## Agricultural Marketing Service, USDA

container of the finished product placed therein. New or replacement equipment shall comply with the 3A Sanitary Standards for Equipment for Packaging Frozen Desserts and Cottage Cheese.

## QUALITY SPECIFICATIONS FOR RAW MATERIAL

## §58.627 Milk and dairy products.

To produce ice cream and related products the raw milk and cream shall meet the quality requirements as prescribed in §§ 58.132 through 58.138, except that only commingled milk and cream meeting the bacteriological requirements of No. 1 shall be used.

# §58.628 Sweetening agents.

Sweetening agents shall be clean and wholesome and consist of one or more of the approved sweeteners listed in §58.605.

## §58.629 Flavoring agents.

Flavoring agents either natural or artificial shall be wholesome and free from undesirable flavors. They must impart the desired characteristic to the finished product. Flavoring agents shall be one or more of those approved in §58.605.

#### §58.630 Stabilizers.

Stabilizers shall be clean and wholesome and consist of one or more of those approved in §58.605.

## §58.631 Emulsifiers.

Emulsifiers shall be clean and wholesome and consist of one or more of those approved in §58.605.

## §58.632 Acid.

Acids used in sherbet shall be wholesome and of food grade quality and consist of one or more of those approved in §58.605.

## §58.633 Color.

Coloring used for ice cream and related products shall be those certified by the U.S. Food and Drug Administration as safe for human consumption.

# § 58.639

#### OPERATIONS AND OPERATING PROCEDURES

# §58.634 Assembling and combining mix ingredients.

The assembling and combining of mix ingredients for processing shall be in accordance with clean and sanitary methods and shall be consistent with good commercial practices. All raw materials shall be subjected to inspection for quality and condition prior to being combined and processed into the finished mix. All necessary precautions shall be taken to prevent the contamination of any raw material or the finished mix with any foreign substance.

## §58.635 Pasteurization of the mix.

Every particle of the mix, except added flavoring ingredients, shall be pasteurized at not less than  $155 \,^{\circ}$ F. and held at that temperature for 30 minutes or for 175  $^{\circ}$ F. for 25 seconds; or it may be pasteurized by any other equivalent temperature and holding time which will assure adequate pasteurization.

## §58.636 Homogenization.

Homogenization of the pasteurized mix shall be accomplished to effectively reduce the size of the milkfat globules and evenly disperse them throughout the mix.

## §58.637 Cooling the mix.

The mix shall be immediately cooled to a temperature of 45  $^{\circ}$ F. or lower, and stored at this temperature until further processing begins.

#### §58.638 Freezing the mix.

After the mix enters the freezer, it shall be frozen as rapidly as possible to assure the formation of minute crystals. Proper adjustment of rate of flow, refrigerant and air pressure controls shall be achieved to assure correct overrun and consistency of the product for packaging and further freezing.

## §58.639 Addition of flavor.

The addition of flavoring ingredients to semi-frozen mix just prior to packaging shall be performed in a clean and sanitary manner. Care shall be taken to insure the flavor injection equipment has been properly cleaned and