Chapter Ag 84

SWISS CHEESE

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Note: These regulations make provision for the grading of Swiss cheese on a voluntary basis by licensed industry graders, except that by section 100.04. Wis. Stats., all drum style Swiss cheese must be graded by the department and sold in compliance with these regulations.

Ag 84.01 Definitions. The following terms when used in this chapter shall have the following meanings:

- (1) "State" means the state of Wisconsin.
- (2) "Department" means the Wisconsin State Department of Agriculture.
- (3) "Cheese" means Swiss cheese made in Wisconsin, either drum or block style, and shall include cheese of the rindless type,
- (4) "Grader" means an authorized cheese grader employed or licensed by the department.
- (5) (a) "Well-developed eyes" means eyes perfectly developed, glossy or velvety, with smooth even walls, round or slightly oval in shape, fairly uniformly distributed throughout the cheese.
- (b) "Dull glossy eyes" means eyes that have lost some of their bright, shiny luster.
- (c) "Dead eyes" means developed eyes that have completely lost their glossy or velvety appearance, and also may be rough.
- (d) "Small-eyed" means that a majority of the eyes are less than five-sixteenths of an inch in diameter.
 - (e) "Blind" means having no eye formation.
- (f) "Pinholey" means cheese that has numerous holes the size of a pin puncture to the size of a pinhead.
- (6) "Plug" means a plug of cheese, from one-half to three-fourths of an inch in diameter and approximately six inches long, drawn from the cheese with an instrument called a No. 8 cheese trier.
- (7) "Meaty" means that when a plug of cheese is bent, it will tear and not break short, showing flexibility; not dry or brittle.
- (8) (a) "Glass" means sizeable cracks, usually in parallel layers and usually clean cut, found within the body of the cheese.
- (b) "Excessive glass" means glass so generally distributed that the cheese will not slice well.
- (9) "Clean and desirable flavor" means free from objectionable or foreign flavor or odor.
- (10) "Closed surface" means a sound exterior surface having no checks or cracks penetrating the body of the cheese.

- (11) "Picks" means small irregular or ragged openings within the body of the cheese,
- (12) "Checks" means small short cracks within the body of the cheese.
 - (13) "Shell" means nutshell appearance on surface of eyes.
- (14) (a) "Set" means the number of eyes to a plug or in a given area of cheese.
 - (b) "Overset" means too many eyes; more than 10 eyes to a plug.
- (15) "Cabbage" means cheese having eyes so numerous within the major part of the cheese that they crowd each other leaving only a paper-thin layer of cheese between the eyes, causing the cheese to have a cabbage appearance and very irregular eyes.
- (16) "Blowholes" means abnormally large openings caused by gas formations.
- (17) "One-sided" means a cheese reasonably developed on one side and showing imperfections or lower quality on the other.
 - (18) "Fine-bodied" means lacking firmness but not pasty.
 - (19) "Weak" means soft, easily deformed by pressure.
- (20) "Pasty" means soft with a paste-like consistency when massaged with the fingers,
- (21) "Cured" means cheese held at the factory the length of time specified in these regulations at a temperature conforming to good factory practices, properly salted, turned and tended.
- Ag 84.02 Styles. (1) DRUM. (a) Drum cheese is circular in shape, usually ranging from 30 inches to 38 inches in diameter and from five to ten inches in height.
- (b) Drum cheese shall be graded by drawing two plugs, one from each face of the cheese, at points approximately equidistant from the center and opposite edges of the cheese. If the grader deems it necessary, the cheese may be tried elsewhere to determine the correct grade, but no more than four plugs shall be drawn.
- (2) BLOCK. (a) Cheese known as block Swiss is cheese oblong in shape, having the appearance of a block.
- (b) Block Swiss cheese shall be graded by drawing not less than one nor more than three plugs. Plugs shall be drawn so as to obtain representative samples of the body of the cheese.
- Ag 84.03 Grades. (1) STATE BRAND OR WISCONSIN GRADE A. Cheese shall qualify for this grade if:
- (a) It has well-developed eyes, so set that there is an average of not less than one nor more than eight indicated to a plug. Such eyes shall be reasonably uniform in distribution and a majority of them shall be at least one-half inch in diameter. An occasional dull glossy, shell or dead eye shall not disqualify the cheese for this grade.
- (b) It is uniformly firm and meaty, free from glass, not pinholey, spongy or bloated. Picks and checks located not more than one inch from the surface and a limited number of picks and checks located within the body (as disclosed on one plug only) shall not disqualify the cheese for this grade.
 - (c) It is clean and desirable in flavor and aroma. The age of the

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cheese shall be considered, but the flavor and aroma shall be characteristic of Swiss cheese.

- (d) It is well-shaped. Its surface is even, closed and reasonably flat, is sound and clean, and is practically free of mold.
- (e) It has a reasonably uniform, slightly salty taste. The salt taste may be more pronounced near the surface than in the center. Age shall be taken into consideration.
 - (f) It is uniform in color, without specks or other discoloration.
- (2) Wisconsin B. Cheese which does not qualify as State Brand or Wisconsin Grade A shall qualify for this grade if:
- (a) It has an eye formation consisting of smaller eyes and may have more set than is permitted in State Brand; the cheese shall not be blind; the majority of eyes to a plug shall be not less than 5/16 inch in diameter; a limited number of dull glossy, shell or dead eyes shall not disqualify the cheese for this grade.
- (b) It has a body somewhat weaker than is permitted in State Brand. It should not be gassy, bloated or pinholey. It may be overset if otherwise solid, without cabbage. It shall have no glass but may have a limited amount of picks and checks.
- (c) It has a clean and desirable flavor and aroma characteristic
- of Swiss cheese, age being taken into account.

 (d) It is well-shaped. Its surface is even, closed and reasonably flat, is sound and clean, and is reasonably free of mold.
- (e) It is fairly uniform in salt, having a slightly salty taste throughout, when of the age required for holding.
- (f) It is uniform in color, without specks, but may have slightly uneven color directly under the surface.
- (3) WISCONSIN C. Cheese which does not meet the requirements for any of the grades in subsections (1) and (2) shall qualify for this grade if it is merchantable as natural cheese. It may have glass, may be overset and may be one-sided. It may be small-eyed and deadeyed but should not be totally blind or totally pinholey. It may have some cabbage. It may have some body or flavor defects or a combination of these.
- (4) WISCONSIN D. Cheese which does not meet the requirements for any of the higher grades shall qualify for this grade if it is not so defective or damaged as to make it unfit for storage. It is ordinarily used in the manufacture of pasteurized process cheese or pasteurized process cheese foods.
- (5) UNDERGRADE. Cheese which is so defective or damaged as to make it unfit for storage shall qualify only as "Undergrade", and shall be identified and grade-marked as herein required; provided, however, that in any case where not more than one-fourth of the cheese is damaged or defective, such cheese shall be graded and marked in the manner required by section Ag 84.06 (1) (f).

History: 1-2-56; am. (1) (intro. par.), (2) (intro. par.), and (3), Register, August, 1968, No. 152, eff. 9-1-68.

Ag 84.04 Minimum holding period. (1) Cheese that qualifies for any of the grades in section Ag 84.03 shall after date of manufacture be held by the producer for a period of at least 6 weeks.

(2) Whenever it is impractical to grade at the factory, cheese may

be moved from the factory to another storage earlier than herein provided but such cheese shall not be graded or marked as and for a grade before it is of the age specified.

- (3) This section shall not apply to damaged or Undergrade cheese. History: 1-2-56; am. (1), Register, November, 1960, No. 59, eff. 12-1-60.
- Ag 84.05 Identification. (1) Cheese to be graded shall be marked by the producer when it is new. Such marks shall be applied with a stencil or stamp obtained from the department. The department will furnish this equipment at cost and each factory will be assigned a serial number. The word "Wisconsin" shall be applied at least four times in the shape of a diamond on the flat face of a drum cheese in type at least one inch high, and on one flat surface of block cheese. Inside of the figure thus formed there shall be placed the factory serial number, the number of the month, the day in the month and the kettle number, all in type at least one inch high.
- (2) Cheese that fails to conform with the requirements of the Wisconsin Statutes shall not be branded, marked or otherwise represented to be of any of the above grades. Cheese which is to be classified in any of the above grades shall, before leaving the place where the period for holding is completed and before being placed in market channels, be branded with permanent marks indicating its grade, except that the regular gouge marks are sufficient for cheese turned over to a cheese dealer in this state who shall apply said permanent marks before the cheese enters into channels of trade.
- Ag 84.06 Grade marking. (1) GOUGE MARKS. When gouge marks are used to represent grades, they shall be applied under the direction of a grader on the hoop side of each drum cheese, and on the end of each block cheese:
- (a) State Brand or Wisconsin Grade A: To be represented by a vertical bar at least one and one-half inches high.
- (b) Wisconsin B: Add to the marking for State Brand one crossbar at least one inch long, making a figure like a printed capital "T".
- (c) Wisconsin C: Add to the marking for State Brand two crossbars at least one inch long, making a figure like a printed capital "I".
- (d) Wisconsin D: To be represented by two diagonal, intersecting bars, each at least one and one-half inches long, so as to make an "X".
- (e) Undergrade: To be represented by two vertical bars crossed with two horizontal bars, all at least one and one-half inches long.
- (f) Drum cheese, not more than one-fourth of which is damaged or defective, shall be marked for the grade for which it qualifies, and, in addition, shall be marked with two gouge marks at least three-fourths inch long, in the form of a letter "V", applied immediately below the correct grade mark.
- (2) COMMERCIAL MARKING. All cheese which has been graded, before it shall enter retail channels or before shipment from this state, shall be marked with permanent grade marks indicating its grade. The following markings shall be applied on such cheese after the age for holding has been reached and before it shall enter retail channels or before shipment from this state:
- (a) With drum cheese there shall be a large emblem in the center of the wheel to identify it as a wheel of Wisconsin cheese. For Wis-

consin State Brand or Wisconsin Grade A, there shall be an outline map of the state of Wisconsin bounded by a circle not less than 12 inches in diameter and touching the map at the extreme points. Within the map there shall be stamped in letters as large as practicable the words "State Department of Agriculture", "Wisconsin State Brand", or the words "State Department of Agriculture", "Wisconsin Grade A". Around the circle and forming the boundary thereof there shall be placed in letters at least one-half inch high the grade of the cheese as "Wisconsin State Brand" or "Wisconsin Grade A".

- (b) For the second and third grades of drum cheese, there shall be a diamond-shaped figure within the circle and reaching to its circumference. Around the circle and forming the boundary thereof there shall be placed in letters at least one-half inch high the grade of the cheese, as "Wisconsin B" or "Wisconsin C", and within the diamond in letters as large as practicable the grade of the cheese.
- (c) Wisconsin D and Undergrade shall be represented by a straight strip on which is placed the term "Wisconsin D" or "Undergrade" in letters at least one inch high.
- (d) In the case of block cheese, the designs and size of letters shall be the same as for drum, but the diameter of the circle shall be six inches. In the case of block cheese, permanent grade marks will be applied on the side opposite the factory mark on each cheese.
- (e) Undergrade cheese shall be marked on the flat surface of drum cheese in four places with the word "Undergrade". In the case of block cheese, the word "Undergrade" shall be marked on the side opposite the factory marks.
- (f) Swiss cheese produced outside the state and assembled in Wisconsin, and the receptacles thereof, shall be branded or marked, in two conspicuous places, with the name of the state of its origin, the size of type used to be at least one and one-half inches high.

History: 1-2-56; am. (1) (a) and (2) (a), Register, August, 1968, No. 152, eff. 9-1-68.

Ag 84.07 Identification and grade marking of rindless type cheese. In lieu of marking the surface of rindless type cheese, the identification and grade markings may be applied to the wrapper and containers of such cheese by or under the supervision of a grader. Such markings may also be printed on a label to be inserted under the wrapper of rindless type cheese.

Ag 84.08 Licensing of graders. Cheese graders shall be licensed under section 93.11, Wis. Stats. An individual who desires to grade cheese shall make application for a license to the department, naming the place where the grading is to be done. Drum cheese shall be graded only by graders employed by the department, as provided in section 100.04, Wis. Stats.

Ag 84.09 Approval of marking equipment and labels. Equipment for the identification and grade marking of cheese, and labels used in lieu thereof, shall be approved by the department before use.

Ag 84.10 Arbitration. In case of disagreement between producers, buyers or supervisors, or any of them, as to the grade of cheese, a neutral party shall be called in to check the findings. In case of fur-

ther disagreement, each party shall select a competent person as an arbitrator and such two arbitrators shall select a third competent person. All three must be present to determine the final grade jointly. The decision of the majority of such arbitrators as to the grade of cheese shall be final. Such arbitrators shall be selected from the list of competent persons compiled by the department from a list submitted by producers and dealers of cheese. The party requesting the arbitration committee shall pay the cost thereof.

Ag 84.11 Moisture and milk fat. Cheese for which grades are prescribed herein shall contain not more than 41% moisture and not less than 43% milk fat in the solids.

History: Cr. Register, September, 1972, No. 201, eff. 10-1-72.