



Maple Cream Machine



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MAPLE CREAM MACHINE INSTRUCTIONS

Set the machine up adjusting the paddles (the thickness of a quarter minimum) so they clear the bottom of the pan as it is revolving. The paddle with the flange would pull the cream from the sides to the center. The other paddle should pull the cream from the center to the outside of the pan.

Maple cream is made by cooking fancy or a good “A” syrup (first run is desirable) to a temperature of 18°F to 24°F above the boiling point of water. Good results may be obtained by cooking to only 20° above the boiling point of water. The higher the temperature the cream is cooked to, the longer before it separates and by the same token making it more difficult to pour into packaging containers.

Cook approximately 1 ½ gallons of syrup to a batch. After the syrup has been cooked to the desired temperature, it should be cooled as rapidly as possible by placing it in the creaming pan, which is placed in a second pan or sink of ice water. To prevent surface crystals, place a dampened cheese cloth on the surface of the cooling cream. Cool rapidly to 120°F and remove the cloth. If the syrup is too cool, you can't get the paddles into the syrup and the machine starts very hard. Turn the machine on and do not stop stirring until the cream loses its shiny surface and shows signs of setting.

While stirring, the sides and bottom of the pan should be scraped down to insure a uniform texture. Too little stirring causes large crystals after pouring, while prolonged stirring may cause the cream to set up itself. If the latter happens, it will be necessary to reheat for pouring or repeat the entire process. Pour the cream quickly into moisture proof containers such as glass. Cream kept under refrigeration will keep indefinitely.

The paddles and pan should be washed and dried before the next batch is made. It may be desirable to keep some of the cream to be used as a seed for the next batch. This seed, when added just before beating, hastens the stirring operation.

This is only a very brief description of one method of making maple cream. Soft sugar is made the same way only it is stirred immediately after cooking without cooling. This causes a grainy texture. More ideas, such as the invert sugar test to see if a syrup is suitable for creaming, may be found in the “Maple Syrup Producer’s Manual”. Some of the ideas in this text were taken from that manual in the section on maple syrup cream.

TESTING FOR INVERT SUGAR

Because the amount of invert sugar in maple syrup affects its suitability for making maple cream, it is sometimes desirable to evaluate the invert sugar content of syrup. There is no simple test that will accurately measure the exact amount of invert sugar in a sample of syrup. For years, however, maple producers have used a modification of the *Clinitest*[®] urine sugar test to classify syrups into two categories, those containing less than 2% invert sugar and those containing more than 3% invert sugar. The test is made by first preparing a syrup-water mixture (1 part of syrup to 20 parts of water) and then color testing the diluted syrup. It can be performed in 3 or 4 minutes.

The few pieces of equipment required to make the tests can be obtained from a local pharmacy, the following items are required:

1. *Clinitest*[®] tablets obtainable at a pharmacy.
2. Two medicine droppers.
3. A test tube, about ½ inch in diameter and 3 or 4 inches long.
4. A sample of the syrup to be tested (a cupful).
5. One medicine glass, calibrated in ounces.
6. One glass measuring cup, calibrated in ounces.
7. Test tube holder.
8. Two 8-ounce, clean and dry drinking glasses.
9. One, 1-quart glass fruit jar and cover.
10. Water (20 fluid ounces).

MAKING THE TEST

1. Carefully pour enough of the test syrup into a medicine glass to bring the level of the syrup exactly to the 1-ounce (2 tablespoons) mark. If too much (more than 1 ounce) is added, empty the syrup out of the medicine glass, wash and dry it and start over.
2. Measure 2 ½ cups of water and transfer it to the quart jar.
3. Make the 1 to 20 dilution by pouring the fluid ounce of syrup into the jar containing the 2 ½ cups (20 fluid ounces) of water.
4. Pour some of the water-syrup mixture into the medicine glass and return it to the jar. Repeat this three or four times to be sure that all the syrup has been transferred to the water in the jar. Mix the contents of the jar thoroughly by stirring with a spoon or with a portable electric mixer.
5. Place the test tube upright in the holder. (The holder can be a 1-inch thick block of wood, 2 inches square with a 7/16-inch hole 3/4-inch deep.

6. Fill a clear, dry medicine dropper with the diluted (1:20) syrup in the fruit jar. Hold the dropper upright above the test tube and let 5 drops of the diluted syrup fall into the test tube.
7. Fill another clean and dry medicine dropper with water and add 10 drops of water to the test tube.
8. Place a *Clinitest*®₁ tablet, freshly removed from the bottle or wrapper, in the test tube. As the tablet dissolves, it causes the contents of the tube to boil. Do not remove the tube from the holder while the solution is boiling.
9. Fifteen seconds after the boiling stops, add water to the test tube until it is two-thirds full.
10. Observe the color of the solution in a room illuminated with an incandescent bulb. The colors are not easily judged by fluorescent light or direct sunlight. Disregard the colored chart values provided with the test. For this test, blue indicates the syrup contains less than 2 percent of invert sugar and can be used to make cream; yellow or yellow green indicates the syrup contains more than 3 percent of invert sugar and may not be suitable for making cream.

1. Clinitest is a registered trade mark of Miles Inc. Diagnostics Division, Elkhart, IN 46515 USA.

This article is a direct reprint from the North American Maple Syrup Producers Manual. This manual is available through the Leader Evaporator Co. Inc. catalog:

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