

**§ 58.233**

**§ 58.233 Skim milk.**

The skim milk shall be separated from whole milk meeting the requirements as outlined in §§ 58.132 through 58.138, and unless processed immediately, it shall be cooled to and maintained at a temperature of 45 °F. or lower from the time of separating until the time of processing.

**§ 58.234 Buttermilk.**

Buttermilk for drying as dry buttermilk or dry buttermilk product shall be fresh and derived from the churning of butter, with or without the addition of harmless lactic culture. No preservative, neutralizing agent or other chemical may be added. Fluid buttermilk, unless cultured, shall be held at 45 °F or lower unless processed within 2 hours.

[56 FR 33855, July 24, 1991]

**§ 58.235 Modified dry milk products.**

Dry milk products to which approved neutralizing agents or chemicals have been added or constituents removed to alter their original characteristics for processing or usage shall come from products meeting the requirements of §§ 58.232, 58.233, or 58.234. These products shall meet the applicable labeling requirements.

OPERATIONS AND OPERATING PROCEDURES

**§ 58.236 Pasteurization and heat treatment.**

All milk and buttermilk used in the manufacture of dry milk products and modified dry milk products shall be pasteurized at the plant where dried, except that acidified buttermilk containing 40 percent or more solids may be transported to another plant for drying without repasteurization. Provided the condensed product is handled according to sanitary conditions approved by the Administrator.

(a) *Pasteurization.* (1) All milk or skim milk to be used in the manufacture of nonfat dry milk shall be pasteurized prior to condensing at a minimum temperature of 161 °F. for at least 15 seconds or its equivalent in bacterial destruction. Condensed milk products made from pasteurized milk

may be transported to a drying plant, provided that it shall be effectively repasteurized at the drying plant, prior to drying, at no less than 166 °F. for 15 seconds or its equivalent in bacterial destruction.

(2) All buttermilk to be used in the manufacture of dry buttermilk or dry buttermilk product shall be pasteurized prior to condensing at a temperature of 161 °F for 15 seconds or its equivalent in bacterial destruction.

(b) *Heat treatment—(1) High-heat.* The finished product shall not exceed 1.5 mg. undenatured whey protein nitrogen per gram of nonfat dry milk as classified in the U.S. Standards for Grades of Nonfat Dry Milk (Spray Process).

(2) *Medium-heat.* The finished product shall show undenatured whey protein nitrogen between the levels of “high-heat” and “low-heat” (1.51 to 5.99 mg.).

(3) *Low-heat.* The finished product shall show not less than 6.0 undenatured whey protein nitrogen per gram of non-fat dry milk as classified in the U.S. Standards for Grades of Nonfat Dry Milk (Spray Process).

[40 FR 47911, Oct. 10, 1975. Redesignated at 42 FR 32514, June 27, 1977, and further redesignated at 46 FR 63203, Dec. 31, 1981, as amended at 56 FR 33855, July 24, 1991]

**§ 58.237 Condensed surge supply.**

Surge tanks or balance tanks if used between the evaporators and dryer shall be used to hold only the minimum amount of condensed product necessary for a uniform flow to the dryers. Such tanks holding product at temperatures below 150 °F. shall be completely emptied and washed after each 4 hours of operation or less. Alternate tanks shall be provided to permit continuous operation during washing of tanks.

**§ 58.238 Condensed storage tanks.**

(a) Excess production of condensed product over that which the dryer will take continuously from the pans should be bypassed through a cooler into a storage tank at 50 °F. or lower and held at this temperature until used.

(b) Product cut-off points shall be made at least every 24 hours and the