Food and Drug Administration, HHS

§ 133.195 Swiss and emmentaler cheese.

(a) Description. (1) Swiss cheese, emmentaler cheese, is the food prepared by the procedure set forth in paragraph (a)(3) of this section, or by any other procedure which produces a finished cheese having the same physical and chemical properties. It has holes or eyes developed throughout the cheese. The minimum milk fat content is 43 percent by weight of the solids and the maximum moisture content is 41 percent by weight, as determined by the methods described in §133.5. The dairy ingredients used may be pasteurized. Swiss cheese is at least 60 days old.

(2) If pasteurized dairy ingredients are used, the phenol equivalent value of 0.25 gram of Swiss 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, or treated with hydrogen peroxide/catalase, and is subjected to the action of lactic acid-producing and propionic acid-producing bacterial cultures. 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 into particles similar in size to wheat kernels. For about 30 minutes the particles are alternately stirred and allowed to settle. The temperature is raised to about 126 °F. Stirring is continued until the curd becomes firm. The acidity of the whey at this point, calculated as lactic acid, does not exceed 0.13 percent. The curd is transferred to hoops or forms and pressed until the desired shape and firmness are obtained. The cheese is then salted by immersing it in a saturated salt solution for about 3 days. It is then held at a temperature of about 50° to 60 °F. for a period of 5 to 10 days, after which it is held at a temperature of about 75 °F. until it is approximately 30 days old, or until the so-called eyes form. Salt, or a solution of salt in water, is added to the surface of the cheese at some time during the curing process. The cheese is then stored at a lower temperature for further curing. One or more of the 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) Coloring.

(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.