
PASTEURISATION

CONCEPT OF PASTEURISATION

Pasteurisation is a thermal process to which the food is exposed to guarantee its quality by reducing the pathogens it may contain (bacteria, moulds and yeasts).

In pasteurisation the primordial aim is not to completely eliminate the pathogens, but rather significantly reduce their populations seeking levels that will not cause poisoning.

It is a relatively gentle treatment, as it entails temperatures below 100°C. It is used to prolong the useful life of foods for several days or months. This is why they need cooling or freezing for optimum maintenance.

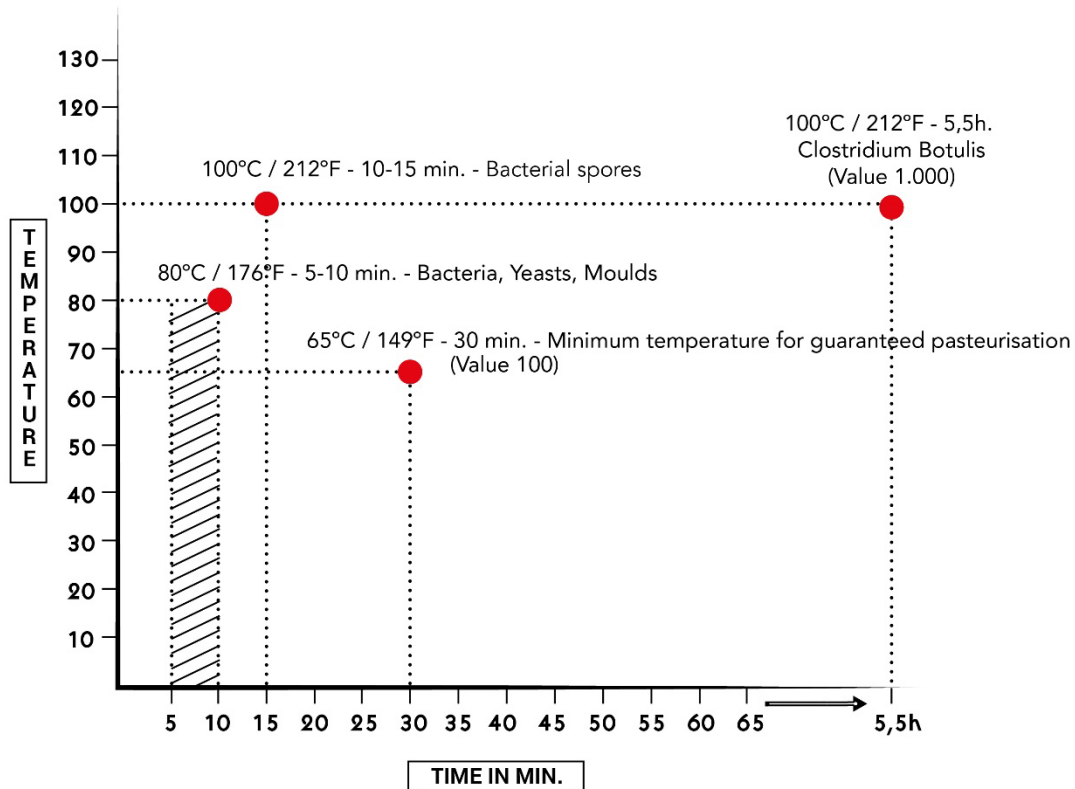
HOW DO YOU PASTEURISE RELIABLY?

- Pasteurisation entails reaching 65°C at the centre of the product for at least 30 min.
- The longer the exposure time to the higher temperature, the greater the pasteurisation value of the product.

WHAT IS THE PASTEURISATION VALUE OF THE PRODUCT?

- The pasteurisation value is equivalent to the time the food has been kept at a constant or increasing temperature.
- The pasteurisation value 100 is equivalent to a shelf life of 21 days while the value 1,000 (the highest that there is) provides 42.
- The maximum shelf life permitted to date is 42 days.

TABLE OF TIMES/TEMPERATURES FOR PASTEURISATION



- * Value of 100: Shelf life of 21 days
- * Value of 1,000: shelf life of 42 days

PASTEURISATION TABLE FOR DAIRY PRODUCTS

TEMPERATURE	TIME	TYPE OF PASTEURISATION
63°C (145°F)	30 minutes	Pasteurisation LTLT
72°C (161°F)	15 seconds	Pasteurisation "High Temperature Short Time Pasteurization" (HTST)
89°C (191°F)	1.0 second	Ultra Pasteurisation (UP)
90°C (194°F)	0.5 seconds	Ultra Pasteurisation (UP)
94°C (201°F)	0.1 seconds	Ultra Pasteurisation (UP)
96°C (204°F)	0.05 seconds	Ultra Pasteurisation (UP)
100°C (212°F)	0.01 seconds	Ultra Pasteurisation (UP)
138°C (280°F)	2.0 seconds	Ultra high temperature sterilisation (UHT)

Source: IDFA website Page header: Pasteurisation: Definition and methods.

TABLE OF USES AND MINIMUM TEMPERATURES OF USE WITH FOOD SAFETY

	Minimum temperature of use	Minimum temperature of conservation
Roasts, fillets, beef, pork and lamb chops	62.8°C	65°C
Minced beef, pork and lamb	71.1°C	65°C
Poultry	73.9°C	65°C
Dishes with egg, stews, etc.	71.1°C	65°C
Reheating	73.9°C	65°C
Fish	62.8°C	65°C