tensile strength	> 23 MPa	ISO 527
Elongation at break	> 90%	ISO 10477, ISO 4049
Biocompatible	Comply	ISO 10993-1

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning 20 secs
Recommended curing time	Fabcare 1/1S: 10min Fabcare 2: 5min

SH01



Splint Hard Resin

Splint Hard is an ideal choice for printing hard occlusal splints with features including optimum elongation and high flexural strength with low water absorption. This material has features in TPO-free, tasteless and MMA&THF-MA free, which is even safer for sensitive users. SH01 has undergone real-aging performance in oral devices, combined with high degree of shrinkage control and industry leading accuracy, resulted in longevity in using. With the use of HyperClear system offering excellent transparency for occlusal splint application. Printed splints would need minimal polish in support adding area. SH01 is recommended to place at room temperature 23±2 in the retainer storage box.



- TPO-free
- MMA & THF-MA free
- Minimal polish using HyperClear system
- Transparent, high flexural strength, optimum elongation

■ Physical Properties - Liquid Status

Colour	Transparent
Viscosity	1050
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Ultimate flexural strength	> 50	ISO 20795-2
Flexural Modulus Mpa	> 1500	ISO 20795-3
Elongation at Break	> 20%	ISO 527
Fracture Work J/m ²	> 6000	ISO 20795-1
Maximum Stress Intensity Mpa m ^{1/2}	> 3.9	
Maximum Stress Intensity after three months of accelerated aging tests	> 3.9	ASTM F1980-2021, ISO 527

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning 20 secs
Recommended curing time	Fabcure 1/1S: 10min Fabcure 2: 5min

W20



Washable Resin

W20 is an ideal choice for printing separated models for crown&bridge application. It is easy to wash with water and no chemicals needed. W20 displays nice pink color. Dental model W20 improves the stability and consistency needed for printing and storage, which allows ultra-fast printing with high-detailed precision. This washable resin is suggested to wash in live water for 1 minute. The result will be performed with fast drying and smooth surface product.

Printed dental model is suggested to place at room temperature 23 ± 2 with humidity $<70\%$. Avoiding high humidity environment which would cause deformation of the product.



→ Easy to wash

→ High flexural strength & high flexural modulus

Physical Properties - Liquid Status

Color	Pink
Viscosity @25°C cps	300
Wavelength	405nm

Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Color	Pink	N/A
Flexural Strength Mpa	>85	ASTM D790
Flexural Modulus Mpa	>2000	ASTM D790
Tensile Modulus Mpa	>1800	ASTM D638
Elongation At Break	$>7.5\%$	ASTM D638

CB11



Temporary Crown&Bridge

CB11 is an ideal choice for printing crown and bridge with perfect performance in colours, morphology, occlusion, etc. This material undergoes MMA&THF-MA free which is even safer in use of sensitive users. This material has features including high toughness, high pressure resistance, high flexural strength with low water absorption after testing in oral devices real anti-aging performance. The flexural strength can be maintained above 115MPa after a long-accelerated aging test. The low risk of CB11 fracture after wearing, the safer when patient's chewing. CB11 is recommended to place at room temperature $23\pm2^{\circ}\text{C}$ with humidity $<70\%$. The surface of the printed CB11 is smooth and easy to polish, with high gloss after polishing.

- Multi-colour choice A1/A2/A3/A3.5/B1/B2/B3 (Vita A-D Shade Guide)
- Comprehensive biocompatibility
- High pressure-resistance, high flexural strength



Physical Properties - Liquid Status

Colour	A1/A2/A3/A3.5/B1/B2/B3
Viscosity	1320
Wavelength	405nm

Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Flexural Strength Mpa	118	ISO 10477, ISO 4049
Flexural Strength after two months of accelerated aging test (Mpa)	116	ASTM F1980-2021, ISO 10477
Chewing Simulation Test	> 5 years (1.2 million chewing cycles at a load of 200 N)	Chewing Simulation Methods
Color Stability dE	≤ 1 (CIELAB, dE)	ISO 10477, ISO 4049
Color Stability dE	No perceptible color change	ISO 22112
Resistance to blanching, distortion and crazing	No perceptible failing	ISO 22112
Elongation at break	6.59%	ISO 527-1
Water Sorption $\mu\text{g}/\text{mm}^3$	≤ 35	ISO 10477, ISO 4049
Solubility $\mu\text{g}/\text{mm}^3$	≤ 5.5	ISO 10477, ISO 4049
Biocompatible	Comply	ISO 10993-1

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning 20 secs
Recommended curing time	Fabcure 1/1S: 10min Fabcure 2: 5min

DT01



Try-In Denture Resin

Denture Try-In DT01 is an excellent choice for printing denture base. This material is TPO-free, MMA & THF-MA free. It is safer sensitive patients to use. DT01 displays good color stability, tasteless and easy to clean. The combination of high hardness, low viscosity and flexural strength gives an excellent resistance in aging of artificial saliva. The flexural strength can be maintained above 80MPa after six months of accelerated-aging test with >99% industry leading accuracy. Multi-color choice allows for different gingiva color choice, restore nature gingiva and excellent texture. Printed Denture Base is recommended to place at room temperature 23±2 with humidity <70% in denture storage box to avoid unexpected dropping.



→ Multi-Colour Choice: Light Pink/ Light Reddish Pink/ Original (Dentsply Sirona Shade Guide)

→ TPO free

→ MMA & THF-MA free

→ Easy to polish & High gloss after polishing

■ Physical Properties - Liquid Status

Colour	OR/ LT/ LRP
Viscosity	1200
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Flexural Strength MPa	106	ISO 178
Ultimate Flexural Strength MPa	>80	ISO 20795-1
Ultimate flexural strength after six months of accelerated aging tests (MPa)	>80	ASTM F1980-2021, ISO 20795-1
Impact Strength J/m	24.7	ASTM D256
Biocompatible	Comply	ISO 10993-1

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning 20 secs
Recommended curing time	Fabcure 2: 10min at 60 degrees

DM03

Implant Model (Grey)

Dental model DM03 is the ideal choice for printing implant models and separated models for C&B applications. This material has features including high toughness, high pressure resistance, etc. This allows the best experience when using for implant models. The hardness and mechanical properties of cured resin allows DM03 to resist abrasion and tearing force during seating and finishing implant cases, ensuring perfect cases every time. The grey colour allows the perfect performance in model details. DM03 is recommended to place at room temperature $23\pm 2^{\circ}\text{C}$ with humidity $<70\%$



→ Accuracy of printed curing model

Within 10 days $>90\%$

Within 15 days $>85\%$

■ Physical Properties - Liquid Status

Color	Grey
Viscosity @25°C cps	870
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Hardness Shore D	77	ISO 868
Tensile Modulus MPa	1021	ISO 527
Tensile Strength MPa	27	ISO 527
Elongation at break %	35	ISO 527
Flexural Modulus MPa	1429	ISO 178
Flexural Strength MPa	54	ISO 178
Notch Izod J/m	10.7	ISO 180

Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 30 + 60 secs
Recommended curing time	Fabcare 1: 10 mins, Fabcare 2: 7 mins

DM12

Implant Model (Geller Model)

Dental Model DM12 is the ideal choice for printing separated models for crown and bridge application. DM12 optimizes model precision through its lower elasticity and higher flexural modulus compared to the previous DM11. The hardness and mechanical properties of the cured resin allows the DM12 to resist abrasion during seating and finishing for crown and bridge cases, ensuring a perfect fit every time. The yellow color offers maximum detection of margin lines and adjacent contours, and cleanup is easy thanks to the low viscosity of the resin.

→ Low viscosity, high stability



Physical Properties - Liquid Status

Color	Yellow
Viscosity @25°C cps	255
Wavelength	405nm

Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Hardness Shore D	81	ISO 868
Tensile Modulus MPa	1404	ISO 527
Tensile Strength MPa	29	ISO 527
Elongation at break %	11	ISO 527
Flexural Modulus MPa	1537	ISO 178
Flexural Strength MPa	52	ISO 178

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning: 30 + 30 secs
Recommended curing time	Fabcure 1: 10 mins, Fabcure 2: 7 mins

SG01

Surgical Guide, Ortho Guide

Surgical Guide SG01 is a clear and biocompatible resin intended for printing dental surgical guides. It is certified by FDA as Class I medical instrument and meets ISO 10993 standards, making it ideal for customized, non-implantable use with body contact limited to 24 hours. SG01 is a rigid polymer with minimal flex, which allows it to maintain its form during dental surgeries.

→ Biocompatible, transparent



■ Physical Properties - Liquid Status

Color	Transparent
Viscosity @25°C cps	527
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Hardness Shore D	84	ISO 868
Tensile Modulus MPa	1873	ISO 527
Tensile Strength MPa	43	ISO 527
Elongation at break %	12.2	ISO 527
Flexural Modulus MPa	2047	ISO 178
Flexural Strength MPa	81	ISO 178

Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 60 + 10 secs
Recommended curing time	Fabcure 1: 5 mins, Fabcure 2: 5 mins

TR01

Custom Tray

Tray TR01 is a biocompatible material with a high elastic modulus making it an outstanding choice for printing custom trays. The high elastic modulus allows the printed tray to resist flexion under high pressure leading to more accurate impressions. Its biocompatibility makes it safe for short term use in the mouth.

→ Biocompatible, high stability



■ Physical Properties - Liquid Status

Color	White
Viscosity @25°C cps	362
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Hardness Shore D	87	ISO 868
Tensile Modulus MPa	1981	ISO 527
Tensile Strength MPa	45	ISO 527
Elongation at break %	4.9	ISO 527
Flexural Modulus MPa	2895	ISO 178
Flexural Strength MPa	93	ISO 178

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning: 10 secs, and ultrasonic bath: 30 secs
Recommended curing time	Fabcrete 1: 10 mins, Fabcrete 2: 7 mins

OD02

Ortho Model

Ortho model OD02 is an excellent choice for printing models for the fabrication of aligners and orthodontic applications. The high heat resistance and hardness of OD02 allows for the cured models to withstand abrasion and maintain accuracy over multiple uses.

→ High heat resistance, hardness



■ Physical Properties – Liquid Status

Color	Yellowish-brown
Viscosity @25°C cps	322
Wavelength	405nm

■ Mechanical Properties – Post Cured Parts

Property	Value	Test Method
Hardness Shore D	86	ISO 868
Tensile Modulus MPa	2477	ISO 527
Tensile Strength MPa	55	ISO 527
Elongation at break %	3.6	ISO 527
Flexural Modulus MPa	3217	ISO 178
Flexural Strength MPa	108	ISO 178

Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 60 + 10 secs
Recommended curing time	Fabcare 2: 20 mins @ 60 °C

DC12

Crown, Bridge, Partial Framework

Dental Cast DC12 is a printable wax-like photopolymer specially developed for investment casting. DC12 is the ideal resin choice for dental applications such as crown and bridge casting and cast partial dentures frameworks. DC12 burns out clean and can also be used in pressed ceramic applications.

→ Low deformation, clean burnout outcome



■ Physical Properties – Liquid Status

Color	Green
Viscosity @25°C cps	128
Wavelength	405nm

■ Mechanical Properties – Post Cured Parts

Property	Value	Test Method
Hardness Shore D	83	ISO 868
Tensile Modulus MPa	1693	ISO 527
Tensile Strength MPa	40	ISO 527
Elongation at break %	2.8	ISO 527
Flexural Modulus MPa	1469	ISO 178
Flexural Strength MPa	20	ISO 178

Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 60 + 10 secs
Recommended curing time	Fabcure 1: 4 mins, Fabcure 2: 3 mins

GM12

Gingiva Mask

Gingiva Mask GM12 is an excellent choice for replicating gingiva contours for digital implant cases. GM12 is a flexible material that can assist in planning the emergence profile for digital implant restorations.

→ Flexible, gingiva color



■ Physical Properties – Liquid Status

Color	Transparent Pink
Viscosity @25°C cps	700
Wavelength	405nm

■ Mechanical Properties – Post Cured Parts

Property	Value	Test Method
Hardness Shore A	55	ISO 868
Elongation at break %	110	ISO 527

Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 60 + 10 secs
Recommended curing time	FabCure 1/1S: 3 mins, FabCure: 2 mins

TN11

A1/A2/A3/B1

TN11 is an ideal choice for printing temporary crown and bridge for try-in with perfect performance in colors, morphology, occlusion, etc. This material has features including high toughness, high pressure resistance, high flexural strength with low water absorption. Multi-color allows for different tooth color treatment, restore natural tooth color and excellent texture.

TN11 is recommended to place at room temperature $23\pm 2^{\circ}\text{C}$ with humidity $< 70\%$



→ Multi-color choice A1/A2/A3/B1

High toughness, high pressure resistance

High flexural strength, low water absorption

■ Physical Properties – Liquid Status

Color	A1 A2 A3 B1
Viscosity @25°C cps	1300
Wavelength	405nm

■ Mechanical Properties – Post Cured Parts

Property	Value	Test Method
Hardness Shore D	85	ISO 868
Flexural Strength MPa	118	ISO 10477
Color Stability dE	< 1.5	ISO 10477
Water Sorption $\mu\text{g}/\text{mm}^3$	< 40	ISO 10477
Solubility $\mu\text{g}/\text{mm}^3$	< 7.5	ISO 10477

Post Processing	Value
Cleaning time with 95% ethanol	Manual cleaning: 20 secs, and ultrasonic bath: 60 secs.
Recommended curing time	Fabcure 1: 10 mins, Fabcure 2: 7 mins

■ Certificate

Materials	CE	RoHS	REACH	FDA	CFDA/NMPA	Biocompatibility
SS01	class I	✓	✓	class I	class I	✓
SH01	class I	✓	✓	class I	class I	✓
W20	-	✓	✓	-	class I	✓
CB11	class I in process	✓	✓	class II	class I	✓
DT01	class I	✓	✓	class I	class I	✓
DM03	-	✓	✓	-	class I	✓
DM12	-	✓	✓	-	class I	✓
SG01	class I	✓	✓	class I	class I	✓
TR01	class I	✓	✓	class I	class I	✓
OD02	-	✓	✓	-	class I	✓
DC12	-	✓	✓	-	class I	✓
GM12	-	✓	✓	-	class I	✓
TN11	class I	✓	✓	class I	class I	✓

■ Delivery & Storage

Net Weight	1 KG / 0.5KG
Storage Temperature	5°C-35°C
Storage Humidity	5% ~ 90%RH
Working Temperature	20°C-30°C
Working Humidity	30-60%RH
Bottle Size mm	D90*225 / D67*192
Package Size mm	125*125*265 / 95*95*240
Gross Weight	1.1 KG / 0.6KG



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