



St. George Technology  
Performance Polymers

Complies with A.D.A. Specification No.12:1976 Type 1, Class I  
1.5.0.1567:1988 Type I, Class I and ISO 20795-1:2008 Type I, Class I

**CADMIUM FREE**

## Excel Formula<sup>®</sup> Pourable Denture Base Material

# DIRECTIONS FOR USE

***Our high performance polymers have been formulated to achieve their unique properties and working characteristics through the specific combination of base powder and corresponding monomer liquid. Curing, handling and color cannot be guaranteed if another liquid is used.***

### **WAXING & INVESTING**

Wax denture to required detail. Trim the plaster cast leaving approximately 1/8" (3mm) shelf around the peripheral roll to facilitate the easy removal from the hydrocolloid mold. For partials ensure wax sprues are added using 6-8 gauge round wax before pouring hydrocolloid (see diagram).

Soak waxed model in cold water below 100°F (38°C) for 20min to eliminate air. Also ensure all wax is removed from surface of the teeth, in particular, the occlusal surfaces. Set waxed model and cast into mold with posterior teeth nearest to the sprue holes of flask. Condition hydrocolloid to a temperature of 125-130°F (50-54°C) and pour carefully between model and flask wall. Avoid pouring directly onto waxed denture. Assemble top plate, clips and extension ring and continue pouring hydrocolloid until mold is full.

Carefully, set aside for 5-7 minutes for the hydrocolloid to set before placing in cold water for 30 minutes to allow hydrocolloid to completely gel.

Remove waxed model and cast from hydrocolloid -protect hydrocolloid from drying by covering with a damp towel. Remove wax in normal way ensuring that both plaster cast and teeth are totally devoid of all traces of wax. Adhesion of teeth to acrylic can be enhanced by careful trimming of ridge laps prior to cleaning. Re-soak plaster cast in water for 5 minutes to ensure air is eliminated before coating with a tin foil substitute (isolating solution) -set aside to dry. Carefully cut sprue holes in hydrocolloid always from the posterior side (see diagrams 1-6). Ensure no shavings of hydrocolloid are left in the mold. Replace teeth in mold, avoid touching the lap ridge area and ensure they are seated correctly occlusally to prevent a possible raised bite. When isolating solution is dry, replace in mold making sure it is correctly seated on the prepared shelf. Reassemble flask and clips.

### **MIXING & POURING**

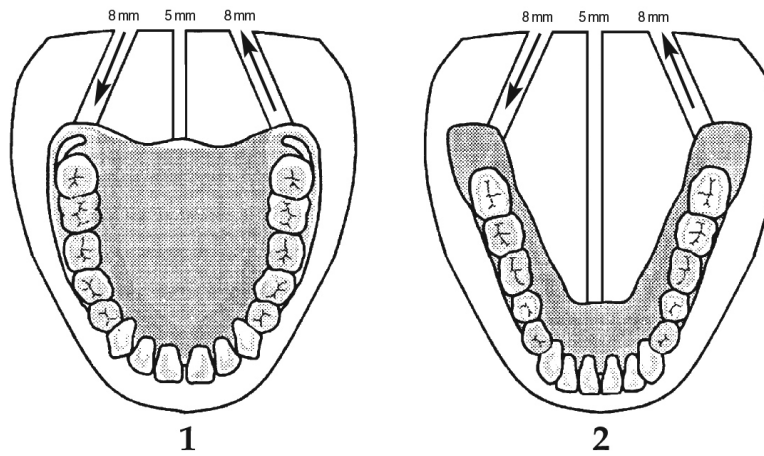
Carefully measure 28mL liquid and 40 grams of powder. ALWAYS ADD POWDER TO LIQUID. Mix for 45 seconds at a room temperature of 73°F (23°C) with a to and fro motion to avoid trapping air. Pour immediately in a slow and steady stream thus allowing air to be released from mold. Continue pouring until all the sprue holes are filled. Only pour through one sprue hold thus allowing acrylic to fill mold and replace all the air space without creating trapped air. After pouring, stand flask at room temperature 73°F (23°C) for 10 minutes to allow acrylic to gel before using.

### **CURING**

Place assembled flask in pressure pot with sprues uppermost and sufficient water to just cover flask. DO NOT FULLY SUBMERGE FLASK IN WATER. The water should be preheated to 120-130°F (48-54°C). After placing flask into vessel increase the pressure to 35-40 psi. (Note: If the water temperature does not meet or stay at 120°F the curing time will need to be increased). Let cure for 20 minutes. Allow time to bench cool to room temperature before separating. Trim and polish in normal way.

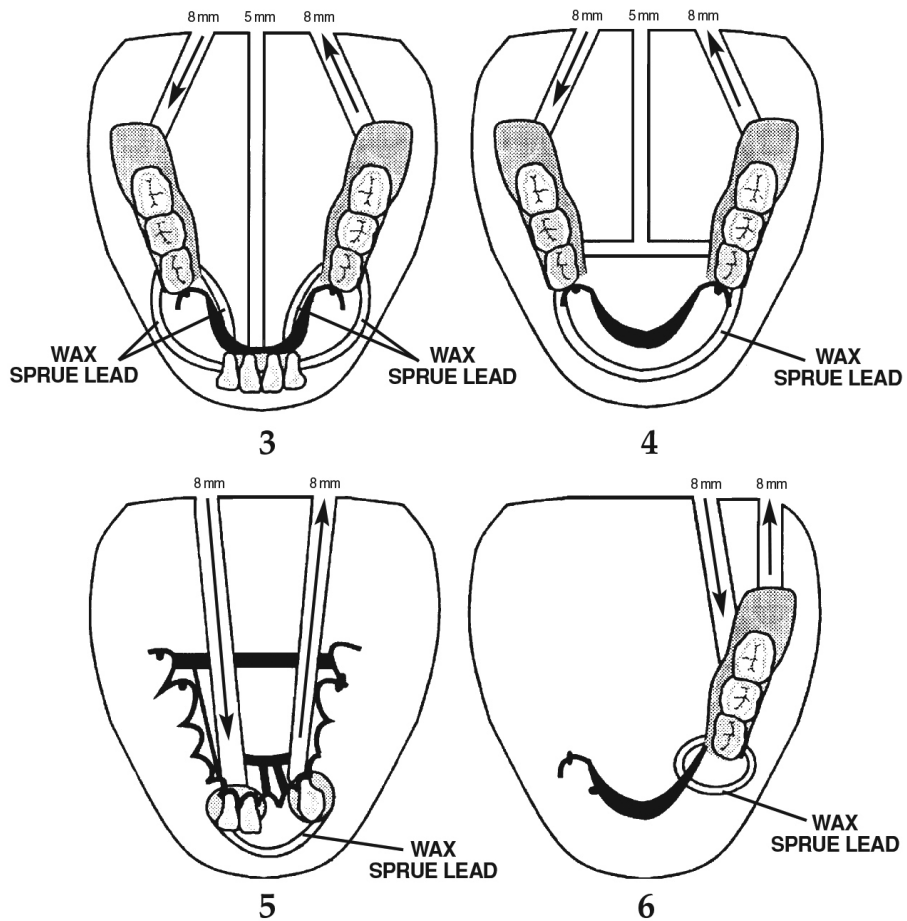
## SPRUE DIAGRAMS / TECHNIQUES

FULL UPPER AND LOWER



PARTIALS

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## **USEFUL TIPS**

- a) To facilitate easy removal of cast from hydrocolloid mold, any undercuts should be eliminated.
- b) Do not use hydrocolloid too hot which could result in distortion of the wax model.
- c) Always use the flask extension ring to compensate for shrinkage of the hydrocolloid.
- d) Never short cut the chill time (30 minutes) for hydrocolloid after pouring and always keep mold covered with damp towel to prevent drying when not working with it.
- e) Wire clasps and lugs on partials should be secured to model prior to pouring to prevent accidental movement.
- f) The pouring time for Excel Pis 4-5 minutes at 73°F (23°C) temperature. Do not use once the viscosity becomes sluggish which can then trap air and create voids.

## **FINISHING**

The Excel Formula® Pourable can be finished and polished using normal techniques as other removable appliances.

## **REPAIRING & RELINING DENTURES**

The Excel Formula® Pourable can be used as a repair material if needed. Use the same mixing ratio as listed in the pour technique but allow the material to set up longer after mixing to the desired viscosity needed for application. Auto-polymerising repairs such as the St. George Technology Excel Formula Auto-Cure Denture Repair material is ideal for repairs and relines.

## **WARNING**

Powder & Liquid may cause skin irritation. Avoid contact without proper safety precautions in place such as safety gloves & safety goggles. Avoid inhalation or ingestion of the material. High vapor concentration can induce headaches, nausea, and irritation to eyes and respiratory system. Excessive long-term exposure to material may be associated with other more serious health effects.

## **INHALATION**

Move subject to fresh air. Give oxygen or artificial respiration as required.

## **INGESTION**

Contact your regional Poison Control center immediately.

## **EYE CONTACT**

Flush eyes promptly with copious amounts of water for 15 minutes, and consult a physician. Wash skin with soap and water.

## **STORAGE**

Dental acrylics based on methyl methacrylate should be stored in a cool 61-79°F (16-26°C), dry place. Avoid prolonged exposure to sunlight. Keep containers closed when not in use.

## **CAUTION**

Liquid contains methyl methacrylate monomer. Highly flammable, keep away from sources of ignition. NO SMOKING. Irritating to eyes, skin and respiratory system. May cause sensitization by skin contact. Keep container in well-ventilated area. Do not empty into drains. Take precautionary measures against static discharge.

Wash hands thoroughly with soap and water after each use. In case of accidental contact with eyes, wash with warm water for 10 minutes and seek medical attention.

ST. GEORGE TECHNOLOGY, Inc. warrants that the product(s) contained in this package shall conform to the specifications for this product as represented to the Federal Food and Drug Administration. When used in accordance with our directions and good laboratory practices, this product will achieve optimum results. St. George Technology, Inc. agrees to replace, at its option, any product which is found to be defective.

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