

HOW TO MAKE MAPLE SUGAR

HOW TO MAKE MAPLE SUGAR WITH THE CDL SUGAR MACHINE

- 1- Before you start, make sure the sugar machine is clean.
- 2- Take a cooking container. It has to be twice as high as the level of syrup you'll put in.
- 3- Calibrate the cooking thermometer. Ideally take a maple syrup cooking thermometer. To calibrate, boil water and make sure the needle shows $0^{\circ}F$ (where $0^{\circ}F$ is $212^{\circ}F$).
- 4- Pour the syrup in. Use between 2 and 2.5 gallon of syrup for the small machine and twice as much for the double machine.
- 5- Ideally cook the syrup on a propane cooker.
- 6- Open the gas at maximum.
- 7- Put in a table spoon of Koscher anti-foam (2 for the big machine).
- 8- Butter all around the container 1 inch wide above the syrup.
- 9- Put the thermometer in the syrup.
- 10- Let the temperature go up.
- 11- When the temperature gets to 2°F above the water boiling point reduce the heat to half.
- 12- BE VERY CAREFULL, WHEN THE SYRUP STARTS TO BOIL, MAKE SURE IT DOESN'T OVERFLOW, THE FIRE HAS TO BE REDUCED BEFORE THIS HAPPENS AND IT HAPPENS VERY FAST. If syrup overflows on the burner, it will burn, very dangerous.
- 13- To help, put in another tea spoon of defoamer or a ¼ tea spoon of butter directly in the syrup.
- 14- The boiling should start around 5°F.
- 15- When the boiling bubbles starts breaking when they are small, the syrup is stabilized and you can turn up the heat to maximum again. (around 10^{0} F)
- 16- The syrup will be ready at 42°F above the boiling point.
- 17- Take rubber gloves to handle the container, it's very hot and spilled syrup will go through cloth gloves.
- 18- IMPORTANT, DO NO GO OVER 42^{0} F. IT'S BETTER TO STOP AT 41.5° F, IT WILL CONTINUE TO GO UP A LITTLE AFTER IT'S REMOVE FROM THE COOKER. If you go over 42^{0} F, the syrup will jam in the machine. If it happens, pour some water into the syrup and bring it back to 42^{0} F.
- 19- When the syrup reaches 42°F, pour it right away in the machine.



- 20- Turn to top knob on auto and press the crystallization button. (Make sure the red emergency stop button is not pushed in).
- 21- The machine will mix for about 10 minutes.
- 22- The machine will stop after 10 minutes. Take a hard wood spatula and scrape of the syrup that stuck on the paddles and the shafts. (it will take approximately 10 minutes to clean it well). It's the only manual operation you'll have to do. To get access to all the paddles, close the cover set the mode to manual and turns the paddles where you want them to get access to another section of the shaft. Repeat the operation until all the machine is cleaned.
- 23- When done, turn the knob back to auto.
- 24- Press the crystallization button. Make sure the safety cover is back on before restarting the machine.
- 25- The machine will start a 1 hour crystallization cycle.
- 26- When the cycle is finished, the sugar is ready.
- 27- Remove the locking pin and turn over the mixing barrel to empty the content in one of the white plastic pans.
- 28- Install the locking pin back to lock the barrel in the down position.
- 29- Put the top knob to manual and let the machine turn to help empty the barrel.
- 30- Bring the barrel back up and lock it with the nut.
- 31- Scrape the excess sugar to recuperate it by repeating steps 28 to 31 or pour a new batch in and start over.
- 32- When done, pour hot water in the machine to dissolve all excess sugar. Start the machine in manual mode.
- 33- When all the sugar is removed, empty the water following steps 28 to 31.
- 34- Press the emergency stop button.
- 35- Wipe out the excess water.
- 36- Keep your sugar in a sealed container to preserve it longer.
- 37- You can sift the sugar to remove the bigger chunks.