



# APPLICATIONS OF DECORATIVE GELS



# Applications of decorative gels

**Customers eat with their eyes first. Decorating and finishing cakes and other pastries is a key stage in confectionery production. The visual appeal of confectionery often plays a decisive role in the customer's choice of a product.**

Covering the surface of cakes and pastries with a special confectionery glaze - known as glazing- can be done manually (by dipping or brushing) or mechanically using specialized confectionery equipment such as sprayers or enrobing machines.

Glazing is a technological process that gives pastries an appetizing color and shine, enhances their flavor, and improves texture. It also extends the freshness of finished products. Items covered with confectionery glaze have a higher chance of selling, as

their appearance is one of the most important factors influencing purchase decisions. Beautifully glossy, colorful cake and pastry surfaces stimulate the appetite and encourage customers to buy or sample the products offered. First visual impressions matter most.

To make confectionery products stand out with an exceptional appearance and attract consumers, several types of finishing and decorating products can be used. These include coatings, frostings, glazes, gels, and various decorations.



## TOPPINGS

Toppings are semi-finished confectionery products in the form of solidifying mixtures used to cover cakes and pastries. They typically contain sugar and egg whites combined with various additives such as flavoring agents, colorants, vinegar, and/or agar.

One type of topping is confectionery glaze, used to finish and decorate the surfaces of ready-made cakes and pastries. The use of glaze enhances the visual presentation.

Among confectionery glazes, we can distinguish:

- fondant glazes
- cold sugar and egg white glazes
- cooked sugar and egg white glazes
- frostings
- mirror glazes (also known as cold decorative gels)
- hot decorative gels (also called hot confectionery glazes).

## FONDANT GLAZES

This type of glaze is made from water-based fondant. The fondant is diluted with boiled water or sugar syrup and mixed continuously until a uniform, semi-liquid consistency is obtained.

To enhance flavor and aroma, flavoring and aromatic substances such as citric acid or vanilla essence are added. Food colorants can also be used to achieve the desired color.

The final color and texture of the glaze depend on the amount of water added to the fondant. A white, matte, and thick glaze is obtained directly from well-mixed fondant or fondant combined with a small amount of water (up to 5%). To achieve a more fluid, delicate, thin, and translucent glaze, the fondant should be heated to 35–40 °C (95–104 °F) and diluted with more water. This type of confectionery glaze is commonly used to decorate yeast cakes, loaves, and various types of sweet breads and pastries.

## SUGAR AND EGG WHITE GLAZES

Sugar and egg white glaze is made by combining egg whites with powdered sugar and various additives such as flavorings, gelling agents, and colorants. It can be prepared either cold or cooked.

Cold-prepared glaze is made by mixing powdered sugar with egg whites, flavorings, and colorants dissolved in water. Cooked glaze is prepared by scalding the egg whites with sugar syrup, whipping the mixture, adding flavoring and gelling agents, and thoroughly blending all ingredients. This type of glaze is typically used for decorating small gingerbread cookies, donuts, and shortcrust biscuits.

## FROSTING

Frosting is created by blending powdered sugar with water or lemon juice. It is used to decorate donuts, Easter cakes, and a variety of other pastries. Once cooled, frosting can become either crisp or slightly sticky depending on the amount of fluid added to the powdered sugar. Pastries coated with sticky frosting can be further decorated with coconut or chocolate shavings, or with candied orange or lemon peel.

## MIRROR GLAZES

One of the ongoing trends in modern confectionery is the use of mirror glazes, also known as cold decorative gels. They make it possible to achieve impressive visual effects on the surfaces of products and decorative elements (for example, on wafers).

In today's confectionery world, minimalism is often preferred. Decorating with mirror glazes provides a modern and elegant look — their shiny, reflective surfaces create stunning visual appeal that naturally draws the eye.

Mirror glazes produce smooth, glossy, or marbled effects on cakes, pastries, ice cream desserts, and fruits. They can also be used as a gloss coating for fondant, chocolate, or

marzipan. Their versatility makes them suitable for use on wafers, tarts, cakes, layered desserts, and fondant decorations.



Thanks to mirror glazes, it is possible to achieve a unique shine and color while enhancing the overall taste of the product. These gels are distinguished by their pleasant flavor and aroma. Cakes and desserts coated with a smooth, glossy glaze in a variety of colors – so reflective you can see your own reflection – are highly recommended by premium patisseries, influencers, renowned chefs, and lifestyle magazines.

Cakes and desserts coated with mirror glaze often resemble true works of art. Beyond their decorative function, these glazes also help protect products from drying out and oxidation.

The flavors and colors of decorative gels can be matched to specific confectionery products. Depending on the recipe and product type, the gels can be applied cold or warm – either directly onto the dessert or mixed before use. To achieve the desired consistency, a small amount of water is usually added.

When applied warm, the glaze should be gently heated to around 30–35 °C (86–95 °F) using a microwave or water bath. At this temperature, it becomes semi-fluid, allowing for a smooth, even coating. Once cooled to room or lower temperature, the glaze returns to its original density.

Cold mirror glazes are prepared similarly to sugar and egg white glazes. The basic ingredients include water, sugar or liquid glucose, sweetened condensed milk, gelatin, white chocolate, and food colorants. Alternatively, they can be made from water, sugar, glucose syrup, heavy cream, chocolate or cocoa, gelatin, and food colorants. However, preparing mirror glaze from scratch is time-consuming and technically demanding – which is why ready-to-use products such as Ascanio mirror glaze offer a practical and consistent solution.

Mirror glazes can be applied manually or with specialized tools such as sprayers or glaze machines.

A neutral mirror glaze used beneath fruit on tarts protects the pastry from soaking up fruit juices. When brushed over fruit, it prevents drying and provides a barrier against microbial contamination. The glaze coats the fondant on traditional English-style cakes, adding shine and bringing the color to life. Applied beneath or over wafer

decorations, it protects them from moisture coming from the pastry, cream, or even external sources such as water or juice droplets.



When used for entremets or individual mousse desserts, mirror glazes can create steep, 3D decorative surfaces. In such applications, they are often combined with gelatin or hot glazes for optimal structure.

Neutral mirror glazes offer the greatest flexibility, as they can be used as-is or blended with colorants, flavorings, and fruit. Unique visual effects can be achieved by combining Ascanio Mirror Glaze with Lauretta fruit fillings containing real fruit pieces. These glazes also pair beautifully with more unconventional ingredients such as coffee, fruit juices, purées, compotes, and chocolate.

Ready-to-use mirror glazes are available in a wide range of flavors and colors – for example, chocolate, caramel, or fruity options such as strawberry. They can be matched to any type of pastry or dessert to create eye-catching colors and patterns. Not only do they provide an exceptional shine and vivid color, but also a rich flavor and aroma.

Thanks to their gel-like consistency, mirror glazes remain flexible after setting – they do not stick, stretch, or crack when cutting. This elasticity allows for clean and elegant slicing of cakes and pastries. They can also be used to create inscriptions or outlines on cakes for later filling with colored mixtures.

Mirror glazes are highly stable at low temperatures – they are resistant to freezing and thawing and maintain their soft, elastic texture down to  $-20\text{ }^{\circ}\text{C}$  ( $-4\text{ }^{\circ}\text{F}$ ). They are also resistant to baking.

## HOT DECORATIVE GELS

Hot decorative gel is also known as hot confectionery glaze. Before applying it to the product, the gel should be heated to a temperature of  $85\text{--}95\text{ }^{\circ}\text{C}$  ( $185\text{--}203\text{ }^{\circ}\text{F}$ ), slightly cooled, and then brushed directly onto the surface. After a short time, it sets into a firm, shiny jelly-like layer, allowing the finished product to be safely packaged – for example, in film wrapping.

Decorative gel enhances the visual appeal of confectionery, helping to boost sales. After all, customers eat with their eyes first. In addition to improving appearance, the gel also protects the surface of pastries and fresh fruit.

Hot glaze can be applied using gel dispensers – automated machines that heat and spray the gel. This method simplifies the application, reduces the dosage, and speeds up the production process, which is particularly important when labor costs are high. Typically, the product is supplied in a bag-in-box format for convenient and hygienic use. Manual application is also possible, most often with a specialized brush.

Just like mirror glaze, hot decorative gel protects the top layer of products and extends their shelf life. When used on fruit tarts, it slows down fruit dehydration. It is also frequently applied to the tops of puff pastry products.

The most popular hot gel flavors are neutral and apricot, although other options, such as strawberry, can occasionally be found on the market.

Cristalli decorative gels are available in two forms: ready-to-use (simply heat to 85–90 °C (185–194 °F) before application and an economical concentrated form (requires dilution with water prior to use).



## SUMMARY

- Confectionery glazes are used to decorate cakes, pastries, cookies, and various desserts.
- There are several types: fondant glazes, sugar-egg white glazes, frostings, hot decorative glazes, and mirror or cold glazes.
- Their physical and chemical properties make them versatile and widely used across the confectionery industry.
- Glazes are valuable tools for pastry production, simplifying processes and enabling the creation of visually appealing, colorful desserts that encourage purchase.
- Thanks to the wide range of ready-to-use decorative glazes available, the variety of confectionery products that can be made with them is virtually limitless.

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