

## Chapter Ag 86

## GRADE A CONDENSED AND DRY MILK PRODUCTS

Ag 86.01	Definitions	Ag 86.07	Bacteriological and physical requirements for Grade A condensed and dry milk products
Ag 86.02	Manufacture and sale of Grade A condensed or dry milk products	Ag 86.08	Sanitation requirements for Grade A condensed milk and dry milk products
Ag 86.03	Permits	Ag 86.09	Dairy plant requirements
Ag 86.04	Inspection of milk condensing and milk drying plants	Ag 86.10	Enforcement interpretations
Ag 86.05	Milk and milk products used in the manufacture of Grade A condensed milk products and Grade A dry milk products	Ag 86.11	Inspection fees
Ag 86.06	Examination of Grade A condensed and dry milk products		

**History:** Chapter Ag 86 as it existed on December 31, 1971 was repealed and a new chapter Ag 86 was created, Register, December, 1971, effective January 1, 1972.

**Ag 86.01 Definitions.** (1) "Milk" is the whole, fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows. Milk shall contain not less than 3% of milk fat, and not less than 8.25% of milk solids not fat. Milk may be standardized by the addition or removal of cream or by the addition of skim milk. When so standardized, milk shall contain not less than 3.3% of milk fat, and not less than 8.25% of milk solids not fat.

(2) "Skim milk" is milk from which a sufficient portion of milk fat has been removed to reduce its milk fat content to less than 0.50%. It must contain not less than 8.5% of milk solids.

(3) "Condensed or concentrated milk" is milk unsterilized and unsweetened, resulting from the vacuum removal of a substantial quantity of water. This definition is not intended to include such products as sterilized milk and milk products hermetically sealed in a container and processed, either before or after sealing so as to prevent microbial spoilage.

(4) "Milk products" mean and shall include skim milk, nonfat or defatted milk, cream, condensed or concentrated milk, and any fluid product made by the addition of any wholesome substance to milk or to any of these products.

(5) "Grade A dry milk products" mean dry milk products which comply with the applicable provisions of this chapter.

(6) "Condensing and/or milk drying plant" means a plant in which milk or milk products are condensed, dried, or in which milk or milk products are received, separated, concentrated or otherwise processed for drying.

(7) "Department" means the State of Wisconsin Department of Agriculture.

(8) "Person" means any individual, partnership, corporation, firm or association.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

Register, December, 1971, No. 192

**Ag 86.02 Manufacture and sale of Grade A condensed or dry milk products.** No person shall sell, offer or expose for sale, or have in possession with intent to sell, any condensed or dry milk products labeled or otherwise represented as Grade A unless such condensed or dry milk products are produced in compliance with the requirements of this regulation or with the provisions of a substantially equivalent regulation which is enforced with equal effectiveness.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.03 Permits.** The operator of any milk condensing or milk drying plant desiring to use the "Grade A" label on any condensed milk products or dry milk products manufactured by him shall make application for a Grade A permit on a form prescribed by the department.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.04 Inspection of milk condensing and milk drying plants.** (1) Upon application for a permit, the department shall inspect the milk condensing plant or the milk drying plant with respect to which the permit is sought. If it is satisfied that the operation of the plant can comply with requirements of this chapter, a permit shall be issued. Such permit shall not be transferable. If a permit is not issued, the department shall advise the applicant of the reasons therefor.

(2) As often as may be necessary and at least once every 3 months after the issuance of a permit, the department shall inspect all Grade A milk condensing plants and milk drying plants. The permit holder shall be notified of any failure to comply with the provisions of this chapter. If a violation of Wis. Adm. Code section Ag 80.08 is involved, the permit holder shall be allowed a reasonable period, but in no event less than 3 days, to correct conditions; provided, the department may require suspension of operations if continued operation of the plant will result in a serious threat to public health. Upon expiration of the period allowed, the premises shall be reinspected. In addition to any other remedies that may be invoked, violation of the same requirements shall be grounds for immediate suspension of permit.

(3) The holder of any permit under this chapter shall keep accurate daily records of the actual quantities of condensed milk products or dry milk products manufactured and sold, together with a list of all sources of milk or milk products from which the products were made, records of inspections and tests and pasteurization time, and temperature records. Such records shall be retained for a period of 12 months and shall be available for examination in such establishment by the department during normal business hours.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.05 Milk and milk products used in the manufacture of Grade A condensed milk products and Grade A dry milk products.** Milk and milk products used in the manufacture of Grade A condensed milk products and Grade A dry milk products shall comply with the requirements for Grade A raw milk as provided in Wis. Adm. Code chapter Ag 80, and shall be produced under the routine supervision of the department, or produced under provisions which are substantially equivalent to the requirements of this regulation and

which are enforced with equal effectiveness by another governmental agency as determined by a sanitation compliance rating. The permit of any Grade A milk condensing or Grade A milk drying plant which receives or processes any milk or milk products other than raw milk or milk products produced in accordance with the provisions of Wis. Adm. Code chapter Ag 80 or a substantially equivalent regulation shall be immediately revoked. The holder of a Grade A permit may surrender his permit at any time and may reapply for a permit in accordance with this chapter.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.06 Examination of Grade A condensed and dry milk products.**

(1) The department shall collect and examine at least one sample of each Grade A condensed milk product and Grade A dry milk product being manufactured during each month. Samples of milk products resulting from processing for condensing or drying shall be taken and examined as often as necessary.

(2) Whenever 2 of the last 4 consecutive bacteria counts, coliform determinations, or cooling temperatures, taken on separate days, exceed the limit of the standard for milk and/or milk product, the department shall send a written notice thereof to the person concerned. This notice shall be in effect as long as 2 of the last 4 consecutive samples, taken on separate days, exceed the limit of the standard. An additional sample may be taken within 14 days of the sending of such notice, but not before the lapse of 3 days. Immediate suspension of permit and/or court action shall be instituted whenever the standard is violated by 3 of the last 5 bacteria counts, coliform determinations, or cooling temperatures.

(3) All sampling procedures and required laboratory examinations shall be in substantial compliance with "Standard Methods for the Examination of Dairy Products", Twelfth Edition (1967), copies of which are on file at the offices of the department of agriculture, secretary of state and revisor of statutes, and which may be obtained from American Public Health Association, Inc., 1790 Broadway, New York, N. Y. 10019, and with "Official Methods of Analysis of the Association of Official Analytical Chemists", Eleventh Edition (1970), copies of which are on file at the offices of the department of agriculture, secretary of state and revisor of statutes, and which may be obtained from Association of Official Analytical Chemists, Inc., Box 540, Benjamin Franklin Station, Washington, D. C. 20044.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.07 Bacteriological and physical requirements for Grade A condensed and dry milk products.** (1) Raw milk and raw milk products used for the manufacture of Grade A condensed milk products or Grade A dry milk products shall at no time between receipt at the milk condensing or drying plant and pasteurization have a bacterial plate count or a direct microscopic clump count exceeding 300,000 per milliliter. After pasteurization such milk and milk products shall at no time have a bacterial plate count exceeding 30,000 per milliliter.

(2) Grade A condensed or dry milk products shall have at no time a bacterial plate count exceeding 30,000 per gram, or a coliform count exceeding 10 per gram; shall be free of unwholesome and

deleterious materials; and the dry milk products shall comply with the physical requirements for U. S. Extra-Grade spray process products.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.08 Sanitation requirements for Grade A condensed milk and dry milk products.** (1) **COMPLIANCE.** All condensing and/or milk drying plants shall comply with all items of this section. Facilities for the cleaning and sanitizing of bulk transport tanks shall comply with applicable items of this chapter.

(2) **FLOORS—CONSTRUCTION.** The floors of all rooms in which milk, milk products, condensed or dry milk products are processed, handled, packaged, or stored, or in which containers, equipment and utensils are washed, shall be constructed of concrete or other equally impervious and easily cleaned material, and shall be smooth, properly sloped, provided with trapped drains, and kept in good repair; provided, that storage rooms for storing dry ingredients, packaged dry milk products and/or packaging materials need not be provided with drains, and the floors may be constructed of tightly joined wood.

(3) **WALLS AND CEILINGS—CONSTRUCTION.** Walls and ceilings of rooms in which milk, milk products, condensed and/or dry milk products are handled, processed, packaged, or stored, or in which containers, utensils and equipment are washed, shall have a smooth, washable, light-colored surface, in good repair.

(4) **DOORS AND WINDOWS.** Effective means, including doors or glazed windows, shall be provided to prevent the access of flies, dust and rodents. All openings to the outside and doors shall be closed during dusty weather.

(5) **LIGHTING AND VENTILATION.** All rooms in which milk, milk products, condensed, or dry milk products, are handled, processed, stored and packaged, and/or in which containers, equipment and utensils are washed, shall be well lighted and well ventilated.

(6) **SEPARATE ROOMS.** There shall be separate rooms for (a) pasteurizing, processing, cooling, condensing and drying; (b) packaging of dry milk products; and (c) cleaning of milk cans and containers. In addition, plants receiving milk or milk products in bulk transport tanks shall provide for cleaning and sanitizing facilities. Unless all milk and milk products are received in bulk transport tanks, a receiving room, separate from (a), (b) and (c) above, shall be required. Rooms in which milk or milk products are handled, processed, stored, condensed, dried, or packaged, or in which containers, utensils and equipment are washed or stored, shall not open directly into any room used for domestic purposes.

(7) **TOILET-SEWAGE DISPOSAL FACILITIES.** Every milk processing plant shall be provided with toilet facilities conforming with the state plumbing code. Toilet rooms shall not open directly into any room in which milk, milk products, condensed and/or dry milk products are processed or packaged. Toilet rooms shall be completely enclosed and shall have tight-fitting self-closing doors. Dressing rooms, toilet rooms and fixtures shall be kept in a clean condition, in good repair, and shall be well ventilated and well lighted. Sewage and other liquid wastes shall be disposed of in a sanitary manner.

(8) **WATER SUPPLY.** (a) Water for plant purposes shall be from a supply that conforms to the water supply standards of the Wisconsin Department of Natural Resources, and where applicable, conforms to requirements of the state plumbing code.

(b) There shall be no direct or indirect connection between safe and unsafe water.

(c) Condensing water for milk evaporators shall be from a source complying with (a) above, provided that when approved by the department, water from sources not complying with (a) above may be used when the evaporator is constructed and operated to preclude contamination of such equipment or its contents by condensing water.

(9) **HAND-WASHING FACILITIES.** Convenient hand-washing facilities shall be provided, including hot and cold and/or warm running water, soap and individual sanitary towels or other approved hand-drying devices. Hand-washing facilities shall be kept in a clean condition and in good repair. Use of a common towel is prohibited.

(10) **PLANT CLEANLINESS.** All rooms in which milk, milk products, condensed and/or dry milk products are handled, processed, packaged or stored, and/or in which containers, utensils, or equipment are washed or stored, shall be kept clean, neat, and free of evidence of insects and rodents. Pesticides shall be safely used. Only equipment directly related to processing and packaging operations or to handling of containers, utensils and equipment shall be permitted in the pasteurizing, processing, condensing, drying, and packaging rooms. Effective means shall be provided to control excessive product dust in milk drying plants.

(11) **SANITARY PIPING.** All sanitary piping, fittings and connections which are exposed to milk, milk products and/or condensed milk products or from which liquids may drip, drain, or be drawn into milk, milk products, and/or condensed milk products, shall be constructed of smooth, impervious, corrosion-resistant, nontoxic, easily cleanable material. All piping shall be in good repair and shall be accessible for inspection. Cleaned-in-place sanitary type pipelines shall meet the approval of the department. Milk, milk products, and condensed milk products shall be conducted from one piece of equipment to another only through sanitary piping.

(12) **CONSTRUCTION AND REPAIR OF CONTAINERS AND EQUIPMENT.** All multi-use containers and equipment with which milk, milk products, condensed and/or dry milk products come into contact shall be of smooth, impervious, corrosion-resistant, nontoxic material; shall be constructed and installed for ease of cleaning; and shall be kept in good repair. Floors of dryer chambers shall be constructed of smooth, nontoxic, noncorrodible metal. All single-service containers, closures, gaskets, and other articles with which milk and milk products come into contact shall be nontoxic and shall have been manufactured, packaged, transported and handled in a sanitary manner. Articles intended for single-service use shall not be reused.

(13) **CLEANING AND SANITIZING OF CONTAINERS AND EQUIPMENT.** The product-contact surface of all multi-use containers, utensils and equipment used in the processing, drying, packaging, storing, handling and transporting of milk, milk products, condensed and/or dry milk products shall be effectively cleaned and sanitized after each use;

provided, that cloth-collector systems used on milk dryers shall be cleaned and sanitized or purged at intervals and by methods recommended by the manufacturer and approved by the department.

(14) STORAGE OF CLEANED MULTI-USE CONTAINERS AND EQUIPMENT. After cleaning, all multi-use milk, milk products, condensed and/or dry milk product containers, utensils and equipment shall be transported and stored to assure complete drainage and shall be protected from contamination before reuse.

(15) STORAGE OF SINGLE-SERVICE CONTAINERS, UTENSILS AND MATERIALS. Single-service parchment papers, containers, gaskets, liners, bags, and other single-service articles for use in contact with milk, milk products, condensed and/or dry milk products shall be purchased and stored in sanitary wrappings or cartons; shall be kept therein in a clean dry place until used; and shall be handled in a sanitary manner.

(16) PROTECTION FROM CONTAMINATION. Condensing and/or milk drying plants, operations, equipment and facilities shall be located and conducted to prevent any contamination of the milk, milk products, condensed and/or dry milk products, ingredients, equipment, containers and utensils. All milk, milk products, condensed and/or dry milk products, or ingredients which have been spilled, overflowed, or leaked shall be discarded. The processing or handling of products other than Grade A milk and milk products in the condensing and/or milk drying plant or dry milk packaging plant shall be performed to preclude the contamination of such Grade A products.

(17) PASTEURIZATION. Milk or milk products shall be pasteurized in the plant in which the milk or milk product is condensed and/or dried. Pasteurization shall be taken to refer to the process of heating every particle of milk or milk products (a) to at least 145° F., and holding it at such temperature continuously for at least 30 minutes; (b) to at least 161° F., and holding it at such temperature continuously for at least 15 seconds; or (c) to such other temperature, and holding it continuously at such temperature for such time as may be approved by the department. Pasteurization shall be performed only in equipment which is constructed and operated in a manner approved by the department.

(18) COOLING OF MILK AND MILK PRODUCTS. All raw milk and milk products shall be maintained at 50° F. or less until processed. All pasteurized milk and milk products and condensed or concentrated milk products shall be cooled immediately in approved equipment to a temperature of 45° or less, unless drying is commenced immediately after condensing. All pasteurized milk and milk products and condensed or concentrated milk products shall be stored at a temperature of 45° F. or less and maintained thereat until further processed. Every room or tank in which milk, milk products, or condensed or concentrated milk products are stored shall be equipped with an accurate thermometer.

(19) PACKAGING AND CONTAINER FILLING. (a) The filling of condensed and/or dry milk product containers shall be done only by mechanical equipment and by methods which preclude contamination. Dry milk products shall be packaged in new containers which protect the contents from contamination. Packaging shall be done at

the place of manufacture, except that packaging at other locations shall be done only upon written authorization of the department.

(b) When the name and address of the distributor rather than the manufacturer appear on the label of packaged Grade A dry milk products, the Wisconsin Grade A permit number of the manufacturer shall also appear conspicuously on the label.

(20) CONTAINER CLOSURE, SEALING AND STORAGE. Closing or sealing of dry milk product containers shall be done in a sanitary manner. The closing and/or sealing of individual containers of condensed or concentrated milk products shall be done by methods which preclude product contamination. Milk products and condensed or concentrated milk or dry milk products shall be stored in a sanitary manner.

(21) PERSONNEL—CLEANLINESS. Hands shall be thoroughly washed before commencing plant functions and as often as may be required to remove soil and contamination. No employee shall resume work after visiting the toilet room without thoroughly washing his hands. All persons engaged in the processing, pasteurization, handling, storage, transportation or packaging of milk, milk products, condensed and/or dry milk products, containers, equipment and utensils shall wear clean outer garments. The use of tobacco by any person while engaged in the processing of milk, milk products, condensed milk, or dry milk products is prohibited.

(22) VEHICLES. All vehicles used to transport fluid milk, milk products, or condensed or concentrated milk products shall be constructed and operated so that the milk, milk products, and condensed or concentrated milk products are maintained at 45° F. or less, and are protected from sun, freezing and contamination. Milk tank cars, tank trucks, and portable shipping bins shall not be used to transport or contain any substance that may be toxic or harmful to humans. Dry milk products shall be transported in a sanitary manner.

(23) SURROUNDINGS. Condensing and/or milk drying plant surroundings shall be kept neat, clean, and free from conditions which might attract or harbor flies or other insects and rodents, or which otherwise constitute a nuisance.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.09 Dairy plant requirements.** In addition to the requirements of this chapter, any operator of a milk condensing and/or a milk drying plant holding a permit as provided for herein shall comply with dairy plant requirements of Wis. Adm. Code sections Ag 80.08, Ag 80.09, Ag 80.13 and Ag 80.14 to the extent said sections are applicable to a milk condensing and/or milk drying plant and are not inconsistent herewith.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

**Ag 86.10 Enforcement interpretations.** These rules shall be enforced in accordance with the interpretations of corresponding provisions contained in Supplement 1 to the Grade A Pasteurized Milk Ordinance—1965 Recommendations of the United States Public Health Service, to the extent such interpretations are not inconsistent with the provisions of this chapter.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.

Ag 86.11 Inspection fees. To finance the cost of supervising the Grade A condensed and/or dry milk products program, each holder of a permit shall pay semi-annually fees in the amount of \$125. Initial fees in such amount shall be submitted with the application for permit to cover the cost of qualifying inspections. Thereafter permittees shall pay fees on January 1 and July 1 of each year.

**History:** Cr. Register, December, 1971, No. 192, eff. 1-1-72.