A Fine-Grain, Precision Investment for Casting Partial Dentures

INTRODUCTION

Nobilium’s GREEN STRIPE™ is a fine-grain, water-mix, oxy-phosphate investment for casting partial denture frameworks. A special all-season liquid is provided for the refractory model to insure an accurate fit of the finished framework. Green Stripe has been developed to be compatible with Nobilium All-Purpose hydrocolloids.

DIRECTIONS

Surveying  Survey and design the master model using accepted laboratory procedures.

Duplicating  Soak master model in warm 90-110°F (32-43°C) water for 15 minutes. Place in flask and fill with duplicating material. Bench set for 10 minutes. Place into water bath 55-70°F (12-21°C) for 30 minutes. Colder water will retard setting of investment.

Mixing  Green Stripe special liquid is used only for refractory models. Special liquid is not required for the outer mold. Prepare diluted liquid: Mix 80% Green Stripe Expansion Liquid to 20% distilled water. This proportion can be varied to increase or decrease expansion. Less distilled water will increase expansion. Max expansion 90% Green Stripe Expansion Liquid, 10% distilled water.

For one refractory model, add exactly 21cc diluted liquid to 150 grams of Green Stripe investment, hand spatulate 15 seconds until the investment is wet, mechanically vacuum mix for 60 seconds. Carefully vibrate into the colloid mold. Allow the refractory investment to set for one hour in the hydrocolloid. Remove the model by creating several slices in the colloid, then carefully peel away the colloid from the model.

Place model in drying oven at 425°F (218°C) for 30 minutes, adding 10 minutes for every two models over six. (Example 10 models = 50 minutes). Submerge in Nobilium Rosin Dip for no more than 10 seconds at 300°F (149°C), remove, place model on its heels and allow to drain and cool. If Nobilium Safe Dip (environmentally-friendly, cold dip) or Special Hard Rosin Dip is used, follow directions on the label.

Caution: During the summer months when temperature goes above 80°F (27°C), keep liquid temperature at about 70°F (21°C) otherwise investment will set too rapidly. It is advisable to pour not more than two (2) models at a time.

Investing Rings  Apply Nobilium Green Paint-On, according to directions. Shake off excess and allow to dry for no longer than 7 minutes. Use a Nobilium ring for investing cases. Attach the waxed model to base with hot wax, then wax the ring into position. To invest case, 84cc of DISTILLED WATER and 600 gm of investment is needed. Add investment to water and spatulate thoroughly or mechanically vacuum mix for 60 seconds. Vibrate flask and slowly fill with investment.

Let the investment set for one (1) hour, remove ring and place in the furnace.
Cad Cam Parts

• Sprue CadCam parts in software, attach cones to sprues and attach to base.
• Recommended investment ratios for framework patterns is 600 grams powder, 42 ml Special Liquid and 42 ml of distilled water. Special Liquid can be increased up to 80% of total volume of liquid to get a looser fit.
• Pour liquid into the mixing bowl. Add Green Stripe powder to the liquid. Mechanically vacuum mix for 60 seconds.
• Invest the case by pouring a thin stream of investment directly into the ring under light vibration. Do not disturb the pattern or trap bubbles.
• Allow invested mold to bench set for 1 hour. Disposable ring can be removed after 10 minutes.

*Place ring in pressure vessel under 50 PSI for 15 minutes.

Burnout Run furnace from 100°F up to 500°F (260°C) and hold for one hour. Then increase to 1800°F (982°C) and hold for 30 minutes before casting. Over six rings in furnace, add 10 minutes per ring for adequate soak. A more rapid run will cause cracking and fins.

Gold/Low Fusing Alloys When casting gold and nickel-chrome alloy partials, the procedure is the same with one exception: heat the mold as above, then lower the oven temperature to 1300°F (704°C), heat soak one hour then cast.

ATTENTION: Important Processing Information
1) Be certain to remove any excess moisture from the colloid mold before pouring the refractory.
2) Allow the colloid to warm slightly if it has been subjected to very cold temperatures.
3) Exercise caution when recovering the refractory from the colloid. Be certain to section the colloid to avoid breaking any teeth. Once the refractory is dehydrated in the drying oven and rosin dipped, the working model is hard, smooth and easy to wax on without fear of refractory distortion.
4) Changes to these instructions may be warranted due to laboratory environment.

WARNING - This product contains free silica
Inhalation of dust may be harmful to your health and excessive inhalation will increase the risk of serious respiratory disease (silicosis). Take appropriate measures to avoid breathing dust. Immediate clean-up of spills is highly recommended. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

WARNING - Causes eye and skin irritation.
Harmful or fatal if swallowed. May be absorbed through the skin. Inhalation may cause respiratory irritation. Prolonged overexposure may cause lung, liver and kidney damage. Contains ethylene glycol, which may cause birth defects based on animal studies.

First Aid Procedure
If inhaled: Remove to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Get immediate medical attention. If swallowed: DO NOT induce vomiting and get immediate medical attention. If in eyes: Immediately flush eyes with plenty of water. Get immediate medical attention. If on skin: Immediately wash skin thoroughly with soap and water. If rash, irritation or symptoms develop: Get medical attention. In case of fire: Use carbon dioxide, alcohol foam or dry chemical.