## §58.920

and equipment meeting the requirements outlined in §58.128. Pre-heat temperatures prior to ultra pasteurization will be those that have the most favorable effect on the finished product.

# §58.920 Homogenization.

Where applicable concentrated products shall be homogenized for the purpose of dispersing the fat throughout the product. The temperature of the product at time of homogenization and the pressure at which homogenization is accomplished will be that which accomplishes the most desired results in the finished products.

#### §58.921 Concentration.

Concentrating by evaporation shall be accomplished with a minimum of chemical change in the product. The equipment and systems used shall in no way contaminate or adversely affect the desirability of the finished product.

# §58.922 Thermal processing.

The destruction of living organisms shall be performed in one of the following methods:

- (a) The complete in-container method, by heating the container and contents to a range of 212 °F to 280 °F for a sufficient time;
- (b) By a continuous flow process at or above  $280\,^{\circ}\mathrm{F}$  for at least 2 seconds, then packaged aseptically;
- (c) The product is first processed according to methods as in paragraph (b) of this section, then packaged and given further heat treatment to complete the process.

# §58.923 Filling containers.

- (a) The filling of small containers with product shall be done in a sanitary manner. The containers shall not contaminate or detract from the quality of the product in any way. After filling, the container shall be hermetically sealed.
- (b) Bulk containers for the product shall be suitable and adequate to protect the product in storage or transit. The bulk container (including bulk tankers) shall be cleaned and sanitized before filling, and filled and closed in a sanitary manner.

### §58.924 Aseptic filling.

A previously ultra pasteurized product shall be filled under conditions which prevent contamination of the product by living organisms or spores. The containers prior to being filled shall be sterilized and maintained, in a sterile condition. The containers shall be sealed in a manner that prevents contamination of the product.

#### §58.925 Sweetened condensed.

After condensing, the sweetened condensed product should be cooled rapidly to about 85 °F to induce crystallization of the oversaturated lactose. When the desired crystallization is reached further cooling is resumed to 68°-70 °F.

## § 58.926 Heat stability.

Prior to thermal processing of concentrated products and where stabilizers are allowed, tests should be made on the heat stability of the product to determine necessity for, and the amount of stabilizer needed. Based on the stability tests, safe and suitable stabilizers and emulsifiers may be added.

## §58.927 Storage.

Finished products which are to be held more than 30 days should be stored at temperatures below 72 °F Precautions shall be taken to prevent freezing of the product.

# §58.928 Quality control tests.

All dairy products and other ingredients shall be subject to inspection for quality and condition throughout each processing operation. Quality control tests shall be made on flow samples as often as is necessary to check the effectiveness of processing and manufacturing and as an aid in correcting deficiencies. Routine analyses shall be made on raw materials and finished products to assure adequate composition control. For each batch or production run a keeping quality test shall be made to determine product stability.

# § 58.929 Frequency of sampling for quality control.

(a) Composition. Sampling and testing for composition shall be made on