

### **Warm Glass Glass-Cast Application Instructions**

#### **Mold Making**

Mix 10 parts powder to 4 parts water by weight. Mix for two to three minutes. We recommend mechanical mixing to achieve the best mixing action but can also be mixed by hand.

Pour the Glass-cast down the side of the flask or mould frame until the patterns are covered to an appropriate depth. This depth will vary depending on the size of glass casting. Tap or vibrate the mould frame to remove air bubbles, which may adhere to the patterns. This operation normally takes 1-1.5 minutes. We then recommend that the mould then sit a minimum of one hour after it has set, before moving on to pattern removal.

#### **Pattern Removal**

Re-usable patterns - After waiting a minimum of 1 hour, re-usable patterns can be physically removed from the mold.

Wax patterns - Two methods of wax removal are commonly used: dry de-wax and steam de-wax. For dry de-waxing, place the mold into a kiln or furnace at a temperature of 149-177°C and hold for 3 to 4 hours. For steam de-waxing, place the mold into the steam de-waxer. Steam de-wax only for the time required to remove the wax and no longer. The amount of time required to de-wax the moulds will vary depending on the size of the mould. After steam de-waxing, it is recommended to immediately move to the curing of the mould.

#### **Mold Curing**

After the pattern is removed, place the mould into a kiln or furnace at a temperature of 149-177°C and hold until the water is removed from the mould. The temperature of the mould can then be raised to desired casting temperature at a rate of 66-93°C per hour.

#### **Glass Application**

Once the pattern has been removed, glass frit can be placed into the mould at any time during the process. The glass can then be heated at the same time as the mould. When Crucible Casting, it is important to have all water removed from the mould before casting. It is recommended that mould temperature be at least the desired annealing temperature of the glass.

Pour time: 14mins

Set time: 19mins