

## Handling and Application Instructions for Confectionery Coatings

## Storage & Handling

All confectionery coatings should be handled and applied with great care in order to achieve a desirable appearance and flavor. Confectionery coating should be stored in a cool, dry environment that is free of odors. It is recommended that all customers use a storage facility with a temperature of 55-65°F and less than 50% humidity for both ingredients and finished products. Any moisture, including free or atmospheric, will have a significant impact on the flow property of the coating and must be avoided.

## Melting & Cooling

Confectionery coatings should be melted with indirect heat, continuous agitation, and under controlled conditions. To achieve maximum efficiency and gloss, confectionery coating should be melted to approximately 120°F and then maintained at a temperature 5-10 degrees above the melt point of the coating. This is necessary to ensure all fat crystals are completely melted.

It is critical to not overheat confectionery coatings since burning of the sugar may occur creating off flavors and thickening the product. A browning reaction may also occur when maintaining a melted temperature over a long period of time, most notably in white coatings, due to reducing sugar and protein interactions.

Once applied, the coating should be exposed to forced cold air (40-45°F or cooler, depending on the amount of coating to be cooled) until the coating is completely set. In a cooling tunnel, it is recommended that the entrance and exit of the tunnel be about 50-55°F and the middle of the tunnel be 40-45°F.



## Confectionery Coating Checklist - Compound Coatings

**Is the coating properly stored?** Storing coating is recommended at 55-65°F with less than 50% humidity. Since moisture has such an adverse effect on the functionality of the coating (becomes viscous and thick), it is critical to maintain proper storage.

**Does the coating look good in its raw material form?** If the coating looks fine in the raw material form, it should look fine in the finished product form. You may see some scuffing of the chocolate products due to movement and contact in the case. Melt the coating and see how it looks after it sets up.

Is the coating used with another food item and are they compatible? Confectionery coating is a fatbased product and should not be used with foods high in moisture content (exposed) or with foods which adversely affect the functionality of the coating.

Is the coating properly melted? Coating is usually melted in large water-jacketed melting tanks (commercial) or microwaves in 20-30 second intervals (residential) until the coating is approximately 120°F and then maintained at a temperature 5-10 degrees above the melting point of the coating. Extreme overheating will cause the sugar crystals to burn and result in discoloration. Double boilers are not recommended since the coating may absorb some of the escaped moisture. Avoid water at all times. Coating should also be thoroughly agitated before application since fat migration to the surface may take place during the melting process.

**Is the coating properly applied?** Are the molds dirty? Is the temperature of the food close to the temperature of the applied coating? Drastic changes in temperature between the applied coating and the matrix receiving the application may promote bloom under certain conditions. Keeping those temperatures similar will prevent moisture from forming.

**Is the coating properly cooled?** Are your cooling temperatures cold enough? The general rule for palm kernel oil is 'the colder the better'. The faster the fat starts to crystallize, the best shine you will experience. We recommend 40-45°F. If your ambient temperature is unusually warm, raise your exit temperatures (cooling) so condensation will not form on the finished product.

**Is the end product properly packaged?** Air and light can affect the flavor profile due to lipid oxidation. Keeping coating in a cool, dark, and dry place will ensure a long shelf life.