

# INSTRUCTIONS

# ERIMODEI" ( WHITE 3D PRINT RESIN

#### **Product description**

Whip Mix VeriModel™ OS White is a 3D print resin for producing dental, orthodontic and presentation models based on an image projection system at 385nm and 405nm. The formulation of VeriModel™ OS White is optimized to meet the requirements of dental model accuracy, and to withstand laser welding and thermoforming.

#### Storage

- VeriModel<sup>™</sup> OS White must be stored in the original packaging at room temperature in a dry area.
- Always keep container tightly sealed and close the container immediately after each use.
- Do not expose VeriModel™ OS White to any light source. Minimum amount of light can induce polymerization (solidification).
- Once resin is poured in a tray, it can be temporarily saved in a dark area for up to 1-3 days. For a longer period of storage time, resin must be transferred back to original packaging to protect it from light.
- Since pigments settle over time, resin that is stored in a tray must be stirred before each print using a plastic or paper card (similar to a business card), see figure 3, to ensure a homogenous mixture and to get pigments back into the solution. Failure to do this will obstruct light from the projector, causing fuzzy edges and irregular surfaces. NOTE: Avoid using sharp objects and edges as these can damage the resin tray.
- Do not use the product past the expiration date.
- The lot number and expiration date are indicated on VeriModel™ OS White packaging. In case of questions or concerns, please refer to the lot number.

- When printing with VeriModel<sup>™</sup> OS White 3D Print Resin, make sure it is at a temperature between 20°C and 30°C. Extreme high or low temperatures could potentially affect the accuracy of the printed models or cause failure of the printed objects.
- VeriModel<sup>™</sup> OS White bottle must be shaken thoroughly for approximately five minutes before use (see figure 1). If shaking is insufficient, color deviation may occur.
- Carefully pour VeriModel<sup>TM</sup> OS White into the tray (see figure 2).







- Print using your printer instructions.
- After the build process is finished, post processing is required. If this cannot be immediately completed, leave the printed objects in the printer until ready to post process.

#### **Post Processing**

- When the print job is complete, remove the build platform from the printer, then carefully remove the printed objects from the platform.
- Carefully remove all support structures from the printed object.
- The printed objects must be rinsed using an ultrasonic alcohol bath for 3 - 5 minutes to eliminate any excess resin.
- Printed objects should then be rinsed in a second clean ultrasonic alcohol bath for an additional 5 minutes.
- Models with cavities and gaps will take longer to clean.
- To remove excess alcohol, leave models to dry at room temperature (or compressed air can also be used).
- To achieve the maximum mechanical strength, post cure in a light curing unit, such as Asiga's Flash from Whip Mix. Follow manufacturer's instructions.
- Look for cured debris in the tray after each print job, especially after a print failure. A paint strainer can be used to filter out any debris. Printing with cured debris could potentially cause damage to the tray or the printed objects.
- Deviations from the described manufacturing process may lead to different mechanical and optical properties of the VeriModel™ OS White material.

### **Working with Printed Models**

- Models can be coated with a separating material such as Whip Mix's Foilcote, Lubritex No. 12, or Gator Die Lube to prevent wax from adhering.
- Models can be duplicated with silicone.
- When models are used to create orthodontic appliances, or denture bases, a non-food grade silicone mold release agent should be used to prevent acrylic from adhering to the surface of the model.
- Models can be used with vacuum form method to create aligners, retainers, and indirect bonding trays.

#### PHYSICAL PROPERTIES:

#### Technical data:

Color: White

Density: ca. 1.1g/ml

Viscosity: 600 - 800 cP at 25°C



## Ordering information:

Standard packing: 1kg (910ml)

Item no.: 71173

Property	Result	Standard
Flexural strength	≥ 80 MPa	ASTM D790
Flexural modulus	≥ 1850 MPa	ASTM D790
Elongation at break	14%	ASTM D638





# **DANGER!**

Contains Acrylate, Phosphine Oxides and Methacrylic monomer. May cause an allergic skin reaction.

Causes serious eye irritation. Suspected of damaging fertility Harmful to aquatic life with long lasting effects.

#### **PRECAUTIONARY STATEMENTS:**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Avoid breathing mists, vapors or spray, Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace

Avoid release to the environment

Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before

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

Immediately call a POISON CENTER or doctor. If eye irritation persists: Get medical attention. Collect spillage.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.