

How to Temper Chocolate

Tempering allows the right crystal structure to form from the cocoa butter in chocolate, making the texture smooth, shiny, and crisp. All chocolate is tempered when you buy it and that is why it is shiny and snaps when broken. Melting chocolate causes it to go “out of temper”, so you must temper to restore the shine and snap.

Yield: Equals the amount selected per recipe.

Timing: Varies according to the type and amount of chocolate selected. With the temperature set at 115 °F / 46 °C, a 1-lb / 0.5-kg solid block of dark chocolate will gently melt in about 2.5 hours. After it is melted, the Proofer can hold the melted chocolate for an extended time at 90 °F / 32 °C.

Ingredients: Dark, milk, or white chocolate containing cocoa butter.

Equipment: Brød and Taylor Folding Proofer & Slow Cooker (without water tray), thermometer, bowls, and spoons or utensils—all clean and dry.

All surfaces in contact with the chocolate should be thoroughly clean and dry. Consider the temperature and humidity of any surfaces or tools your chocolate will come in contact with. For example, a very cold spoon could develop condensation when moved to a warm area. The resulting moisture will likely cause your chocolate to seize, becoming lumpy and unworkable.

Melting the Chocolate. Set up the Proofer with the wire rack in place but without the tray. Set the temperature to 115 °F / 46 °C. The water tray may be placed underneath the rack, but make sure it is completely dry. The entire Proofer should be dry to prevent the chocolate from seizing.

Place about $\frac{3}{4}$ of the chocolate in a heatproof bowl, setting aside the other $\frac{1}{4}$ to use as “seed” chocolate.



Your chocolate can be white, milk, or dark, but it should be real chocolate containing cocoa butter, not palm oil or other non-chocolate fats (candy melts or some brands of white chocolate should not be used for tempering). It is not necessary to chop the chocolate, but smaller pieces will melt faster. Place the bowl on the wire rack in the Proofer and allow the chocolate to melt slowly and safely. A ¼ pound / 113 g of chocolate will be completely melted in 60 minutes or less while larger quantities may take longer.

Adjusting the Proofer Temperature. When the chocolate is completely melted, remove it from the Proofer and lower the thermostat to the correct holding temperature, normally about 90 °F / 32 °C for dark chocolate or 86 °F / 30 °C for milk or white chocolate. Leave the top open briefly so the Proofer will cool.

Seeding the Chocolate. While the Proofer is cooling, add a piece (or pieces) of the reserved, unmelted chocolate to the bowl to provide seed crystals for the cooling chocolate. Stir continuously as the seed chocolate melts, and continue stirring until the temperature of the chocolate cools to 90 °F / 32 °C for dark chocolate or 86 °F / 30 °C for milk or white chocolate.

To check if the chocolate is tempered, dip a spoon into the melted chocolate and place in the refrigerator until firm. The chocolate should be hard and smooth with no streaking. If this test is a success, place the chocolate back into the Proofer to hold at the right temperature to maintain the temper. If the chocolate is streaked, the tempering process may need to be repeated.

Chocolate Tempering Table

Below indicated is the temperature range to maintain temper while frequently stirring. Do not exceed the indicated temperature range.

Chocolate	Temperature range
Dark chocolate	86-90 °F / 30-32 °C
Milk chocolate	84-86 °F / 29-30 °C
White chocolate	84-86 °F / 29-30 °C