

USDA United States
Department of
Agriculture

Agricultural
Marketing
Service

Dairy
Division

USDA Specifications for Vegetable Oil Margarine

Effective August 28, 1996

USDA Specifications for Vegetable Oil Margarine

1.0 Plant Requirements.

Margarine shall be manufactured and packaged in accordance with the applicable requirements contained in 7 CFR Part 58, Grading and Inspection, General Specifications for Approved Plants and Standards for Grades of Dairy Products and inspected by the AMS, Dairy Grading Branch.

2.0 Product Temperature Requirements.

Margarine shall be cooled and maintained between 35⁰ F. to 40⁰ F. (1.6⁰ C. to 4.4⁰ C.) prior to inspection, then tempered to 45⁰ F. to 55⁰ F. (7.2⁰ C. to 12.7⁰ C.) for product evaluation.

3.0 Regulatory.

3.1 Margarine shall comply with all applicable Federal regulations including those contained in the Food and Drug Standard of Identity for Margarine (21 CFR Part 166).

4.0 Composition Requirements.

4.1 **Margarine.**

- *Fat* -- Not less than 80.0 percent.
- *Salt* -- Not more than 2.0 percent.

Note: The margarine shall be made from one or more of the following vegetable oils; canola, safflower, sunflower, corn, soybean, or peanut oil.

5.0 Dairy Ingredients.

Dry dairy products used as ingredients for which there are U.S. grades established (nonfat dry milk, dry whole milk, and dry whey) shall meet the criteria of U.S. Extra Grade. Dairy products for which there are no USDA grades established shall meet the applicable requirements of 7 CFR Part 58. The plants which produce dairy ingredients for use in the margarine shall be approved by the Dairy Grading Branch, Dairy Division, Agricultural Marketing Service, U.S. Department of Agriculture.

6.0 Nondairy Ingredients.

6.1 **Vitamins.**

Margarine shall contain a minimum of 15,000 IU of Vitamin A per pound and may contain Vitamin D. When added, margarine shall contain 1,500 IU of Vitamin D.

6.2 **Stabilizers and emulsifiers.**

Shall be clean and wholesome, and shall be accepted by the U.S. Food and Drug Administration 21 CFR Part 166.110 (b)(4) and (5), and Part 166.110 (b)(6).

6.3 **Food colors.**

Shall be certified by the U.S. Food and Drug Administration as safe for human consumption 21 CFR Part 166.110 (b)(6).

6.4 **Salt.**

Shall be free flowing, refined sodium chloride, and shall meet the requirements of the Food Chemical Codex.

7.0 Quality Requirements.

7.1 **Flavor.**

Shall possess a fine and pleasing buttery flavor. May possess acid, bitter, coarse, flat or oil flavors to a slight degree. A safe and suitable bacterial culture may be added for flavoring.

7.2 **Body and texture.**

Shall possess a smooth, firm and homogeneous texture. Margarine may possess the following body characteristics to a slight degree: ragged boring, chewy, and waxy; or to a definite degree; grainy, gummy, short, sticky, or weak. The margarine shall be free from droplets of moisture.

7.3 **Color and appearance.**

The product shall have a uniform, light to medium yellow color when compared to the USDA Butter Color Standards, except that it may possess mottled, wavy, or streaked to a slight degree.

7.4 **Salt.**

The margarine may be salted or unsalted. Salted margarine may be slightly sharp.

8.0 Microbial Requirements.

Microbial determinations shall be made in accordance with the methods described in the latest edition of Standard Methods for the Examination of Dairy Products, published by the American Public Health Association. Samples shall be taken as often as necessary to insure microbial control.

- *Coliform* -- Less than 10 per gram.
- *E. Coli.* -- Negative.
- *Yeast and Mold* -- Not more than 10 per gram.
- *Standard Plate Count* -- Not more than 1,000 per gram.

8.1 **Analytical testing.**

Laboratory analysis procedures shall be made in accordance with procedures published in accordance with the Dairy Division, Agricultural Marketing Service, U.S. Department of Agriculture, DA INSTRUCTION 918-RL:

<u>Test</u>	<u>Method</u>
Fat	D.1.i. (Kohman)
Salt	D.1.i. (Kohman)

9.0 Official Identification.

Products officially inspected and found to meet these requirements may be identified with the official USDA Quality Approved Inspection Shield.