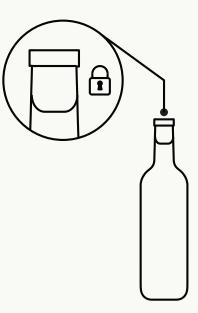
# Application Manual BIM bottle sealing wax

## **BOTTLE PREPARATION**

Verify that bottles are clean and that the natural or synthetic cork stoppers seal perfectly since otherwise leaks will occur at the time of dipping the bottles into the melted wax. Additionally, fractures in the wax capsule may occur since the sealing wax is designed to work as a guarantee seal and not to withstand the high inside pressure that can be generated when the alcohol is gasified during transportation. Leaks while dipping the bottle into the wax can be identified because a bubble may form at the area between the stopper and the neck of the bottle.

If you wish, you can apply a self-adhesive opening ribbon or a pre-cut adhesive tartan tape, either horizontally or vertically depending on your preference, and form a tab to facilitate the rupture of the sealing wax capsule when opening the bottle.

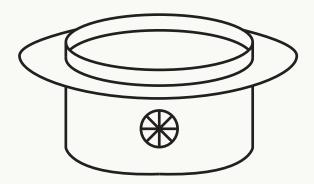


## **MELTING POT**

It is recommended to use an electric pot with adjustable thermostat to melt the sealing wax. ALB offers 4.5kg automatic thermostat pots. If you use another type of pot, it will be more difficult to keep the temperature within the recommended range.

To avoid overheating of the sealing wax, you can use the Bain Marie, but this can slow down the process. The pot must have a minimum capacity of 3 kilograms.

The larger the diameter of the pot, the greater the heat dispersion, so a deep and tall pot is preferable.



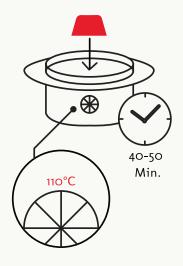
#### WAX MELTING AND TEMPERATURE

It is important to notice that the temperature indicated by the pot's thermostat indicates the temperature of the heating element and not the temperature of the sealing wax. To determine the sealing wax temperature is necessary to use a laboratory thermometer with a stainless steel post that can be immersed in the melted wax.



Place the wax pills in the pot, (about 55 pills), and set the thermostat to 110°C until the pills are completely melted. In a 4.5kg pot this can take 40–50 min. Make sure that no non melted sealing wax pieces remained in the bottom.

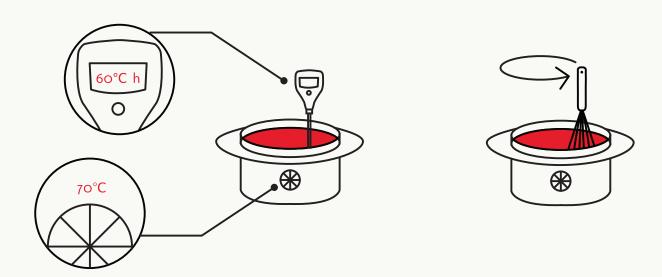
When the sealing wax has melted completely, lower the thermostat to 60°C and wait for the sealing wax temperature to drop to approximately 65 °C. Use the laboratory thermometer to verify the wax temperature. This may take another 30 min. depending on the environmental conditions.



As the sealing wax temperature gets close to the application range, it begins to solidify on the walls of the pot, generating a crust of approximately ½ centimeter in thickness. Use the whisk included with ALB's automatic pot to remove that semi-solid wax crust and incorporate it with smooth, circular and horizontal movements to the melted wax making it homogeneous and bubble-free.

Once the sealing wax reaches the desired temperature range, (Low, Medium or High according with the wax capsule finish you want for your bottles, please see next section), slowly turn the thermostat knob clockwise until the red light turns on. Now, the pot will automatically maintain this temperature turning on and off when necessary.

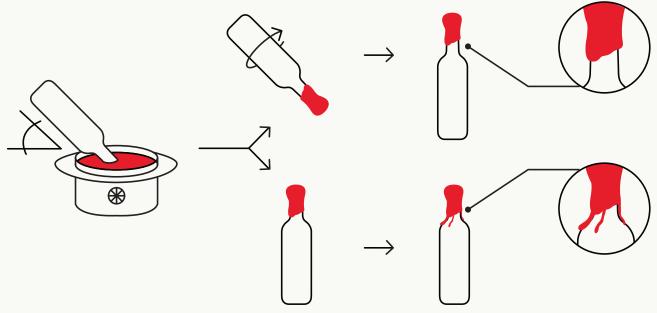
It is important to use the whisk with some frequency to incorporate the wax crust that will be forming in the walls as you continue dipping your bottles.



IMPORTANT: Humidity, ambient temperature and atmospheric pressure can affect the consistency and density of the melted sealing wax so it may be necessary to do small adjustments in temperature.

## **APPLICATION**

Once the sealing wax temperature has been set, dip the neck of the bottle slightly inclined into the melted wax until reaching the desired coverage in one single movement. Remove the bottle from the melted wax turning it to prevent dripping. If an irregular look is desired, the bottle is removed from the wax without rotating it and then put it on the table allowing the wax to drip freely and allow it to cool off completely. In case a logo is to be stamped on the top, it is necessary to pre-lubricate the custom seal and stamp it before the wax solidifies.

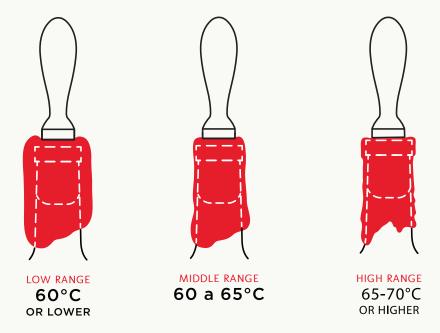


# TEMPERATURE RANGES AND CAPSULE FINISH

LOW RANGE: Under 60°C - A fairly thick and smooth wax capsule is generated with the possibility of wavy edges and drips being formed by the weight of the wax. A seal can be applied to the top of the bottle with ease.

MIDDLE RANGE: 60 to 65°C - This is the ideal application range. A smooth, medium thickness wax capsule is achieved, with the possibility of forming irregular wavy edges. A logo can be easily stamped with a clear imprint.

HIGH RANK: More than 65°C - The sealing layer is very thin, there may be superficial irregularities (cosmetic defects), bubbles and drips. It is not possible to stamp the top of the bottle because the seal cools quickly.

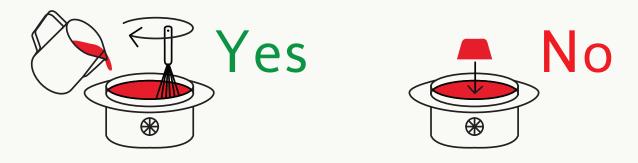


These temperature ranges are approximate and tests should be made to determine the ideal temperature for the desired finish of your bottles.

#### FILLING DE POT

As production starts and bottle are being dipped in your pot, the wax level starts to decrease. The most efficient way to maintain the wax level and its temperature in your dipping pot is by adding sealing wax that has been melted in another pot and has a temperature equal to or slightly higher than the one in your dipping pot. Pour small amounts of hot sealing wax and stir it with the whisk to uniform the temperature.

DO NOT ADD PILLS directly into the dipping pot as this will cause the temperature of the melted wax to drop significantly, lumps will form on the bottom and you will have to wait until the paste becomes uniform again to continue the production process.



#### THE RIGHT BOX FOR SEALED BOTTLES

Once bottle has been waxed, it will be about 3mm taller. This means that box height must consider this final bottle height to avoid wax capsule damages due to scuffing during transportation. For tis reason is important to use cardboard divisions that are 1 cm taller than bottle total height being strong enough to support the weight of the cases on top during transportation and stowage

