

Dry Buttermilk (DBM) Standard

Product Definition

Dry Buttermilk is obtained by drying liquid buttermilk that was derived from the churning of butter and pasteurized prior to condensing. DBM has a protein content of **not less than 30.0%**. It may not contain, or be derived from, nonfat dry milk, dry whey, or products other than buttermilk, and contains no added preservative, neutralizing agent, or other chemical. DBM for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Specific Grading Requirements for Extra Grade Dry Buttermilk

Extra Grade is so designated to indicate the highest quality of dry buttermilk. In addition to meeting the foregoing **General Grading Requirements** (see page), it shall meet the following specifications:

Composition/Specifications for Extra Grade Dry Buttermilk

| Classifications | Fat | Moisture | Protein | Titrateable Acidity | Solubility Index | Scorched Particles |
|--|-----------|-----------|------------|--------------------------|------------------|------------------------|
| Spray Dried Extra Grade DBM | Min. 4.5% | Max. 4.0% | Min. 30.0% | Min. 0.10% Max. 0.18% | Max. 1.25 ml | Max. 15.0 mg Disc B |
| Atmospheric Roller Dried Extra Grade DBM | Min. 4.5% | Max. 4.0% | Min. 30.0% | Min. 0.10% Max. 0.18% | Max. 15.0 ml | Max. 22.5 mg Disc C |

Extra Grade DBM Microbiological Analysis

| | |
|----------------------|--------------|
| Standard Plate Count | 20,000 cfu/g |
| Coliform | ≤ 10 cfu/g |

Extra Grade dry buttermilk shall possess a uniform cream to light brown color and be free from lumps except those that break up readily under slight pressure. The reliquefied product shall have a sweet and pleasing flavor and shall have no unnatural or offensive flavors.

Specific Grading Requirements for Standard Grade Dry Buttermilk

Standard Grade includes dry buttermilk that fails in one or more particulars to meet the requirements of Extra Grade, but which meets the following specifications:

Composition/Specifications for Standard Grade Dry Buttermilk

| Classifications | Fat | Moisture | Protein | Titrateable Acidity | Solubility Index | Scorched Particles |
|---|-----------|-----------|------------|--------------------------|------------------|------------------------|
| Spray Dried Standard Grade DBM | Max. 4.5% | Max. 5.0% | Min. 30.0% | Min. 0.10% Max. 0.20% | Max. 2.0 ml | Max. 22.5 mg Disc C |
| Atmospheric Roller Dried Standard Grade DBM | Max. 4.5% | Max. 5.0% | Min. 30.0% | Min. 0.10% Max. 0.20% | Max. 15.0 ml | Max. 32.5 mg Disc D |

Standard Grade DBM Microbiological Analysis

| | |
|----------------------|--------------|
| Standard Plate Count | 75,000 cfu/g |
| Coliform | ≤ 10 cfu/g |

Standard Grade dry buttermilk shall be free from lumps, except those that break up readily under slight pressure. The reliquefied product shall have a fairly pleasing flavor, but may possess slight unnatural flavor and have no offensive flavors.

Methods of Analysis (see pages 49-79)

| Criteria | Reference Method |
|----------------|------------------------|
| Protein | AOAC 991.20 (N x 6.38) |
| Fat | AOAC 989.05 |
| Total Moisture | AOAC 925.45 |

***Optional Test** – Alkalinity of Ash, when tested, shall not be greater than 125 ml 0.1 N HCL/100 g. This requirement is applicable to Extra and Standard Grades, for both spray and roller process dry buttermilk.

Additional ADPI Specifications

| | |
|----------------------------------|-------------|
| Salmonella | negative |
| Listeria | negative |
| Coagulase positive Staphylococci | <10 cfu/g |
| Yeast & Mold | ≤ 100 cfu/g |

Product Labeling

Product should be labeled as: “Dry Buttermilk”

Product Applications and Functionality

Bakery products, frozen desserts, prepared dry mixes, beverages, cheese products, frozen foods, dairy products, salad dressings, snack foods

Storage & Shipping

Product should be stored and shipped in a cool, dry environment with temperatures below 80°F and relative humidities below 65%. Stocks should be rotated and utilized within 6 - 9 mo.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container – i.e., “tote bins,” etc.