



Agricultural Marketing Service
Commodity Procurement Program
P.O. Box 419205, Mailstop 8718
Kansas City, MO 64141-6205

USDA COMMODITY REQUIREMENTS

DNAC6 **NATURAL AMERICAN CHEESE**

FOR USE IN DOMESTIC PROGRAMS

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Part 1 COMMODITY SPECIFICATIONS

Section 1.1 COMMODITIES

A. Product Requirements

Except as otherwise required, the natural American cheese shall comply with the appropriate definition and standard of identify, and all regulations issued pursuant to the Federal Food, Drug, and Cosmetic Act, relevant to cheese (21 Code of Federal Regulations (CFR) Parts 1-199, including Parts 133.113 for Cheddar cheese, Part 133.118 for Colby cheese, Part 133.144 for Granular cheese, and Part 133.146 for grated cheese), as appropriate, for the type of natural American cheese specified in the solicitation.

B. Regulatory Requirements

- (1) The cheese shall comply with all applicable Federal regulations including, **but not limited to**, those contained in 21 CFR § 133.113 for cheddar cheese, 21 CFR §101.13 for general principles for nutrient content claims, [21 CFR §101.62 for nutrient content claims for fat, fatty acid, and cholesterol content of foods](#), and 21 CFR § 130.10 *Requirements for foods named by use of a nutrient content claim and a standardized term*. The shredded cheese shall also comply with 21 CFR § 133.146 for grated chesses.
- (2) The cheese shall be prepared and packaged in accordance with good manufacturing practices (21 CFR Part 110).
- (3) The delivered cheese shall comply with all applicable Federal and State mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of the cheese within the commercial marketplace. The delivered cheese shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated there under. The cheese shall comply with the allergen labeling requirements of the Federal Food, Drug, and Cosmetic Act.

C. Production Requirements

- (1) The cheese delivered to the Government shall have been manufactured from pasteurized milk that was produced in the United States and not previously owned by the Government, and in plants that were inspected and approved by the Dairy Grading Branch, Dairy Programs, Agricultural Marketing Service (AMS). The USDA AMS plant approval code must match the appropriate product or operation code for the commodity being offered.
- (2) All dairy ingredients shall be pasteurized at a temperature of not less than 71.7°C (161°F) for a period of not less than 15 seconds, or for a time and at a temperature equivalent thereto in phosphatase destruction.
- (3) Dairy ingredients used in the manufacture of cheese shall originate from a plant that has been approved by the Dairy Grading Branch (DGB), Dairy Programs (DP), Agricultural Marketing Service (AMS), USDA. The USDA AMS plant approval code must match the appropriate product or operation code for the dairy ingredient being used.
- (4) Cheese used for cutting shall be clean, free from impurities, mold, rindrot, soft spots, salt spots, pests, and other similar defects.

- (5) A mold inhibitor may be applied in accordance with the Federal Food, Drug, and Cosmetic Act.
- (6) All surfaces of the barrel cheese shall be reasonably smooth and closed to inhibit mold growth and penetration. However, if the surface is treated with an antimycotic and/or vacuum sealed, definite rough surface will be allowed. Each lot shall contain only one type and size container. Barrel cheese may contain a reasonable amount of whey on the surface of the cheese and the liner. "Reasonable" means droplets but less than flowing whey on the cheese or the interior of the liner. Barrel cheese may not have visible mold at the time of grading.
- (7) Cheese which deviates from the specifications contained herein will be rejected or, at the discretion of the contracting officer, accepted at discounts to be determined by the Government.
- (8) Notwithstanding the other provisions of this section, the presence of any extraneous material in the natural American cheese will be the basis for rejection.

D. Product Age, Temperature and Grade Requirements

Cheese product age and temperature requirements shall comply with the following:

Requirement	Description
Product Age	<p>No lot may contain cheese having a variation of over 30 days in dates of manufacture.</p> <p>All cheese shall be at least 10 days old when graded except Reduced Fat, which shall be at least 20 days old when graded.</p> <p>The cheese shall be aged at 38° to 42°F (3.3° to 7.2°C) prior to inspection. This aging may take place before or after the cheese is shredded.</p>
AMS Grading	<p>Barrel cheese shall be U.S. Extra Grade.</p> <p>Cheddar cheese shall be U.S. Grade A or higher.</p>
Contractor Grading	<p>Barrel cheese shall be equivalent to U.S. Extra Grade.</p> <p>Cheddar cheese shall be equivalent to U.S. Grade A or higher.</p>
Temperature	<p>Immediately after aging & physical analysis is completed, cheese shall be placed in a cooler and the product temperature reduced to 32° - 40°F within a 24-hour period and held at such temperature until delivered.</p> <p>At the time of delivery, the cheese shall have a temperature of no higher than 45°F.</p>

D. Composition Requirements

Cheese composition requirements shall comply with the following:

Composition	Cheddar	Reduced Fat Cheddar	Barrel Cheese	Report test to the nearest:
Milk fat %	Not less than 50% by weight of the solids	Range 19.2% - 22.9% by total weight	Not less than 50% by weight of the solids	0.1%
Moisture %	No vat more than 39%	No vat more than 49%	No vat more than 35%	0.1%
Salt %	Not to exceed 2%	Not to exceed 2%	Not to exceed 2%	0.1%
Sodium	No more than 200 mg of Sodium per 28 gram serving	No more than 200 mg of Sodium per 28 gram serving	No more than 200 mg of Sodium per 28 gram serving	N/A
pH value¹	No vat may have a pH value higher than 5.30, except shredded cheese, which shall not have a pH value higher than 5.35			0.01 value
Notes: Shredded cheese allows for 1% less milk fat than the standard of identity for cheddar cheese.				
Reduced fat cheddar cheese shall contain between 1/4 to 1/3 less milk fat than that of traditional cheddar cheese.				

E. Physical Analysis

Barrel, cheddar, and reduced fat cheddar cheese physical analysis requirements shall comply with the following:

Barrel Cheese U.S. Extra Grade	Cheddar, Blocks/Prints, Slices U.S. Grade AA	Cheddar, Blocks/Prints, Slices U.S. Grade A
Flavor: Cheese shall possess a pleasing flavor characteristic of the variety and type of cheese packaged in barrels. The barrel cheese may contain a very slight bitter taste and slight acid and feed flavor, but shall not possess any undesirable flavor or odors as listed in the U.S. Standards for Grades of Bulk American Cheese, which are available at https://www.ams.usda.gov/grades-standards/bulk-american-cheese-grades-and-standards	Flavor: Cheese shall be fine and highly pleasing. The cheese may be lacking in flavor development or may possess slight characteristic cheddar cheese flavor. The cheese also may possess a very slight feed flavor, but shall be free from any undesirable flavors and odors.	Flavor: Cheese shall possess a pleasing flavor. It may be lacking in flavor development or may possess slight characteristic Cheddar cheese flavor. It may possess very slight acid, or slight feed, but shall not possess any undesirable flavors and odors.

¹ If a re-test of the product is required, the quinhydrone method will be used by AMS laboratories.

<p>Body and Texture: The cheese shall be firm and sufficiently compact to draw a plug for examination. The cheese may be slight coarse, mealy, open (except for Colby), short, weak, and curdy to definite degree, but it shall not be corky, crumbly, gassy, pasty, pinny, slitty, or have sweet holes. Mechanical openings are permitted in all types of the cheese except cheddar.</p>	<p>Body and Texture: A plug drawn from the cheese shall be firm, appear smooth, compact, close and should be slightly translucent, but may have a few small mechanical openings. The cheese may be very slight open and definitely curdy or may be partially broken down if more than 3 weeks old. Shall be free from sweet holes, yeast holes, and gas holes of any kind. The surface shall be free of mold, but may be very slightly soiled.</p>	<p>Body and Texture: A plug drawn from the cheese shall be firm, appear smooth, compact, close and should be slightly translucent, but may have a few mechanical openings, if not large and connecting. May possess not more than two sweet holes per plug, but shall be free from other gas holes. The cheese may be slight open and definitely curdy or partially broken down if more than 3 weeks old. The surface shall be free of mold. The 40 pound blocks surface may be very slightly soiled and slightly rough. The 40 pound blocks may be slightly lopsided.</p>
<p>Color: The barrel cheese shall be uncolored.</p>	<p>Color: The cheese shall have a uniform, bright attractive appearance; practically free from white lines or seams. May be colored or uncolored, but if colored, it should be a medium yellow-orange.</p>	<p>Color: The cheese shall have a fairly uniform, bright attractive appearance. May have slight white lines or seams, or be very slightly wavy. May be colored or uncolored, but if colored, it should be a medium yellow-orange.</p>

Shredded Cheddar	Shredded RDU FAT Cheddar
<p>Flavor: Cheese shall have a mild pleasing flavor. It may be lacking in flavor development, or may possess characteristic cheddar cheese flavor. Shredded cheddar cheese shall meet the flavor requirements of U.S. Grade A or better according to the U.S. Standards for Grades of Cheddar Cheese, which are available at https://www.ams.usda.gov/grades-standards/cheddar-cheese-grades-and-standards</p>	<p>Flavor: Reduced fat cheddar cheese shall have a pleasing flavor. It may be lacking in flavor development or may possess slight characteristic cheddar cheese flavor. It may possess very slight acid, bitter, or slight feed, but shall not possess any undesirable flavors and odors.</p>

<p>Body and Texture: Shredded cheddar cheese may have the following body and texture characteristics to a slight degree: mealy, weak, or pasty. The cheese shall be free from all foreign and extraneous materials. Shredded cheddar cheese shall have a height and width up to 3/16 inch in either dimension. Shredded Cheddar cheese shall be free flowing and shall not be matted. An approved anticaking agent may be added as a processing aid. If an anticaking agent is used, the amount used shall be the minimum required to produce the desired effect, but shall not exceed 2.0% of the weight of the shredded cheddar cheese.</p>	<p>Body and Texture: Shredded cheese shall be free flowing and of uniform size and shape. It shall not mat, crumble, oil off, or contain excessive fines.</p>
<p>Color and Appearance: Shredded cheddar cheese shall have a uniform bright color, and an attractive sheen. The cheese may be colored or uncolored, but if colored, it shall be a medium yellow-orange. No visible signs of mold shall be permitted.</p>	<p>Color: The cheese shall have a uniform, bright attractive appearance, and may be slightly wavy. May be colored, or uncolored, but if colored, it shall be medium yellow-orange. The shredded cheese shall not vary in color.</p>
<p>Fines: Shredded cheddar cheese shall contain not more than 6.0% fines. For shreds whose height and/or width is 1/16 inch or less, the fines content shall be determined using a Standard Test Sieve #14 (1.4 mm). For shreds whose height and/or width is greater than 1/16 inch, the fines content shall be determined using Standard Test Sieve #8 (2.36 mm).</p> <p>Note: The manufacturer shall provide shred size information. This information will determine the sieve used to measure the fines content. If shred size information is not provided, the Standard Test Sieve #8 will be used.</p>	<p>Fines: Shredded RDU FAT Cheddar cheese shall contain not more than 6.0% fines. For shreds whose height and/or width is 1/16 inch or less, the fines content shall be determined using a Standard Test Sieve # 14 (1.4 mm). For shreds whose height and/or width is greater than 1/16 inch, the fines content shall be determined using a Standard Test Sieve # 8 (2.36mm).</p> <p>Note: The manufacturer shall provide shred size information. This information will determine the sieve used to measure the fines content. If shred size information is not provided, the Standard Test Sieve # 8 will be used.</p> <p>Meltability: The cheese shall have been tested for meltability in accordance with AMS Methods of Laboratory Analysis, DA Instruction No. 918-RL, and shall be at No. 3 or higher.</p>

- F. Preparation of sample. A minimum of 100 g (3.5 oz) of cheese must be blended to uniformity in a minimum time using a Robot Coupe food processor (AOAC method 983.18) or equivalent. This uniform sample may then be used in the analyses for fat, moisture, salt, and pH. For the meltability test using a loaf, either manually shred 100g (3.5 oz) through a 6.4 mm (¼ in) shredder or a mechanical shredder. No further processing is required for the meltability testing of the shredded samples.
- G. Manufacturer's/Distributor's Product Assurance. The manufacturer/distributor shall certify that the cheese provided shall meet the requirement of this CRD, conform to their own specifications, standards, and quality assurance practices, and be the same cheese offered for sale in the commercial market. The USDA reserves the right to require proof of conformance.

- H. **Liability**
The contractor shall be liable for losses due to excessive deterioration, mold development, or spoilage, which are discovered within **150 days from pack date (blocks, shreds) or 120 days from pack date (shreds, slices)**. The liability for reduced-fat cheddar cheese shall be five months from the date of delivery.

Section 1.3 QUALITY ASSURANCE

- A. The contractor or AMS shall perform the product testing and quality analysis to ensure that the product meets the commodity specifications. The results shall be evidenced by a Certificate of Analysis (COA) maintained by the contractor. The meltability, percentage of moisture, milkfat, salt, fines and pH value as well as the quality, date(s) of manufacture, and weight of the natural American cheese shall be evidence by certificates issued by AMS, an independent commercial laboratory using AOAC International approved methodology, or the contractor's laboratory that complies with the inspection clause in the contract. The contracting officer may require submission of COAs representing contract performance.
- B. Contractors shall notify the Government immediately of lots that fail to meet contract requirements.
- C. **Manufacturer's/distributor's certification.** When the contractor performs quality assurance, the manufacturer/distributor will certify that the cheese distributed meets or exceeds the requirements of this CRD.
- D. **USDA certification.** When AMS performs quality assurance, the USDA, AMS, DP, DGB, shall be the certifying program. DGB inspectors shall certify the quality and acceptability of the cheese in accordance with DGB procedures which include selecting random samples of the cheese, evaluating the samples for conformance with the salient characteristics of this CRD and other contractual requirements, and documenting the findings on official DGB certificates. In addition, when required in the solicitation, contract, or purchase order, DGB inspectors will examine the cheese for conformance to the United States Standards for Condition for Food Containers in effect on the date of the solicitation. To qualify for this option the plant must be listed in Dairy Plants Surveyed and Approved for USDA Grading Service. The USDA AMS plant approval code must match the appropriate product or operation code for the commodity being manufactured.
- E. **USDA INSPECTION NOTES.** USDA certification shall include evaluation of the quality and condition of samples of the cheese and compliance with requirements in the following areas.
- (1) Natural American Cheese Requirements (Sec 1.1).
 - (2) Composition Requirements (Sec. 1.1 D). When USDA testing of cheese is specified, DGB inspection personnel shall select samples and submit them to the USDA, Science and Technology Programs (S&TP) laboratory for analysis.
 - (3) Packaging requirements (Part 2).

Section 1.4 WEIGHT REQUIREMENTS

- A. The cheese shall be packaged in approximately 40 pound blocks or other sizes stated in the offer and accepted by the Government. [Shredded cheese may be packaged in 1, 2, or 5 pound packages as specified in the solicitation](#), and barrel cheese is packaged in a 500 pound drum.
- B. For random weight blocks and cuts, contractor shall deliver the number of units specified by the Government. For barrel cheese, the actual net weight delivered shall not vary more than 2% from the net weight specified by the Government.
- C. Block cheese shall weigh not less than 40 pounds net weight but not more than 44 pounds net weight. Print cheese shall weigh not less than ten (10) pounds net weight but not more than 11 pounds net weight. Cheese that varies from the net weight requirements shall be rejected or, at the discretion of the contracting officer, accepted at discounts to be determined by the Government.
- D. Individual shipping containers of shredded cheese packed in 6/5 pound pouches shall weigh not less than 29.85 pounds. [Additional package configurations, such as 1 and 2 pound bags, will be listed in the solicitation as applicable](#). The total net weight of all exact weight shipping containers test weighed by AMS from a lot shall not vary more than one-tenth (0.1) of the one percent under the aggregate marked net weight of all shipping containers within the lot.
- E. For sliced cheese, individual slices shall weigh 0.50 oz. or 0.75 oz. as indicated in the solicitation.

Part 2 CONTAINER AND PACKAGING REQUIREMENTS

Section 2.1 GENERAL

This part provides the container specifications and packaging materials requirements used under the contract.

Section 2.2 COMMERCIAL PACKAGING REQUIREMENTS

- A. Contractors shall supply commercial brand products only and shall certify at the time of submission of an offer that the commercial product being delivered has a history of successful distribution and use in domestic commercial channels and is sold on the commercial market with an established level of consumer acceptance.
- B. Container and packaging requirements are those used in the current commercial shipping practices and shall comply with:
 - (1) Unitization requirements in Section 2.4.
 - (2) At contractor's option, a statement such as "Not for Retail Sale" may be printed on the principal display panel of the food label.
 - (3) The manufacturer's lot code/lot identification number shall be shown on the commercial bill of lading.
 - (4) Shipping containers shall be marked to show the maximum safe stacking height. It is the responsibility of the contractor in cooperation with the shipping container manufacturers to determine the safe stacking height.

- (5) For identification upon receipt at delivery warehouses, all commercial-labeled product shipping documents shall specify “FOR USDA FOOD DISTRIBUTION PROGRAMS.”

C. A company name or brand name shall be shown on all shipping containers.

Section 2.3 CONTAINERS AND MATERIALS

A. All containers and packaging shall be constructed to meet the requirements of the Food and Drug Administration (FDA) for safe contact with the packaged product. The contractor shall obtain and maintain documentation from the container or packaging material manufacturer to verify that the containers and packaging materials used in this contract were in compliance with the Government’s regulatory requirements for safe contact with food products as required below:

1. Regulatory Requirements for Commodities and Packaging
2. The commodity shall conform to the applicable provisions of the "Federal Food, Drug, and Cosmetic Act" (21 U.S.C. 301 et. seq.), as amended, and the relevant regulations. The contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations related to its performance under this contract.
3. All containers and packaging materials shall be constructed to meet the requirements of the Food and Drug Administration for safe contact with the packaged product.
4. In addition, all containers and packaging materials shall be constructed to comply with the sum concentration levels of lead, cadmium, mercury, and hexavalent chromium addressed by the Coalition of Northeast Governors (CONEG) model legislation. The sum of the concentration levels of lead, cadmium, mercury, and/or hexavalent chromium present in any package or packaging component shall not exceed 100 parts per million. Concentration levels shall be determined using American Standard of Testing Materials test methods, as revised, or U.S. Environmental Protection Agency test methods for evaluating solid waste, S-W 846, as revised.

B. If the contractor purchases packaging and container ingredients from a foreign country and/or the package and container is manufactured in a foreign country, the package and container SHALL NOT display country of origin labeling. Phrases including, but not limited to, “Made in [Name of Foreign Country.]” or “Product of [Name of Foreign Country.]” are strictly prohibited.

Section 2.4 UNITIZATION REQUIREMENT

Shipments shall comply with the following unitization requirements:

A. Unless otherwise specified by the Government, all shipments of packaged products

shall be unitized (palletized and stretch wrapped).

- B. Pallets shall be:
 - (1) Constructed to facilitate the safe handling and transportation of the packaged product, as a unit, without loss or damage.
 - (2) A Number 2, four-way, reversible flush stringer with no broken runners or slats.
 - (3) Suitable for use in the shipment of food products.

- C. Plastic stretch wrap shall be:
 - (1) Constructed of a plastic film which is to be stretched a minimum of 50 percent beyond its original length when stretched around the pallet load.
 - (2) Applied as tightly as possible around all tiers of the palletized shipping containers. The shipping containers shall be held firmly in place by the stretch wrap.

- D. Pallet loads shall be:
 - (1) Stacked in such a way as to minimize the amount that shipping containers overhang the edges of pallets.
 - (2) Blocked and braced or otherwise loaded into the conveyance in a manner that prevents shifting during transit.

Section 2.5 MONTH/YEAR OF PACK

- A. The month/year of pack shall be shown on all [primary packaging \(immediate containers\)](#) and shipping containers.

- B. A date fill code may be applied in addition to, but not in lieu of, the month, [day](#), year, and [time](#) of pack.

Section 2.6 LOT CODE/CERTIFICATE NUMBER

A lot code or official inspection certificate number shall be legibly marked on all primary shipping materials. Contractors may use any type of lot coding system, provided a unique code is used to identify each lot under a contract. When requested contractors shall provide to the Government an explanation of the lot coding system utilized.