

How to produce farmhouse yoghurts Using Sepak Industries Table Top Batch Pasteuriser

P9000 pasteurizer AND Y140 yoghurt maker



The laboratory must be fitted with a sink with a swan neck type tap and 230V electrical power supply.

Step 1: Prepare the pasteurizer
Remove the pasteurizer's inner vat as shown below.



Photo 1

Fill the inner vat with milk. Powdered milk (2-3%) can be added to increase the "consistency" of the yoghurts.
Replace the lid and place the inner vat on the pasteurizer's two supports.
Close the lid using the spring by wedging it under the two inner vat support hooks.

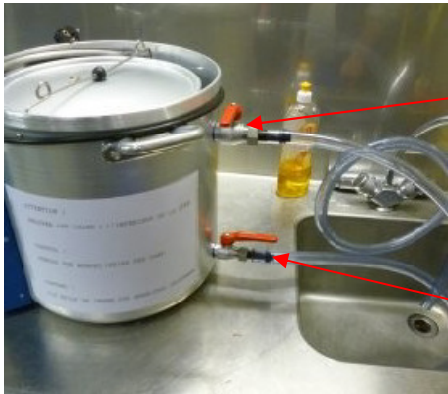
Spring



Hooks (inside)

Photo 2

Fit the external tubes onto the two taps.



Upper tap: used to remove the water during the cooling cycle (overflow during the cooling phase).

Lower tap: used to drain the bain-marie.

Photo 3

Fit the water supply tube (placing the end of the tube at the bottom of the vat) to fill the bain-marie and switch on the tap (hot water if possible) until the water reaches the maximum overflow level.
(NB: To provide a clearer image, the tap tubes were disconnected for photo 4).

Overflow



Photo 4

Once the water is flowing out via the overflow, switch off the tap, remove the water supply tube and replace the lid.

Step 2: Pasteurisation

Switch on the pasteuriser. The pasteurisation cycle will get underway.

NB: Never switch on the pasteuriser until the bain-marie has filled. There is a risk of the resistance being damaged if you fail to follow this guideline.

NB: You should check the recommended pasteurisation temperature when using the unit for the first time, as it may be a few degrees different from the preset factory temperature.

(See the adjustments chapter)

The pasteurizer's buzzer sounds at the end of the pasteurization process (located in the blue box on the side of the unit). Disconnect the plug.

Please note: do not forget to start the yoghurt maker at this point so that it warms up.

The door of the yoghurt maker must remain closed while it is heating up. The red (heating) and green (power on) warning lights switch on. The red warning light switches off when the vat reaches its preset temperature (45C).

Step 3: Cooling

Remove the outside lid and reconnect the tube to the cold water tap and then place the end at the bottom of the outside vat. Turn on the upper tap and turn on the cold water supply. Cooling gets underway.

Photo 5



Cold water tube for cooling

Overflow outflow point

Check the temperature of the milk after a few minutes using a thermometer. Simply lift up the lid's spring and dip the thermometer into the milk via the lid's central hole.



Checking the temperature of the milk

Step 4: Inoculation with bacteria (see photo 6 below)

Stop the cooling process once the milk temperature has dropped to 45C by turning off the tap and removing the tube. Lift out the inner vat, raise the lid and pour in the bacteria.

Mix to dilute the bacteria.

Please note: Sugar and flavouring can be added at this point.

Photo 6



Fill the yoghurt pots using a stainless steel jug or ladle and place them in the yoghurt maker's racks (which will have heated up to 45C).

Place the racks containing the filled pots in the yoghurt maker. The maturing time (with the door closed) is approximately 2.5 – 3 hours.

NB:Remember to start your stopwatch in order to keep an eye on the incubation time.
Practical tip: the starting time can be written on a blackboard.

Photo 7



Introducing the bacteria, sugar and flavouring. The pots are placed in the racks and the racks are then placed in the yoghurt maker.

Step 5: Cooling the yoghurt after maturing

Once the yoghurt has matured in the yoghurt maker, remove the pots and check the consistency of

the yoghurts (during the first few production runs).

Closing the pots: the pots can be closed before or after maturing.

Place the yoghurts in a fridge or a cold room to cool them down.

Keep the yoghurts chilled and consume them within 20 days.

Good luck with the yoghurt production process and bon appétit!

If you need to purchase pots, lids, caps or bacteria, please get in contact with us. We will put you in touch with our experienced suppliers.

Cleaning

Cleaning the pasteurizer

Disconnect the plug after each usage.

Clean the inner vat (where you pour the milk) and its lid with hot water and washing up liquid.

Dry with a soft cloth or absorbent paper.

NB:

Do not use alkaline or acidic products, as they will permanently damage the vat's protective coating

and will accelerate wear and tear and rusting.

Regularly check the state of the vat lid seal.

Cleaning the yoghurt maker

Rinse the yoghurt racks with hot water after each usage. If necessary (traces of yoghurt or drips for example), clean the racks with hot water and washing up liquid and then leave them out to dry.

Wipe the stainless steel rack supports with a damp sponge to remove all traces or drips and then dry with a soft cloth or absorbent paper.

Wipe the following parts with a damp sponge containing a small amount of washing up liquid:

- The door.
- The back of the yoghurt maker.
- The base of the yoghurt maker.

Rinse with a damp sponge and then dry with a soft cloth or absorbent paper.

Please note:

Leave the door ajar (put the hook in place without closing it). This will naturally ventilate the

machine and prevent the formation of unpleasant mould and smells.

These appliances should be placed in dry and properly ventilated locations.

A small amount of regular maintenance will enable you to keep your appliances in an excellent state of repair for many years.

Settings and controls

Adjusting the P9000 pasteuriser's thermostat

Firstly, check the temperature of the bain-marie when the buzzer sounds.

Adjust the thermostat using a flat screwdriver by turning the screw located towards the bottom of the box on the side of the P9000 pasteuriser (there is a small hole).

Turn the screw 1/12 of the total distance clockwise if you wish to increase the set temperature and anticlockwise if you want to reduce it.

The set temperature of the bain-marie should be around 95C.

Adjusting the set temperature of the Y140 yoghurt maker

Keep pressing the set button and increase or decrease the set temperature using the up and down arrows.

Thermostat
adjustment
screw



YOGHURT MAKING TERMINOLOGY

Milk pasteurisation

This heat treatment aims to destroy pathogens and a large swathe of the original normal flora.

Pasteurisation also helps to destroy any natural inhibitors by encouraging the growth of special lactic flora.

Inoculation

Inoculation refers to the adding of two specific yoghurt bacteria:

Lactobacillus bulgaricus and *Streptococcus thermophilus*.

Strepto / milk ratio 1.2 – 2/1 for plain yoghurt.

Strepto / milk ratio up to 10/1 for fruit yoghurts.

Incubation

The acidity of the yoghurt develops during the incubation phase. It hinges on two factors

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temperature and duration. A temperature close to the optimal *Streptococcus thermophilus* development temperature (42 – 45 °C) should be chosen.

The incubation (or maturing) period varies from 2.5 hours – 3.5 hours.