

GUIDELINES ON THE EFFECTIVE CLEANING OF SOFT ICE CREAM MACHINES

Soft ice cream is a popular commodity and a machine can be fitted into the majority of trading locations.

Many of the traders who have installed machines have little or no experience of the food trade in general or ice cream manufacturing in particular. These notes are intended to assist such traders to produce a safe and hygienic product.

The majority of soft ice cream is now made from either a sterilised or a pasteurised liquid mix. Mix is supplied in a variety of types of packaging and varying handling and storage methods will apply. The supplier of the mix should supply these details and their advice should be followed particularly in relation to storage times and temperatures.

Two types of machine are in use, namely the self pasteurising machines and the non self pasteurising machines. As the name implies, a self pasteurising type is capable of periodically repasteurising the ice cream mix within the machine thus extending the period between machine cleaning operations.

The following notes advise on the methods to adopt when cleaning either type of soft ice cream machine.

THE CLEANING PROCEDURE

1. All the ice cream should be removed from the freezer. The lever at the front of the machine should be held open until all the ice cream has run out of the barrel. The lever can then be released to close the nozzle. The ice cream should be disposed of in a hygienic manner.
2. The hopper should be filled with warm water (not exceeding 38°C or 100°F) that contains a detergent. The freezer should then be operated for a few seconds, without refrigeration, and can then be drained off. The machine should then be flushed with warm water until the washings are no longer milky in appearance.
3. The parts of the machine, which come into contact with the ice cream, can then be removed and dismantled in their constituent pieces. All parts are then washed and brushed in a detergent solution. After being washed, the parts should be rinsed in cold water.
4. The barrel and hopper of the machine should be swabbed and brushed out with a detergent solution and should then be rinsed out with cold water. The outside of the machine should then be washed with a detergent solution, rinsed off and finally cleaned with a "sterilising" solution. The drip cup, sump and back seal should be cleaned in this manner.
5. The machine should then be reassembled and the hopper filled with a "sterilising" solution diluted in accordance with the chemical manufacturers instructions. The freezer is then operated without refrigeration to thoroughly circulate the solution. The machine should then be stopped and the solution left in the machine for the contact time recommended by the chemical manufacturers. The solution may then be drained off and the machine should then be rinsed out with cold water.

FAULT FINDING

When you are cleaning your machine remember the following:

1. Unless the operative observes good personal hygiene practices the cleaning process will fail.
2. The equipment used in the cleaning process must be kept in a clean dry condition between use and should be reserved exclusively for that purpose.
3. Adequate working space, copious supplies of hot water and suitably sized sink and working surfaces are essential.
4. Effective cleaning isn't quick. The task will take at least 45 minutes. Remember short cuts cause problems, ice cream is a high risk food and hygiene failures represent your customers health and your reputation being at risk.

When you are to operate the machine remember the following:

- a. Prior to using the machine you should ensure that the surrounding area and the machine are clean and free from potential contaminants. The food handler should be wearing suitable protective clothing, including headgear and should first of all wash their hands.
- b. The mix should be poured into the hopper ensuring there is no contact between hands and mix.

- c. Any opened and part used containers of mix should be used or disposed of at the end of the working day.
- d. Before dispensing ice cream ensure the machine dispenser tap is clean. Periodically during the day the tap and surrounding area should be wiped with a disposable wiper which has been dampened with a “sterilising” solution.

CLEANING MATERIALS

The following material have been recommended by their manufacturers as being suitable for the tasks described:

MANUFACTURER	MACHINE DETERGENT	MACHINE STERILANT	GENERAL CLEANING
Diversy	Diversol.BX	Diversol.BX	D4
Lever	Quatetsu 321	Quatetsu 321	Titan
Marsden	Dual	Dual	Markleen

NOTE

The term “sterilant” has been used to describe a disinfectant manufactured for use in the food industry and should not be taken to mean a chemical which can sterilise i.e. destroy all organisms.

The use of detergent and “sterilant” must always be in the order described in this document.

Where a manufacturer has recommended a “sanitizer” which is capable of both “detergent” and “sterilant” applications it should still be the practice to follow the cleaning procedure described in this leaflet.

Equipment used in the machine cleaning process should, as a minimum, consist of:

- a) 3 large washing up bowls
- b) 2 stainless steel buckets
- c) 1 bottle brush
- d) 1 test tube brush

If you would like any advice or further information please do not hesitate to contact the Food Control Group Via Customer First 01253 477477.