

Agricultural Marketing Service, USDA

§ 58.336

shall have a pleasing and desirable flavor and shall have the ability to transmit these qualities to the finished product.

§ 58.331 Starter distillate.

The refined flavor components when used to flavor butter and related products. It shall be of food grade quality, free of extraneous material and prepared in accordance with good commercial practice.

OPERATIONS AND OPERATING
PROCEDURES

§ 58.332 Segregation of raw material.

The milk and cream received at the dairy plant shall meet the quality specifications as indicated under § 58.322. The milk and cream should be segregated by quality and processed separately in such a manner that the finished product will fully meet the requirements of a particular U.S. Grade or other specification, whichever is applicable.

§ 58.334 Pasteurization.

The milk or cream shall be pasteurized at the plant where the milk or cream is processed into the finished product or by procedures as set forth by the Administrator.

(a) *Cream for butter making.* The cream for butter making shall be pasteurized at a temperature of not less than 165 °F. and held continuously in a vat at such temperature for not less than 30 minutes; or pasteurized by HTST method at a minimum temperature of not less than 185 °F. for not less than 15 seconds; or it shall be pasteurized by any other equivalent temperature and holding time which will assure adequate pasteurization. Additional heat treatment above the minimum pasteurization requirement is advisable to insure improved keeping-quality characteristics.

Adequate pasteurization control shall be used and the diversion valve shall be set to divert at no less than 185 °F. with a 15 second holding time or its equivalent in time and temperature to assure pasteurization. If the vat or holding method of pasteurization is used, vat covers shall be closed prior to holding period to assure temperature of

air space reaching 5 °F. higher than the minimum temperature during the holding time. Covers shall also be kept closed during the holding and cooling period.

(b) *Cream for plastic or frozen cream.* The pasteurization of cream for plastic or frozen cream shall be accomplished in the same manner as in paragraph (a) of this section, except, that the temperature for the vat method shall be not less than 170 °F. for not less than 30 minutes, or not less than 190 °F. for not less than 15 seconds or by any other temperature and holding time which will assure adequate pasteurization and comparable keeping-quality characteristics.

§ 58.335 Quality control tests.

All milk, cream and related products are subject to inspection for quality and condition throughout each processing operation. Quality control tests shall be made on flow samples as often as necessary to check the effectiveness of processing and manufacturing and as an aid in correcting deficiencies in processing and manufacturing. Routine analysis shall be made on raw materials and finished products to assure adequate microbiological, composition and chemical control.

§ 58.336 Frequency of sampling for quality control of cream, butter and related products.

(a) *Microbiological.* Samples shall be taken from churnings or batches and should be taken as often as is necessary to insure microbiological control.

(b) *Composition.* Sampling and testing for product composition shall be made on churns or batches as often as is necessary to insure adequate composition control. For in-plant control, the Kohman or modified Kohman test may be used.

(c) *Chemical*—(1) *Acid degree value.* This test should be made on churnings or batches from samples taken from the cream as often as is necessary to aid in the control of lipase activity.

(2) *Free fatty acid.* This test should be made on churnings or batches from samples taken from the butter as often as is necessary to aid in the control of lipase activity.

(d) *Other analysis.* Other chemical analysis or physical measurements shall be performed as often as is necessary to insure meeting grade standards and contract specifications.

(e) *Weight or volume control.* Representative samples of the packaged product should be checked using procedures prescribed by the Administrator during the packaging operation to assure compliance with the stated net weight or volume on the container.

(f) *Keeping quality and stability.* Samples from churnings shall be subjected to a seven day keeping quality test at a temperature of 72 °F. to establish and maintain a satisfactory keeping quality history. Optionally 98 °F. for 48 hours may be used, however, in case of a dispute, the results of the seven days at 72 °F. will prevail.

§ 58.337 Official test methods.

(a) *Chemical.* Chemical analyses except where otherwise prescribed herein, shall be made in accordance with the methods described in the latest edition of Official Methods of Analysis of the Association of Official Analytical Chemists, published by the Association of Official Analytical Chemists, the Official and Tentative Methods of the American Oil Chemists Society or any other methods giving equivalent results.

(b) *Microbiological.* Microbiological determinations shall be made in accordance with the methods described or suggested in the latest edition of Standard Methods for the Examination of Dairy Products, published by the American Public Health Association.

§ 58.338 Composition and wholesomeness.

All ingredients used in the manufacture of butter and related products shall be subject to inspection and shall be wholesome and practically free from impurities. Chlorinating facilities shall be provided for butter wash water if needed and all other necessary precautions shall be taken to prevent contamination of products. All finished products shall comply with the requirements of the Federal Food, Drug and Cosmetic Act, as to composition and wholesomeness.

§ 58.339 Containers.

(a) Containers used for the packaging of butter and related products shall be commercially acceptable containers or packaging material that will satisfactorily protect the quality of the contents in regular channels of trade. Caps or covers which extend over the lip of the container shall be used on all cups or tubs containing two pounds or less, to protect the product from contamination during subsequent handling.

(b) *Liners and wrappers.* Supplies of parchment liners, wrappers and other packaging material shall be protected against dust, mold and other possible contamination.

(1) Prior to use, parchment liners for bulk butter packages shall be completely immersed in a boiling salt solution in a suitable container constructed of stainless steel or other equally non-corrosive material. The liners shall be maintained in the solution for not less than 30 minutes. The liners shall be effectively treated with a solution consisting of at least 15 pounds of salt for every 85 pounds of water and shall be strengthened or changed as frequently as necessary to keep the solution full strength and in good condition.

(2) Other liners such as polyethylene shall be treated or handled in such a manner as to prevent contamination of the liner prior to filling.

(c) *Filling bulk butter containers.* The lined butter containers shall be protected from possible contamination prior to filling. Use of parchment liners may be accomplished by alternately inverting one container over the other or stacking the lined boxes on their sides in a rack, until ready for use. When using polyethylene liners the boxes should be lined immediately prior to use. When packing butter into the bulk containers, care shall be taken to fill the corners leaving as few holes or openings as possible. The surface of the butter as well as the covering liner shall be smoothed evenly over the top surface before closing and sealing the container. Containers should be stacked only as high as the firmness of the product will support weight, so as not to crush or distort the container.