

Uniflex™ duplicating material

Properties*

Color	Melting Temperature	Idle Temperature	Hold Time	Pour Temperature
Transparent/Beige or Blue	192°F (89°C)	131°F (55°C)	≤ 1 hour	131°F (55°C)

*These results are based on the testing methods, frequency and procedures of Ransom & Randolph or its approved suppliers. The levels referenced herein are only for general guidance and do not constitute a firm specification.

Step 1: Preparation

Model

1. To ensure full hydration, soak the model in water for 20 minutes.
2. Place the hydrated model in a duplicating flask. Avoid the use of aluminum, copper, and iron bearing alloyed containers.

Duplicating Material

1. Remove as much material from its container as required.
2. Chop material into small pieces—approximately 1" (25 mm) cubes.
3. Cover and seal any remaining portion in the original container.

Step 2: Melting Procedure

Automatic Equipment

1. Set the melt temperature at 192°F (89°C) and the pouring temperature at 131°F (55°C).
2. Follow equipment manufacturer's instructions.
3. Allow the mold to cool at room temperature for 60–90 minutes before attempting removal.

Hotplate

1. Place the prepared duplicating material on a heat source in a glass beaker.
2. Stir while heating until all the particles are melted and completely in solution. Exercise care to avoid overheating and/or scorching.
3. Heat the melt to 192°F (89°C) for no more than one hour.
4. Remove from the heat source and allow the melt to cool to 131°F (55°C) while agitating.
5. Pour the melt into the prepared duplicating flask.
6. Allow the mold to cool at room temperature for 60–90 minutes before attempting removal.

Microwave

Do not use a microwave to melt Uniflex duplicating material.

Remelting

Prepare the materials and follow the instructions as usual. This can be done up to 20 times.

- Any liquid that has separated from the used molds during storage should NOT be discarded but added to the mold pieces during the remelt cycle.
- After several remelts, the duplicating material may thicken and pour slowly at the idle temperature of 131°F (55°C). The resulting molds may appear dry and somewhat brittle. To eliminate this problem, add 5 fl oz (150 mL) of deionized water for each pail of Uniflex duplicating material being melted at the beginning of the remelt cycle.

Step 3: Removal

1. Gently remove model and wash mold with cold running water.
2. Gently blow dry with air jet.
3. Place mold open side down on bench to prevent drying and shrinkage.

Step 4: Duplication

Stone Model

1. Mix stone as per manufacturer's instructions. Note that slower setting stones usually require a longer period of spatulation to achieve a faster initial set.
2. Pour the mixture into the mold.
3. At the proper time, remove mold with duplication from the flask. Note that fast setting stones may be removed approximately 20 minutes after initial set, whereas slower setting stones will require more time—approximately 45–60 minutes.

4. Tear mold away from duplicate model.
5. Trim model and rinse with water.

Refractory Model

1. Follow manufacturer's instructions for mixing and setting time of the refractory material. DO NOT use Uniflex duplicating material if Protective Coat is specified in the technique.
2. Pour the mixture into the mold.
3. At the proper time, remove mold with duplication from the flask.
4. Tear mold away from duplicate model.
5. Trim model and rinse with water.

Fluid Resin Pouring

1. Properly soak model with wax pattern and position in a flask in desired manner.
2. Fill the flask with molten material.
3. Chill in a cold water bath at $50 \pm 10^{\circ}\text{F}$ ($10 \pm -12^{\circ}\text{C}$) for 40 minutes. Position flask in the water bath on slats or ribs to allow proper water circulation.
4. After chilling, disassemble the flask and remove the mold.
5. Slit mold in three or four places (being careful not to cut down on the waxed area) and remove model.
6. Cut desired sprues and venting holes.
7. Rinse mold in rapidly running cold water.
8. Blow dry with an air jet and cover mold not being worked on with a damp towel.
9. Follow resin manufacturer's technique for casting dentures.

Step 5: Clean-Up

1. Rinse the used mold to ensure it is free of any gypsum or refractory debris.
2. Store the material in a closed, airtight container until the next remelt cycle.

Tips

- Do NOT heat Uniflex duplicating material above 195°F (90°C).
- If Uniflex duplicating material is not properly heated, it may become grainy. To avoid this, ensure a sufficient amount of time is allowed to dissolve all particles. If grainy texture persists, you may need to run the remelt cycle again.
- To speed up the cooling process, place $1/3$ of the flask in cold water bath at $50 \pm 10^{\circ}\text{F}$ ($10 \pm -12^{\circ}\text{C}$) for 45 minutes. Chill longer if water temperature is warmer than 60°F (16°C).

Storage

Keep container tightly closed when not in use. Store at room temperature. Shelf life is 2 years from the date of manufacture found in the first six digits of the lot number on the label in MMDDYY format.

Safety

Warning. Causes skin irritation. Causes serious eye irritation. Avoid contact with skin and eyes. Wash hands thoroughly after handling. Wear protective protection. See SDS for more information.

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