



SHINING 3D
DENTAL

SHINING DENT

3D Printing Material Catalogue

SS01



Splint Soft Resin

Splint Soft SS01 is an ideal choice for printing soft splint with perfect performance in transparent colour, morphology, occlusion, etc. This material has features including high tensile strength, optimum elongation and high flexural strength with low water absorption. Transparent colour allows for different applications, such as splint, nightguards, etc.

SS01 is recommended to place at room temperature 23 ± 2 with humidity $< 70\%$



→ 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	Fabcrete 1/1S: 10min Fabcrete 2: 5min

CB11



Temporary Crown&Bridge

CB11 is an ideal choice for printing crown and bridge 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.

CB11 is recommended to place at room temperature $23\pm 2^{\circ}\text{C}$ with humidity $<70\%$

- Multi-color choice A1/A2/A3/A3.5/B1/B2/B3
- High toughness, high pressure resistance
- High flexural strength, low water absorption



Physical Properties - Liquid Status

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

Mechanical Properties - Post Cured Parts

Property	Value	Reference/Standard
Flexural Strength	118 MPa	ISO 10477, ISO 4049
Flexural Strength after two months of accelerated aging tests (Mpa)	116 MPa	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	≤ 1 (CIELAB, dE)	ISO 10477, ISO 4049
Color Stability	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
Sorption	$\leq 35 \mu\text{g}/\text{mm}^3$	ISO 10477, ISO 4049
Solubility	$\leq 5.5 \mu\text{g}/\text{mm}^3$	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 try-in. This material has best performance in flexural strength, high hardness and low viscosity without product being brittle. Displays good colour stability, tasteless and easy cleaning. Mutli-colour choice allows for different gingiva colour choice, restore nature gingiva colour and excellent texture. DT01 is recommended to place at room temperature 23±2 with humidity <70%



- Mutli-Colour Choice: Light Pink/ Light Reddish Pink/ Original
- Tasteless, high hardness, low viscosity

■ Physical Properties - Liquid Status

Colour	OR/ LP/ LRP
Viscosity	750
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Reference/Standard
Flexural Strength	98 MPa	ISO 178
Flexural modulus	2800 MPa	ISO 178
Flexural Strength	75 MPa	ISO 20795-2
Impact strength	> 2.5 kJ/m ²	ISO 180
Elongation at break	7%	ISO 527-1
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	Fabcure 1: 10 mins, Fabcure 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	Fabcure 1: 10 mins, Fabcure 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	Fabcure 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

GM11

Gingiva Mask

Gingiva Mask GM11 is an excellent choice for replicating gingiva contours for digital implant cases. GM11 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	1015
Wavelength	405nm

■ Mechanical Properties - Post Cured Parts

Property	Value	Test Method
Hardness Shore A	70	ISO 868
Tensile Modulus MPa	N/A	ISO 527
Tensile Strength MPa	N/A	ISO 527
Elongation at break %	N/A	ISO 527
Flexural Modulus MPa	N/A	ISO 178
Flexural Strength MPa	N/A	ISO 178

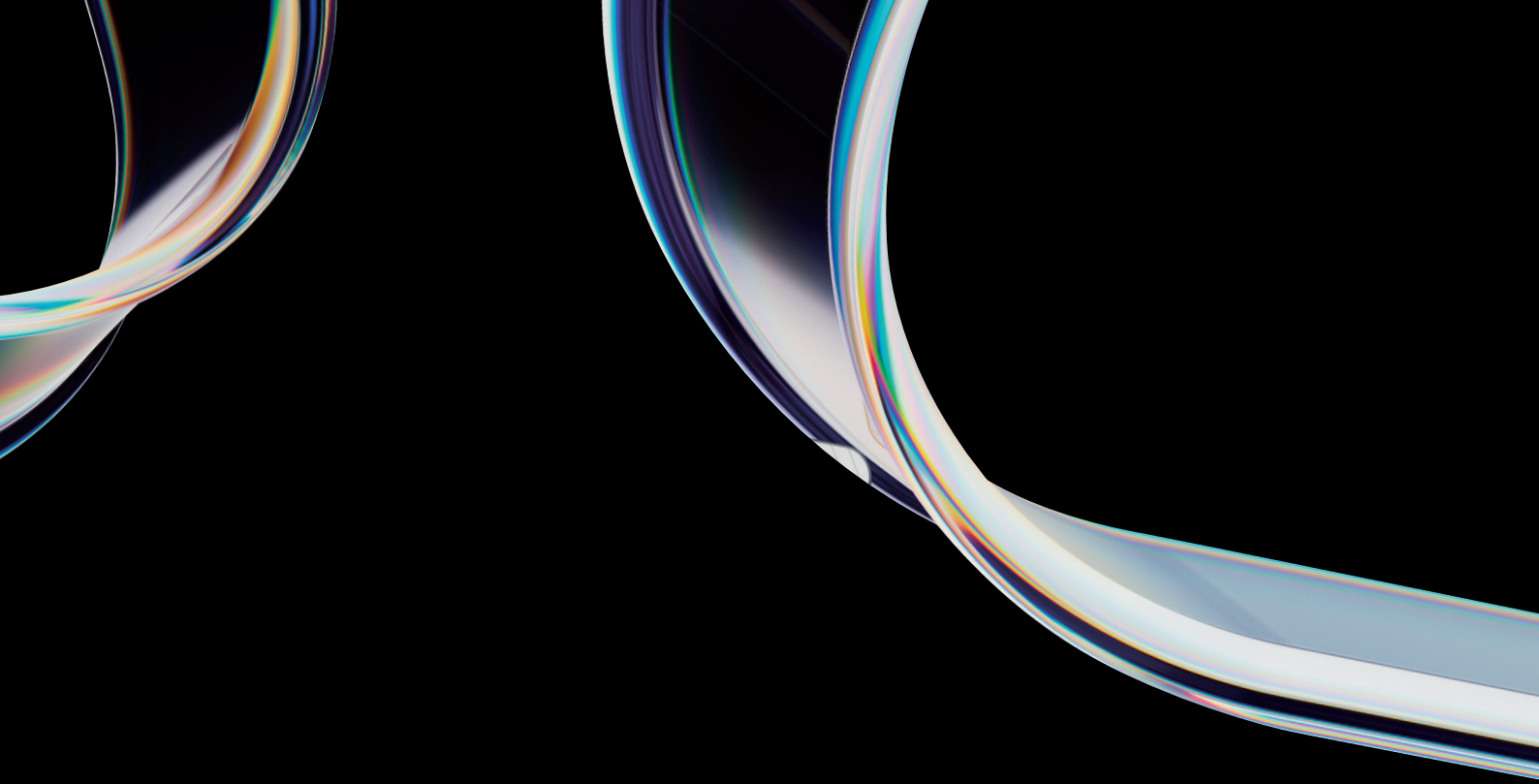
Post Processing	Value
Cleaning time with 95% ethanol	Ultrasonic bath: 60 + 10 secs
Recommended curing time	Fabcure 1: 6 mins, Fabcure 2: 3 mins

■ Certificate

Materials	CE	RoHS	REACH	FDA	CFDA/NMPA	Biocompatibility
SS01	class I	✓	✓	class I	class I	✓
CB11	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	✓
GM11	-	✓	✓	-	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



SHINING 3D DENTAL

Go Digital With SHINING 3D

SHINING 3D

www.shining3ddental.com

sales@shining3d.com

V.SHININGDENT20231031EN

Copyright © 2014-2023 SHINING 3D. All Rights Reserved.