The tempering

Serves :	Prep :	Rest :	Cook :
-	30 min.	Freezing : - Refrigeration : -	Temperature : - Time : -

Special equipment

- ☑ Cooking thermometer
- ☑ A chocolate tempering machine (optional)

List of recipes

- ✓ Tempering with mycryo
- ✓ Tempering without mycryo

Steps

Tempering whithout Mycryo

- Melting the chocolate
- Lowering the temperature
- Raising the temperature
- Temperature for use reached

Tempering with Mycryo

- Weigh the Mycryo = 1% of the weight of the chocolate
- Melting the chocolate
- Lower the temperature
- Add the Mycryo at 34°C/93°F
- Mix until the temperature for use

The tempering

- Tempering allows chocolate, after being melted, to regain its initial texture, crispness, smoothness and shine. Tempering therefore only concerns the use of pure chocolate (usually called couverture chocolate).
- Indeed, the cocoa butter contained in chocolate is a lazy and complex fat; without help, melted cocoa butter cannot regain perfect crystallization on its own; it hardens in a completely disordered way until it whitens, becomes waxy, unpleasant to the sight... and even in the mouth.

Without Mycryo

- To properly crystallize chocolate, it is first necessary to "decrystallize" it, i.e. melt it for a sufficient period of time (15 to 30 minutes) and at the right temperature. See the tempering curves for different types of chocolate.
- Next, the temperature of the melted chocolate must be lowered. There are several ways to do this:
    1. Place the container in a cold water bath (or on a cold surface)
    2. Add finely chopped chocolate (method called "seeding")
    3. Pour and spread 3/4 of the chocolate onto a marble surface (method called "tabling")
- Whichever method you choose, it is important to mix the chocolate carefully with a spatula, so that the cooling process is even and the chocolate does not thicken.
- Finally, as soon as the temperature reaches 27-28°C/81-83°F for dark and milk chocolates, or 26-27°C/79-81°F for Dulcey or white chocolates, the temperature must be quickly raised again to prevent the chocolate from crystallizing too much and becoming too thick to work with. There are several solutions :
    1. Briefly place the container in a warm water bath.
    2. Place the melted chocolate in a microwave for a few seconds.
    3. Scrape up the cooled chocolate from the marble surface into a bowl, immediately add the remaining 1/4 of warm chocolate and mix to raise the temperature.
    4. Use a heat gun to warm up your chocolate for a few seconds. (My preferred method!)
- The chocolate should then reach :
    - 31-32°C/88-90°F for dark chocolate
    - 30-31°C/86-88°F for milk and Dulcey chocolates
    - 29-30°C/84-86°F for white chocolate.
- The chocolate should be smooth and free of lumps !

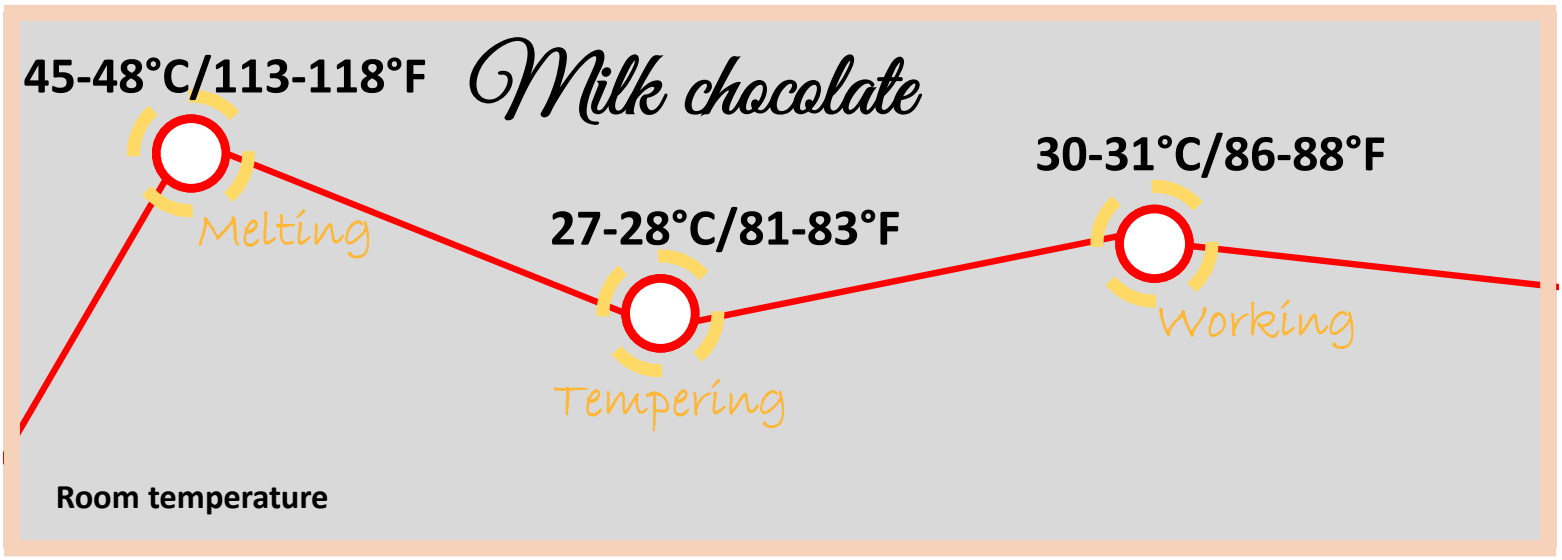
With Mycryo

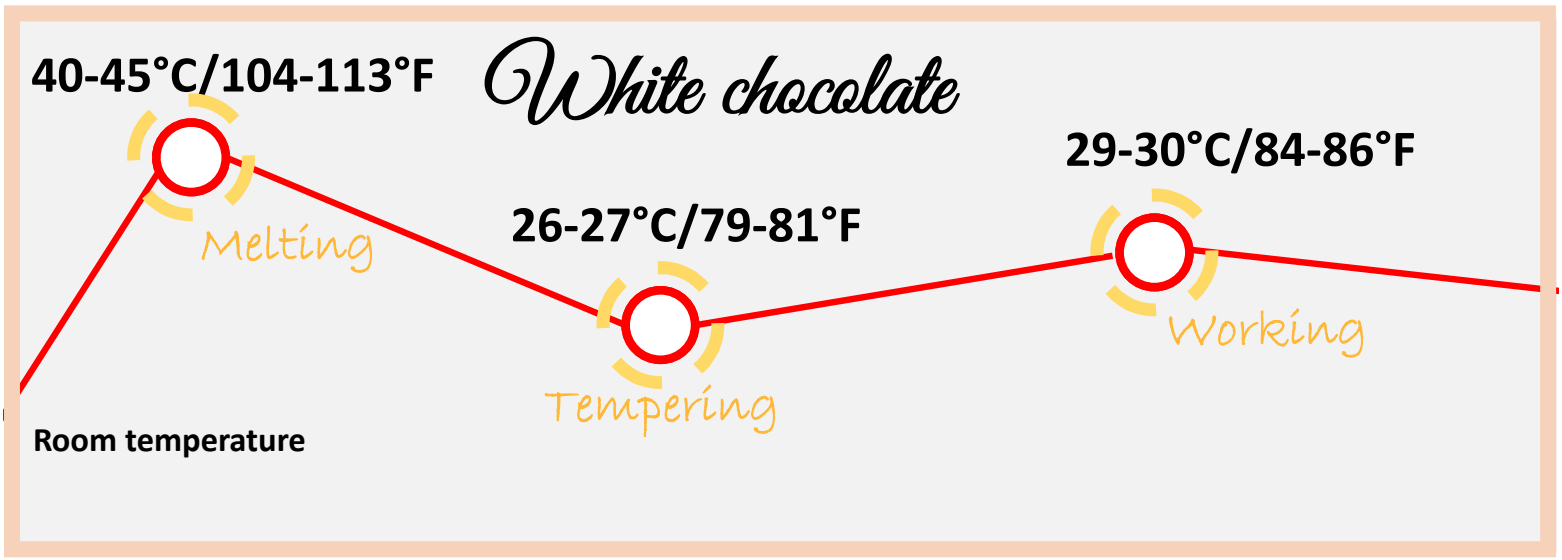
- The Mycryo, which is nothing but cryogenized cocoa butter, is used to simplify the different temperature stages.
- In fact, it eliminates the phase where the chocolate must be warmed up before being worked with.
- The steps are as follows :
  - ✓ Slowly melt the couverture chocolate at 40-45°C/104-113°F.
  - ✓ Cool the chocolate (to 34-35°C/93-95°F for dark or 33-34°C/91-93°F for milk, white, or colored chocolate).
  - ✓ Add 1% Mycryo cocoa butter (10g for 1kg of chocolate), mix well.
  - ✓ When the couverture is at the ideal temperature (31-32°C/88-90°F for dark chocolate or 29-30°C/84-86°F for milk, white, or colored chocolate), use the chocolate.
    The chocolate should be smooth and free of lumps.
- To use the chocolate for a longer period of time, it should be kept at 31-32°C/88-90°F for dark chocolate or 29-30°C/84-86°F for milk, white, or colored chocolate.

Chocolate tempering

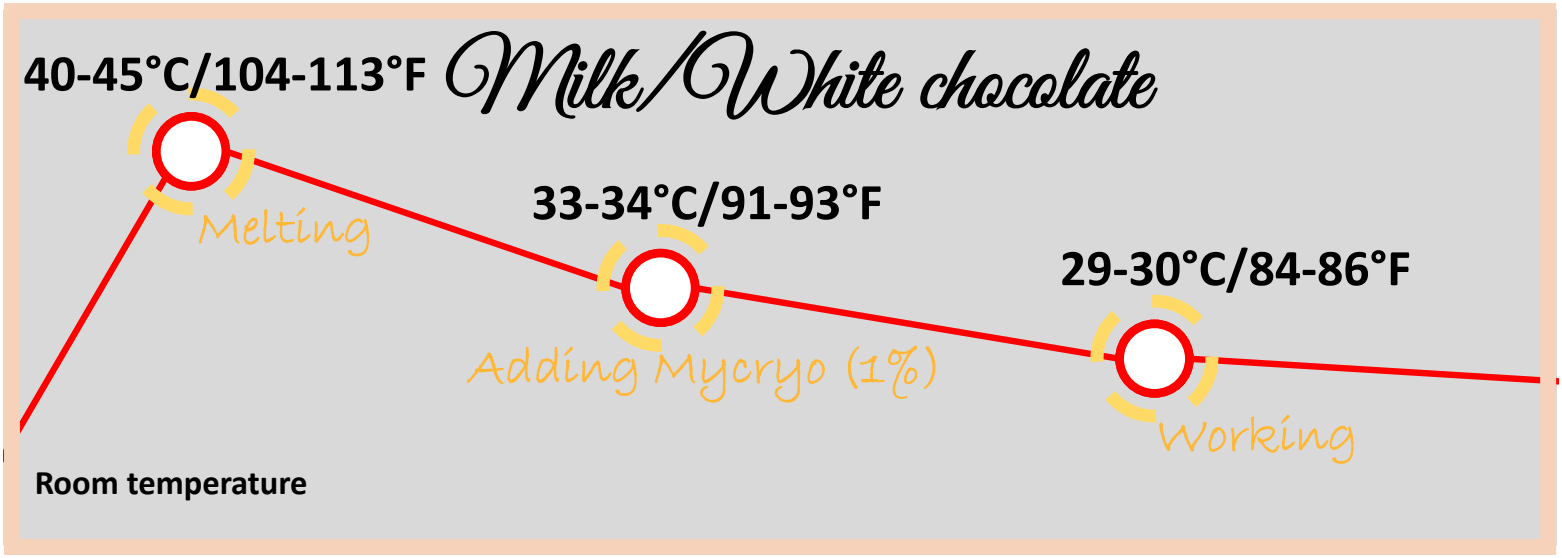
It depends on the type of chocolate you use.
So refer to the information on the packaging (if it is available)!

The information below is therefore given for guidance purposes only :





Tempering chocolate with mycryo



Tips

❖ **If you don't have a chocolate tempering machine :**

You can use an oven set to static mode at 45-50°C/113-122°F. This creates a nice warm environment!

The chocolate can be left in there for 2, 3 or 4 hours. The longer it stays, the better the result will be.

But don't forget to stir it frequently

❖ **Unused chocolate :**

Once your recipe is finished, pour the remaining chocolate into an airtight container and let it crystallize.

It is ready for the next tempering. If you used mycryo for tempering, try not to use it more than 2 times !

❖ **Regarding the quantity :**

Avoid working with less than 200g of chocolate, as the temperatures would otherwise vary too abruptly.

The more chocolate you work with, the easier it will be to work with !

❖ **Choice of chocolate :**

It is essential to use a couverture chocolate. Couverture chocolate is chocolate enriched with cocoa butter. It must contain a minimum of 31% fat. This will make it more fluid and easier to work with. For dark chocolate, it is recommended to use chocolate with at least 40% fat.

For your information, I work a lot with the Barry brand..

❖ **Tempering cocoa butter :**

It can also be useful to temper cocoa butter to obtain an incredible shine.

- Melting temperature = 50-55°C/122-131°F
- Tempering temperature = 27°C/81°F
- Working temperature = 28-30°C/82-86°F.