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The American Dairy Products Institute, national trade association of the processed dairy products industry, is pleased to present this brochure as a guide in selecting dairy products for use as functional and nutritious ingredients in a broad range of food products.

We invite inquiries seeking further information on the use of dairy products to serve your food applications. If you are interested in dry milk standards, ADPI offers the ADPI Bulletin 916, "Standards for Grades of Dry Milks Including Methods of Analysis." If you are interested in whey standards, ADPI offers the ADPI Bulletin W-16, "Whey & Whey Products – Definitions, Composition, Standard Methods of Analysis." Please contact ADPI if you are interested in these publications.

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Nonfat Dry Milk (NDM)

Production Definition

Nonfat Dry Milk is obtained by the removal of water from pasteurized skim milk. It contains not more than 5% moisture (by weight) and not more than 1.5% milkfat (by weight) unless otherwise indicated. NDM for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	34.0 – 37.0
Lactose	49.5 – 52.0
Fat[2]	0.6 – 1.25
Ash	8.2 – 8.6
Moisture[2]	3.0 – 4.0

Microbiological Analysis

Standard Plate Count[2]	≤ 10,000/g
Coliform[2]	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[2]	7.5 – 15.0 mg
Solubility Index[2]	≤1.2 ml ≤ 2.0 ml – high-heat
Titratable Acidity[2]	≤ 0.15%
Color[2]	white to light cream/natural color
Flavor[2]	clean and pleasing

Ingredient Statement

"Nonfat Dry Milk" (_____ % milkfat) if the fat content is over 1.5%

Production Applications and Functionality

Fluid milk fortification, frozen desserts, cheese, yogurt, dairy beverages, bakery products, custards, gravies, sauces, frozen foods, packaged dry mixes, processed meats, soups, infant formulas, snack foods, cosmetics

Nonfat dry milk is classified for end-product use according to the heat-treatment used in its manufacture.

The classifications are: high-heat, medium-heat and low-heat. *(see page 2)*

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 1 to 1 ½ years.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] USDA Grade parameters (7 CFR §58.2528)

Heat-Treatment Classification of Nonfat Dry Milk

(General Applications for Use Based on Processing Parameters)

Classification	Typical Processing Treatment	Undenatured Whey Protein Nitrogen* *mgs./gm*	A Few Recommended Uses
Low Heat	Cumulative heat treatment of milk not over 160°F for 2 minutes	Over 6.0	Fluid milk fortification, cottage cheese, cultured skim milk, starter culture, chocolate dairy drinks, ice cream
Medium Heat	Preheat to 160° - 175°F for 20 minutes	1.51 – 5.99	Prepared mixes, ice cream, confectionery, meat products
High Heat	Preheat to 190°F for 30 minutes	Under 1.5	Bakery, meat products, ice cream, prepared mixes

** Higher temperatures and/or extended holding times contribute directly to whey protein denaturation. This index is used as a measure of the cumulative heat effects during processing of nonfat dry milk.*

Instant Nonfat Dry Milk (INDM)

Production Definition

Instant Nonfat Dry Milk is nonfat dry milk which has been produced in a manner to substantially improve its dispersing and reconstitution characteristics. If lactose is used as a processing aid, the amount shall be only that necessary to produce the desired effect – not to exceed 2.0% of the weight of the nonfat dry milk. INDM is fortified with Vitamins A and D. The vitamins are added to ensure that each quart of the reconstituted product contains 2000 I.U. of Vitamin A and 400 I.U. of Vitamin D, when prepared according to label directions. While most INDM is used for beverage purposes, INDM which has not been fortified with vitamins may be procured for use as an ingredient in other food products. INDM for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	34.0 – 37.0
Lactose	49.5 – 52.0
Fat[2]	0.6 – 1.25
Ash	8.2 – 8.6
Moisture[2]	3.5 – 4.5

Microbiological Analysis

Standard Plate Count[2]	≤ 10,000/g
Coliform[2]	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[2]	7.5 – 15.0 mg
Solubility Index[2]	≤ 1.0 ml
Titratable Acidity[2]	≤ 0.15%
Dispersibility[2]	≥ 85.0%
Color[2]	white to light cream/natural color
Flavor[2]	sweet, pleasing and desirable

Ingredient Statement

"Instant Nonfat Dry Milk fortified with Vitamins A & D" or "Instant Nonfat Dry Milk fortified with Vitamins A & D (_____ % milkfat)" if the fat content is over 1.5%.

Production Applications and Functionality

Beverages, breads, soups, salad dressings, entrees, desserts, diet drinks (special dietary beverages), infant formulas, cosmetics

To Reconstitute INDM

INDM	+	cold water	=	Liquid Instant Milk
1/3 cup	+	1 cup	=	about 1 cup
1 1/3 cups	+	3 ¾ cups	=	about 1 quart

Storage & Shipping

Keep in a cool, dry place. Unopened packages of INDM can be kept for 6 months to 1 year without refrigeration. Some flavor change may occur if storage and shipping temperatures reach 90°F or above for long periods of time. Refrigerate after mixing with water. The same care should be given to reconstituted dry milk as is given to other fluid milk products.

Packaging

Usually packaged for retail sales in multi-quart bulk packages or individual pre-measured envelopes. Also packaged in multiwall kraft bags and bulk containers.

[1] On an "as is" basis
[2] USDA Grade parameters (7 CFR §58.2753)

Dry Whole Milk (DWM)

Production Definition

Dry Whole Milk usually is obtained by the removal of water from pasteurized milk, which also may have been homogenized. Alternatively, DWM may be obtained by blending fluid, condensed or nonfat dry milk with liquid or dry cream or with fluid, condensed or dry milk, provided the resulting DWM is equivalent in composition. It contains not less than 26% but less than 40% milkfat (by weight) on an "as is" basis and not more than 5% moisture (by weight) on a milk solids-not-fat basis. Optionally, it may be fortified with either Vitamins A or D, or both. The primary DWM products are those having 26.0% and 28.5% milkfat. DWM for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	24.5 – 27.0
Lactose	36.0 – 38.5
Fat[2]	26.0 – 28.5
Ash	5.5 – 6.5
Moisture[2]	2.0 – 4.5

Microbiological Analysis

Standard Plate Count[2]	≤ 10,000/g
Coliform[2]	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[2]	7.5 – 15.0 mg
Solubility Index[2]	≤1.2 ml ≤ 2.0 ml – high-heat
Titratable Acidity[2]	≤ 0.15%
Color[2]	white to light cream/natural color
Flavor[2]	clean and pleasing

Ingredient Statement

"Dry Whole Milk (_____ % milkfat)". If vitamins are added, appropriate declaration shall appear on the package.

Production Applications and Functionality

Confectionery, bakery products, packaged dry mixes, dairy products, soups, sauces, frozen foods, beverage use

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 to 9 months.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins", etc.)* Product also packaged in smaller sizes for retail sale.

[1] On an "as is" basis
[2] USDA Grade parameters (7 CFR §58.2705)

Dry Buttermilk (DBM)

Production 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.

Typical Compositional Range[1]

	Percentage
Protein[2]	≥ 30.0 – 33.0
Lactose	46.5 – 49.0
Fat[2]	4.5 – 7.0
Ash	8.3 – 8.8
Moisture[2]	3.0 – 4.0

Microbiological Analysis

Standard Plate Count[2]	≤ 20,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[2]	7.5 – 15.0 mg
Titratable Acidity[2]	0.10 – 0.18%
Solubility Index	≤ 1.25 ml – spray process ≤ 15.0 ml – roller process
Color[2]	uniform cream to dark cream
Flavor[2]	clean and pleasing

Ingredient Statement

"Dry Buttermilk"

Production 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 to 9 months.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] USDA Grade parameters (7 CFR §58.2654)

Dry Buttermilk Product (DBMP)

Production Definition

Dry Buttermilk Product is obtained by drying liquid buttermilk that was derived from the churning of butter and pasteurized prior to condensing. DBMP has a protein content **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. DBMP for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein[2]	< 30.0
Lactose	48.0 – 55.0
Fat[2]	4.5 – 10.0
Ash	8.6 – 9.2
Moisture[2]	3.0 – 4.0

Microbiological Analysis

Standard Plate Count[2]	≤ 20,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[2]	7.5 – 15.0 mg
Titratable Acidity[2]	0.10 – 0.18%
Solubility Index[2]	≤ 1.25 ml – spray process ≤ 15.0 ml – roller process
Color[2]	uniform cream to light brown
Flavor[2]	clean and pleasing

Ingredient Statement

"Dry Buttermilk Product" The minimum protein content should be stated.

Production Applications and Functionality

Bakery products, prepared dry mixes, frozen desserts, beverages, 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 to 9 months.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] USDA Grade parameters (7 CFR §58.2654)

Dry Whey (Sweet-type)

Production Definition

Dry Sweet-type Whey is obtained by drying fresh whey (derived during the manufacture of cheeses, *i.e. Cheddar and Swiss*), which has been pasteurized and to which nothing has been added as a preservative. It contains all the constituents, except moisture, in the same relative proportion as in the whey. Dry Whey (Sweet-type) for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein[2]	11.0 – 14.5
Lactose	63.0 – 75.0
Fat[3]	1.0 – 1.5
Ash	8.2 – 8.8
Moisture[3]	3.5 – 5.0

Microbiological Analysis

Standard Plate Count[3]	≤ 30,000/g
Coliform[3]	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[3]	7.5 – 15.0 mg
Titratable Acidity[4]	0.10 – 0.15%
Color[3]	off white to cream
Flavor[3]	normal whey flavor
Alkalinity of Ash[2]	≤ 225 ml 0.1N HCL/100G

Ingredient Statement

"Dry (Sweet-type) Whey"

Production Applications and Functionality

Bakery products, process cheese products, frozen desserts, sauces, meat emulsions, salad dressings, beverages, confections, gravies, soups, meat products, 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 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] Optional tests (7 CFR §58.2608)
[3] USDA Grade parameters (7 CFR §58.2605)
[4] Basis for acidity classification (7 CFR §58.2606)

Dry Whey (Acid-type)

Production Definition

Dry Acid-type Whey is obtained by drying fresh whey (derived during the manufacture of cheeses, *i.e., Cottage and Ricotta*), which has been pasteurized and to which nothing has been added as a preservative. It contains all the constituents, except moisture, in the same relative proportion as in the whey. Dry Whey (Acid-type) for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein[2]	11.0 – 13.5
Lactose	61.0 – 70.0
Fat[3]	0.5 – 1.5
Ash	9.8 – 12.3
Moisture[3]	3.5 – 5.0

Microbiological Analysis

Standard Plate Count[3]	≤ 30,000/g
Coliform[3]	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content[3]	7.5 – 15.0 mg
Titratable Acidity[4]	0.35 – 0.44%
Color[3]	off white to cream
Flavor[3]	normal whey flavor; slightly acid

Ingredient Statement

"Dry (Acid-type) Whey"

Production Applications and Functionality

Bakery products, prepared dry mixes, dry blends, salad dressings, snack foods, frozen desserts (sherbets)

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] Optional tests (7 CFR §58.2608)
[3] USDA Grade parameters (7 CFR §58.2605)
[4] Basis for acidity classification (7 CFR §58.2606)

Reduced Lactose Whey (RLW)

Production Definition

Reduced Lactose Whey is obtained by the selective removal of lactose from whey. The lactose content of the dry product may not exceed 60%. Removal of lactose is accomplished by physical separation techniques such as precipitation, filtration or dialysis. The acidity of reduced lactose whey may be adjusted by the addition of safe and suitable pH adjusting ingredients. RLW for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	18.0 – 24.0
Lactose	52.0 –58.0
Fat	1.0 – 4.0
Ash	11.0 – 22.0
Moisture	3.0 – 4.0

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
Color	cream to dark cream
Flavor	normal whey flavor

Ingredient Statement

"Reduced Lactose Whey (_____ % lactose)". The percent of lactose is declared in 5% increments or as actual percentage, provided an analysis of the product is supplied.

Production Applications and Functionality

Infant foods, confections, prepared dry mixes, bakery products, soups, sauces, gravies, dry seasoning blends, salad dressings, frozen foods, meat products

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 to 9 months.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis

Reduced Minerals Whey (RMW)

Production Definition

Reduced Minerals Whey is obtained by the removal of a portion of the minerals from pasteurized whey. The dry product may not exceed 7% ash. Reduced minerals whey is produced by physical separation techniques such as precipitation, filtration or dialysis. The acidity of reduced minerals whey may be adjusted by the addition of safe and suitable pH-adjusted ingredients. RMW for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	11.0 – 15.0
Lactose	70.0 – 80.0
Fat	0.5 – 1.8
Ash	1.0 – 7.0
Moisture	3.0 – 4.0

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
pH	6.2 – 7.0
Color	cream to dark cream
Flavor	normal whey flavor

Ingredient Statement

"Reduced Minerals Whey (_____ % minerals)". The percent of minerals is declared in 2% increments or as actual percentage, provided an analysis of the product is supplied.

Production Applications and Functionality

Infant foods, dairy products, dry blends, wet blends, confections, prepared dry mixes, bakery products, soups, sauces

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis

Whey Protein Concentrate (WPC)

Production Definition

Whey Protein Concentrate is the substance obtained by the removal of sufficient nonprotein constituents from pasteurized whey so that the finished dry product contains ≥ 25% protein. WPC is produced by physical separation techniques such as precipitation, filtration or dialysis. The acidity of WPC may be adjusted by the addition of safe and suitable pH adjusting ingredients. WPC for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	34.0 – 80.0
Lactose	10.0 – 55.0
Fat	1.0 – 10.0
Ash	4.0 – 8.0
Moisture	3.0 – 4.0

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
pH	6.0 – 6.7
Color	white to light cream
Flavor	bland, clean

Ingredient Statement

"Whey Protein Concentrate (_____ % protein)". The percent of protein is declared in 5% increments or as actual percentage, provided an analysis of the product is supplied.

Production Applications and Functionality

Dairy products, dry blends, wet blends, prepared dry mixes, soft drinks/special dietary foods, infant foods, bakery products, confections, frozen desserts

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis

Whey Protein Isolate (WPI)

Production Definition

Whey Protein Isolate is obtained by the removal of sufficient nonprotein constituents from whey so that the finished dry product contains not less than 90% protein. WPI is produced by physical separation techniques such as precipitation, membrane filtration and/or ion exchange. The acidity of WPI may be adjusted by the addition of safe and suitable pH adjusting ingredients. WPI for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	92.0
Lactose	0.5
Fat	1.0
Ash	2.0
Moisture	4.5

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
Color	cream
Flavor	bland, clean

Ingredient Statement

"Whey Protein Isolate (_____ %) protein)". The present of protein is declared in 2% increments or as actual percentage, provided an analysis of the product is supplied.

Production Applications and Functionality

General protein supplement, protein functionality for gelation (yogurts, pudding), whipping (topping and filling), water-binding (meat, sausage), and emulsification (ice cream, margarine, mayonnaise)

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis

Lactose (Milk Sugar)

Production Definition

Lactose (Milk Sugar) is a white to creamy white crystalline product, possessing a mildly sweet taste. It may be anhydrous, contain one molecule of water of hydration, or be a mixture of both forms. Lactose for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	0.1
Lactose[2]	98.0 min.
Fat	0
Ash[2]	0.1 – 0.3
Moisture[2]	4.0 – 5.5

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
pH[2]	4.5 – 7.5
Color	white to pale yellow
Flavor	slightly sweet

Ingredient Statement

"Lactose" or "Milk Sugar"

Production Applications and Functionality

Infant foods, chemicals/pharmaceuticals, dairy, prepared dry mixes, bakery products, soft drinks/special dietary foods, confections

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis
[2] FDA Standard Requirements (21 CFR §168.122)

Dairy Products Solids (DPS)

Production Definition

Dairy Product Solids are modified dairy products (permeates and products derived there from) obtained by the removal of protein and/or lactose, and/or minerals from milk or whey. The product is appropriately labeled to reflect the maximum protein and ash, and the minimum lactose contents. Removal of the dairy constituents is accomplished by physical separation techniques such as precipitation, filtration or dialysis. The acidity of DPS may be adjusted by the addition of safe and suitable pH adjusting ingredients. DPS for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Typical Compositional Range[1]

	Percentage
Protein	3.0 – 8.0
Lactose	65.0 – 85.0
Fat	0.0 – 1.0
Ash	8.0 – 20.0
Moisture	3.0 – 5.0

Microbiological Analysis

Standard Plate Count	≤ 30,000/g
Coliform	≤ 10/g
Salmonella	negative
Listeria	negative
Coagulase-positive Staphylococci	negative

Other Characteristics

Scorched Particle Content	7.5 – 15.0 mg
pH	5.7 – 6.5
Color	white to cream
Flavor	bland, clean

Ingredient Statement

"Dairy Product Solids (max. _____ % protein, max. _____ % ash, min. _____ % lactose)". A 10% range allowed provided an analysis of the product is supplied.

Production Applications and Functionality

Bakery products, fermentation, sugar and corn syrup replacers

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 9 months to 1 year.

Packaging

Multiwall kraft bags with polyethylene inner liner or other approved closed container. *(i.e. "tote bins," etc.)*

[1] On an "as is" basis