§ 133.179 Pasteurized process cheese spread.

(a)(1) Pasteurized process cheese spread is the food prepared by comminuting and mixing, with the aid of heat, one or more of the optional cheese ingredients prescribed in paragraph (c) of this section, with or without one or more of the optional dairy ingredients prescribed in paragraph (d) of this section, with or without the emulsifying agents prescribed in paragraph (e) of this section, and with or without one or more of the optional ingredients prescribed by paragraph (f) of this section, into a homogeneous plastic mass, which is spreadable at 70 °F.

(2) During its preparation, a pasteurized process cheese spread is heated for not less than 30 seconds at a temperature of not less than 150 °F. When tested for phosphatase by the method prescribed in §133.5(c), the phenol equivalent of 0.25 gram of pasteurized process cheese spread is not more than 3 micrograms.

(3) The moisture content of a pasteurized process cheese spread is more than 44 percent but not more than 60 percent, and the milk fat content is not less than 20 percent.

(4) Moisture and fat are determined by the methods prescribed in §133.5(a) and (b), except that in determining moisture the loss in weight which occurs in drying for 5 hours, under the conditions prescribed in such method, is taken as the weight of the moisture.

(5) The weight of the cheese ingredient referred to in paragraph (a)(1) of this section constitutes not less than 51 percent of the weight of the pasteurized process cheese spread.

(b) Pasteurized process cheese spread may be smoked, or the cheese or cheeses from which it is made may be smoked, before comminuting and mixing, or it may contain substances prepared by condensing or precipitating wood smoke.

(c) The optional cheese ingredients referred to in paragraph (a) of this section are one or more cheeses of the same or two or more varieties, except that skim-milk cheese for manufacturing may not be used, and except that cream cheese, neufchatel cheese, cottage cheese, creamed cottage cheese, cook cheese, hard grating cheese, semisoft part-skim cheese, and part-skim spiced cheese are not used, alone or in combination with each other, as the cheese ingredient.

d) The optional dairy ingredients referred to in paragraph (a) of this section are cream, milk, skim milk, buttermilk, cheese whey, any of the foregoing from which part of the water has been removed, anhydrous milkfat, dehydrated cream, albumin from cheese whey, and skim milk cheese for manufacturing.

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(e) The emulsifying agents prescribed in paragraph (a) of this section are one or any mixture of two or more of the following: Monosodium phosphate, di-sodium phosphate, dipotassium phosphate, trisodium phosphate, sodium metaphosphate (sodium hexametaphosphate), sodium acid pyrophosphate, tetrasodium pyrophosphate, sodium aluminum phosphate, sodium citrate, potassium citrate, calcium citrate, sodium tartrate, and sodium potassium tartrate, in such quantity that the weight of the solids of such emulsifying agent is not more than 3 percent of the weight of the pasteurized process cheese spread.

(f) The other optional ingredients referred to in paragraph (a) of this section are:

1. (i) One or any mixture of two or more of the following: Carob bean gum, gum karaya, gum tragacanth, guar gum, gelatin, sodium carboxymethylcellulose (cellulose gum), carrageenan, oat gum, alginate (sodium alginate), propylene glycol alginate, or xanthan gum. The total weight of such substances is not more than 0.8 percent of the weight of the finished food.

(ii) When one or more of the optional ingredients in paragraph (f)(1)(i) of this section are used, dioctyl sodium sulfosuccinate complying with the requirements of §172.810 of this chapter may be used in a quantity not in excess of 0.5 percent by weight of such ingredients.

2. An acidifying agent consisting of one or any mixture of two or more of the following: A vinegar, lactic acid, citric acid, acetic acid, and phosphoric acid, in such quantity that the pH of the pasteurized process cheese spread is not below 4.0.

3. A sweetening agent consisting of one or any mixture of two or more of the following: Sugar, dextrose, corn sugar, corn sirup, corn sirup solids, glucose sirup, glucose sirup solids, maltose, malt sirup, and hydrolyzed lactose, in a quantity necessary for seasoning.


5. Salt.

6. Harmless artificial coloring.

7. Spices or flavorings other than any which singly or in combination with other ingredients simulates the flavor of a cheese of any age or variety.

8. Pasteurized process cheese spread in consumer-sized packages may contain an optional mold-inhibiting ingredient consisting of sorbic acid, potassium sorbate, sodium sorbate, or any combination of two or more of these, in an amount not to exceed 0.2 percent by weight, calculated as sorbic acid or consisting of not more than 0.3 percent by weight of sodium propionate, calcium propionate, or a combination of sodium propionate and calcium propionate.

9. Pasteurized process cheese spread in consumer-sized packages may contain lecithin as an optional anti-sticking agent in an amount not to exceed 0.03 percent by weight of the finished product.

10. Safe and suitable enzyme modified cheese.

11. Nisin preparation in an amount which results in not more than 250 parts per million nisin in the food.

(g) The name of the food is "pasteurized process cheese spread". The full name of the food shall appear on the principal display panel of the label in type of uniform size, style, and color. Wherever any word or statement emphasizing the name of any ingredient appears on the label (other than in an ingredient statement as specified in paragraph (i) of this section) so conspicuously as to be easily seen under customary conditions of purchase, the full name of the food shall immediately and conspicuously precede or follow such word or statement in type of at least the same size as the type used in such word or statement.

(h) The name of the food shall include a declaration of any flavoring, including smoke and substances prepared by condensing or precipitating wood smoke, that characterizes the product as specified in §101.22 of this chapter and a declaration of any spice that characterizes the product.

(i) Each of the ingredients used in the food shall be declared on the label as required by the applicable sections of parts 101 and 130 of this chapter, except that cheddar cheese, washed curd cheese, colby cheese, granular cheese, or any mixture of two or more of these
§ 133.180 Pasteurized process cheese spread with fruits, vegetables, or meats.

(a) Pasteurized process cheese spread with fruits, vegetables, or meats, or mixtures of these is a food which conforms to the definition and standard of identity, and is subject to the requirements for label statement of ingredients, prescribed for pasteurized process cheese spread by § 133.179, except that:

(1) It contains one or any mixture of two or more of the following: Any properly prepared cooked, canned, or dried fruit; any properly prepared cooked, canned, or dried vegetable; any properly prepared cooked or canned meat.

(2) When the added fruits, vegetables, or meats contain fat, the method prescribed for the determination of fat by § 133.5(b) is not applicable.

(b) The name of a pasteurized process cheese spread with fruits, vegetables, or meats is “Pasteurized process cheese spread with ______”, the blank being filled in with the name or names of the fruits, vegetables, or meats used, in order of predominance by weight.


§ 133.181 Provolone cheese.

(a) Description. (1) Provolone, a pasta filata or stretched curd-type cheese, is the food prepared by the procedure set forth in paragraph (a)(3) of this section, or by any other method which produces a finished cheese having the same physical and chemical properties. It has a stringy texture. The minimum milkfat content is 45 percent by weight of the solids, as determined by the methods described in § 133.5 and the maximum moisture content is 45 percent by weight. If the dairy ingredients used are not pasteurized, the cheese is cured at a temperature of not less than 35 °F for at least 60 days.

(2) If pasteurized dairy ingredients are used, the phenol equivalent value of 0.25 gram of provolone cheese is not more than 3 micrograms as determined by the method described in § 133.5.

(3) One or more of the dairy ingredients specified in paragraph (b)(1) of this section may be bleached, warmed, and subjected to the action of a lactic acid-producing bacterial culture. One or more of the clotting enzymes specified in paragraph (b)(2) of this section is added to set the dairy ingredients to a semisolid mass. The mass is cut, stirred, and heated so as to promote and regulate the separation of whey from the curd. The whey is drained off, and the curd is matted and cut, immersed in hot water, and kneaded and stretched until it is smooth and free from lumps. Antimycotics may be added to the curd during the kneading and stretching process. Then it is cut and molded. During the molding the curd is kept sufficiently warm to cause proper sealing of the surface. The molded curd is then firmed by immersion in cold water, salted in brine, and dried. It is given some additional curing. Provolone cheese may be smoked, and one or more of the other optional ingredients specified in paragraph (b)(3) of this section may be added during the procedure.

(b) Optional ingredients. The following safe and suitable ingredients may be used:

(1) Dairy ingredients. Milk, nonfat milk, or cream, as defined in § 133.3, used alone or in combination.

(2) Clotting enzymes. Rennet and/or other clotting enzymes of animal, plant, or microbial origin.

(3) Other optional ingredients. (i) Blue or green color in an amount to neutralize the natural yellow color of the curd.

(ii) Calcium chloride in an amount not more than 0.02 percent (calculated as anhydrous calcium chloride) by weight of the dairy ingredients, used as a coagulation aid.

(iii) Enzymes of animal, plant, or microbial origin, used in curing or flavor development.

(iv) Safe and suitable antimycotic agent(s), the cumulative levels of which shall not exceed current good manufacturing practice, may be added to the cheese during the kneading and stretching process and/or applied to the surface of the cheese.