AxioPrint Surgical Guide

3D Printing Resin for Fabrication of Surgical Guide

Product Description : AxioPrint Surgical Guide resin is a light-curing material for the 3D printing of dental surgical guides for use in LCD, DLP and SLA 3D printers as reactive to wavelength of light between 385nm and 405nm.

Composition : Methacrylates, Photo-initiator, Inhibitor and Pigment.

Intended Purpose / Intended Use : AxioPrint Surgical Guide resin is intended for the fabrication of 3D printed dental surgical guides.

Indications for Use : It is a photopolymer resin used for 3D printing dental surgical guides to aid in dental implant placement procedure.

Indications for Hygiene : The dental model appliances produced with AxioPrint Surgical Guide resin are mostly customized and intended for a single-patient. The cleaning of the appliance with soap and warm water, or any over-the-counter, mild cleaning agents is also must.

Instructions for Use :

Processing : Make sure to work as clean as possible, dirty reservoirs or equipment can cause deformation and therefore failure of the printed objects.

Shake for 5 minutes before use : Shake the bottle for at least 5 minutes prior to the mixing process on the roller mixer. This is required to loosen the (possible) sediment from the bottom of the bottle.

Thoroughly mix before using :

1. For first time use before opening the bottle, mix the product for 2.0 hours on the roller mixer to disperse the resin & the pigments adequately.

2. Before each subsequent use, mix the product for 1.0 hour on roller mixer to avoid color development & print failures which may occur when mixed insufficiently.

Fill printer resin tray : Make sure the temperature of the resin is between (20-25°C/68-77°F) and prevent exposure to (sun) light. Pour the resin in the resin tray of the3D printer. Do not mix different batches of the same product.

Printer settings : Only use the calibrated and/or predetermined settings for your LCD, DLP and SLA 3D printer and Post Wash-Cure system as mentioned in Axiodent website. The resin can only be used with a 385nm – 405nm UV light source.

Remove printed parts from platform : When the 3D printer has finished its program remove the building platform from the machine. Place the platform on plastic sheet. The printed parts can now be removed from the platform using a metal scrapper.

Cleaning printed parts - Step 1 : Dip the printed parts in an ethanol/Isopropyl alcohol and wash it using Post wash-cure system for at least 15 minutes. Remove the cleaned parts and again clean in ethanol/Isopropyl alcohol using an ultrasonic bath for not more than 4-5 minutes as beyond this defect in printed parts may appears.

Finishing : After cleaning and drying, let the printed parts rest for at least 10 minutes to make sure that the printed parts are free of ethanol/isopropyl alcohol residue. Remove any support structures from the printed parts using plastic spatula.

Post-Curing : Place the printed parts in a Post wash-cure system for final polymerization. Post-curing is an UV-light treatment to ensure that printed parts obtain optimal polymer conversion. Through this the residual monomer is reduced to a minimum and the required mechanical properties are obtained. This procedure is necessary to achieve the desired material properties using the Post wash-cure system. To obtain stable cured parts use the prescribed curing time of 45-60 minutes and if possible, further gives cured parts an additional exposure of temperature min. 60°C / 140 °F for 15 minutes.

The dispensed material shall not be placed back in container and the dose once applied and used shall not be reused.

Warnings :

The product contains polymerizable substances which may cause skin irritation. If contact with skin occurs, wash thoroughly with soap and water. If skin sensitization occurs, discontinue use. Avoid inhalation or ingestion.

Precautions :

- Recommended for dental use only.
- Use of nitrile gloves is recommended until post-curing.
- Restorations made of AxioPrint Surgical Guide resin should not be cleaned with chemical products.
- Expired or unused resin should be completely cured or polymerized prior to disposal.

Contraindications :

AxioPrint Surgical Guide resin should not be used for any other purpose than as a 3D print resin for the manufacturing of dental surgical guides. Any deviation from this instruction for use may have adverse effect on the chemical and physical quality of AxioPrint Surgical Guide Resin. In case of an allergic reaction, please contact a medical physician.

Storage Conditions: Store the resin in original packaging, preferably in cool and dark place, store at temperature between 10°C(50°F) to 24°C(75°F) and away from high temperatures or direct sunlight.

Shelf Life : 3 years from the date of manufacturing.

Presentation :

AxioPrint Surgical Guide Resin is available in clear transparent appearance.

Ref : 18003

500g Bottle

Ref : 18004

1000g Bottle

Disposal conditions : To be disposed off based on the prevailing rules of the country in which it is used.

MANUFACTURED FOR

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JK/DEVICE/MFG/MD/2022/000480

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LOT Symbol for "BATCH CODE" Symbol for "USE-BY DATE" Symbol for "NON STERILE" Symbol for "KEEP DRY" Symbol for "CAUTION" Symbol for "CONSULT INSTRUCTION FOR USE"

REF Symbol for "CATALOGUE NUMBER" EC REP Symbol for "AUTHORIZED REPRESENTATIVE IN THE EUROPEAN COMMUNITY/EUROPEAN UNION" Symbol for "DO NOT USE IF PACKAGE IS DAMAGE" Symbol for "WARNING"

Symbol for "KEEP OUT OF THE REACH OF CHILDREN" Symbol for "MANUFACTURER" Symbol for "TEMPERATURE LIMIT" Symbol for "KEEP AWAY FROM SUNLIGHT" MD Symbol for "MEDICAL DEVICE" UDI Symbol for "UNIQUE DEVICE IDENTIFIER"