

Gelato Formulas and Recipes for Component Ingredients

If you know how to make gelato and you want to jump right in, you'll love the formulas that follow. Each contains a list of ingredients and information on their percentages out of the total mixture, balance data, *potere anticongelante* (PAC) information (anti-freezing power in English), *potere dolcificante* (POD) information (sweetening power in English), and estimated serving temperature.

PAC is a method of determining the approximate serving temperature of gelato from the ingredients and their quantities. POD is a method for estimating the sweetness of gelato from the different sugars in the gelato. PAC and POD are covered in more detail in Chapter 7, “Freezing Point Depression,” and Chapter 9, “Sweetening Power,” respectively. You can make wonderful artisan Italian gelato without understanding these concepts, but the deeper you get into your gelato journey, especially if you want to develop your own flavors, the more useful they will become.

This chapter also includes brief directions aimed at home or small-scale gelato production. The process of making gelato varies somewhat if it is being made at large scale, such as enough to stock a gelateria. As mentioned in the Introduction, what does not change is the formula — the *proportions* of the ingredients in the total mixture.

Because the process of making gelato is standardized from flavor to flavor, with minor variations based on the inclusion of components such as eggs, sour cream, yogurt, mascarpone, cream cheese, fruit purees, and infusions, the directions presented for each flavor are brief and are focused on small-scale production. The processes for commercial production are described in Chapter 3, “The Process of Making Gelato.” Once you have made gelato several times, the brief directions will be more than adequate. You can always refer to Chapter 3 for a refresher and detailed directions.

When I work with gelato masters in Italy, directions are rarely written out. They usually use just a list of ingredients and proportions that they convert to quantities based on the amount of gelato they want to make. Once you know the basic process, and the variations based on some of the ingredients, you really know how to make any gelato based on ingredient quantities alone.

All gelato formulas in this book are balanced. However, a few ingredients vary significantly from producer to producer. Mascarpone comes to mind, as its fat content can vary from about 35% to 50%. This is enough variation that it can affect the balance of the gelato. For ingredients that are likely to vary significantly from one producer to another, I provide information on composition or even specific brands.





Gelato al Cioccolato al Latte

Milk Chocolate Gelato

Dark chocolate can seem serious. Milk chocolate is quite the opposite. This gelato starts with dark chocolate but the proportion is less than is used in dark chocolate gelato. The lower percentage of chocolate and the higher percentage of dairy turn it into milk chocolate.

Ingredient	Quantity	Percent
Milk, 2%	600 g	60.00%
Heavy Cream (36% fat)	131 g	13.10%
Sucrose	125 g	12.50%
Dextrose	25 g	2.50%
Powdered Skim Milk	40 g	4.00%
Chocolate, 72% Cocoa Solids	75 g	7.50%
Guar Gum	1.25 g	0.125%
Locust Bean Gum	1.25 g	0.125%
Salt	1.5 g	0.15%
Batch Weight	1000 g	
Serving Temperature	-13.42°C	

Component	Percent
Fats	8.80%
Sugars	16.74%
MSNF	10.04%
Other Solids	3.04%
Water	61.39%
Total Solids	38.61%
POD	17.98
PAC	26.85

1. In a small bowl, combine dextrose, guar gum, locust bean gum, and salt. Mix well. Reserve.
2. Combine milk and sucrose in a stainless-steel pot. Heat to 35°C (95°F), whisking occasionally.
3. Add the chocolate and stir until melted, keeping the temperature below 45°C (113°F).
4. Add skim milk powder and whisk to dissolve completely.
5. Continuing to heat the milk mixture, slowly sprinkle in the dextrose mixture, whisking constantly to avoid lumps and keeping the mixture below 45°C (113°F). After the dextrose mixture is incorporated, heat to 85°C (185°F), stirring constantly and scraping the bottom of the pot with a rubber spatula.
6. Add cream. Mix well. Heat to 75°C (167°F), stirring constantly, and hold for 15 seconds.
7. Chill quickly, preferably in an ice bath. Allow to mature overnight, covered and refrigerated at 4°C (39°F) or less.
8. Just before freezing the gelato, add water to return the base to the calculated batch weight. Blend with an immersion blender. Taste and adjust salt, if necessary.
9. Freeze in a batch freezer.
10. Transfer the gelato from the batch freezer to a tub.
11. Harden in a blast freezer or deep freezer.