# **Dental Model Resin**



Product Description: Prevest Dental Model resin is a light-curing material for the 3D printing of dental prosthodontic and orthodontic models for use in DLP and LCD 3D printers as reactive to wavelength of light between 385nm and 405nm. The following instructions for use are for dental professionals who use Model Resin as a material for dental models. This instruction for use also provides information about safety and environmental aspects

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

Intended Purpose / Intended Use: Model Resin is intended for the fabrication of 3D printed prosthodontic and orthodontic models. The product is classified as a non-medical device according to

Indications for Use: It is used for fabrication of 3D crown and bridge models, orthodontic models, diagnostic models and implant analog models.

Indications for Hygiene: The dental model appliances produced with Model Resin are mostly customized and intended for a single-patient. The cleaning of multi-use appliances between usages is must. 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. It is always advisable to use nitrile gloves when handling the Model Resin up until the Finishing step.

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: Mix the product for 2.0 hours before the first time use. Mix the product for 1 hour before each subsequent use. Mixing on a roller stirring device is necessary to disperse the resin and the pigment. Color deviation and print failures 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 the 3D printer. Do not mix different

Printer settings: Only use the calibrated and/or predetermined settings for your DLP or LCD 3D printer and Post Wash-Cure system as mentioned in Prevest 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 (>90%) and wash it using Post wash-cure system for at least 15 minutes. Remove the cleaned parts and again clean in

ethanol/lsopropyl alcohol (>90%) 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.

## Warnings

HAZARDOUS INGREDIENTS: diphenyl (2,4,6-trimethyl benzoyl) phosphine oxide; 7,7,9(or7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate.

#### HAZARD STATEMENTS

H317 May cause an allergic skin reaction.

Eu204 Contains isocyanates. May produce an allergic reaction.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H318 Causes serious eye damage.

H373May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure < state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>

#### Precautions:

## PRECAUTIONARY STATEMENTS:

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P363 Wash contaminated clothing before reuse.

P273: Avoid release to the environment.

P301+312: IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310: Immediately call a poison center or doctor/physician.

P314: Get medical advice/attention if you feel unwell.

P330: Rinse mouth

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+364: Take off contaminated clothes and wash before use.

P501: Dispose of contents/containerto an approved waste disposal plant.

## Contraindications:

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

Storage Conditions, Expiry Date and Transport: Store the resin in the original packaging or in a closed resin tray garage, preferably at room temperature in a dry and dark area. Close the packaging after each use. The expiry date of the product is mentioned on the product label. In case of exceeding the expiry date, the product is no longer guaranteed in terms of treatment. Do not expose to UVlight.Standard transport conditions apply to this product. There are no restrictions for transport related to hazardous substances. Store at temperature between 5°C(41°F) to 30°C(86°F).

Shelf Life: 3 years from the date of manufacturing.

### Presentation:

Model Resin is available in three different colours.

Grey 1 kg, Peach 1 kg, White 1 kg,

Disposal Conditions: The printed objects produced from Model Resin materials are not considered an environmental hazard in their final, fully cured state. Model Resin in its polymerized form are not environmentally harmful. Model Resins in its liquid state should be treated as chemical waste. The unused and non-recyclable liquid materials should be disposed in accordance with federal, state, and local regulations.

### Prevest DenPro Limited

Unit II, EPIP, Bari Brahmana, Jammu-181133, India. www.prevestdenpro.com Customer Care No.: + 91 8899074151

Email: customercare@prevestdenpro.com

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

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"

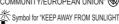
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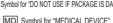
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Date :

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"













The material has been developed solely for professional dental use. Application should be carried out strictly according to the instruction for use. Liability cannot be accepted for damages resulting from failure to observe the instructions of the stipulated area of applications. The user is responsible for testing the material for its suitability and use for any purpose not explicitly stated in this instruction sheet. Description and data constitute no warranty of attributes and are not binding. For feedback, complaints and reporting of unexpected events contact customer care.