3D Printing Resin LEYI® DMO03

1. PRODUCT INFORMATION

Product Type : 3D Printing Resin

Product Name : Precision Model

Product Model : DMO03

Product Color : Orange / Grey

Product Specifications : 1kg/bottle 2.5kg/bottle

Product Description : Light-curing resin for 3D printing high-precision dental models.

2. RESIN PROPERTY

Physical Properties Of Liquid Resin		
Viscosity@25℃	ISO 3219	450-550 mPa·s
Mechanical Properties of Cured Material		
Hardness	ISO 868	82-85 D
Tensile Strength	ISO 527-2	48-60 Mpa
Flexural Strength	ISO 178	55-65 Mpa
Flexural Modulus	ISO 178	2000-2300 Mpa
Elongation at Break	ISO 527-2	12-20 %
Notched Izod	ISO 180	15-23 J/m
HDT	ISO 75-2	58-65 ℃

3. PRINTING PARAMETER SUGGESTION

Parameter Type	Recommended Parameter (Grey)	Recommended Parameter (Orange)
Layer Thickness	0.05 mm	0.05 mm
Bottom Layer Count	3-7	3-7
Exposure Time	3-5 s	4-6 s
Bottom Exposure Time	20-30 s	20-30 s
Compatible Printer Light Source	385-405 nm	385-405 nm
Printing Environment Temperature	25±2 ℃	25±2 ℃
Humidity	≤ 50%	≤ 50%

4.USAGE METHODS

4.1 Design: Based on the scanned data, design a model.

4.2 Slices: Select the appropriate parameters in the slicing software, Open the slicing software, import the model, and make sure the bottom of the model is fully in contact with the build plate. Slice and export the print file. If you are using LEYI's printer, you can select the DMO03 parameter directly; if you are using a different printer, please follow the technician's recommendations.

4.3 Printing : Shake the resin 1-2 minutes or ultrasonicate it for 15 minutes to ensure it is evenly mixed, then pour the resin into the resin tank. Select the slice file you just obtained and start printing.

4.4 Remove : After finishing printing, clean the residual resin on the surface of the model. Use tools to carefully and slowly separate the model from the platform. Check and clean the solid residue of the printer platform and tank to avoid affecting the next printing.

4.5 Cleaning : Ultrasonicate in alcohol for 1.5 minutes,, dry with compressed air, and then clean with fresh alcohol for 1 minute.

4.6 Post-Curing: Place the model in the curing box. Medium energy curing box UV for 5 minutes.

5. USAGE PRECAUTIONS

5.1 When designing dental models, ventilation holes should be included to prevent vacuum suction during the printing process.

5.2 Due to the resin viscosity, please wash repeatedly, to ensure that the model surface clean.

6. STORAGE & TRANSPORTATION

6.1 Resin unopened storage: the best storage temperature of the product is between 10-30℃, away from high temperature, direct sunlight, fire and corrosive substances.

6.2 Tighten the bottle cap in time after the resin is opened to avoid water, light and impurities entering the bottle.

6.3 The resin in the Tank of the printer should not be exposed to the air for a long time. It should be sealed with a film and stored away from light. You can also find a new light-proof bottle to store it. Do not pour it back into the unused resin.

6.4 Transportation: The product should be transported at a temperature range of 0 - 45℃. It is necessary to prevent deformation and leakage caused by prolonged heavy pressure, as well as to avoid direct sunlight and heat sources.