

**USDA
COMMODITY REQUIREMENTS DOCUMENT
(CRD)**

**DMOZ2
MOZZARELLA CHEESE
FOR USE IN DOMESTIC PROGRAMS**

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Part 1 COMMODITY SPECIFICATIONS

Section 1.1 MOZZARELLA CHEESE REQUIREMENTS

A. Quality of Product

- (1) Except as otherwise required, the natural mozzarella cheese (cheese) shall comply with the appropriate definition and standard of identity, 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 133.155 through 133.158, as appropriate for the type of mozzarella cheese specified in the solicitation.

B. 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 Division, Agricultural Marketing Service (AMS). The USDA AMS plant approval code must match the appropriate product or operation code for the commodity being manufactured.
- (2) **The cheese shall be prepared and packaged in accordance with good manufacturing practices (21 CFR Part 110).**
- (3) **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.**
- (4) **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.**
- (5) The curd manufacturing shall be performed at the same plant as the mixing and molding.
- (6) 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.
- (7) Notwithstanding the other provisions of this section, the presence of any extraneous material in the cheese will be the basis for rejection.
- (8) **The cheese shall comply with all applicable Federal regulations including those contained in 21 CFR § 133.155 for mozzarella cheese, 21 CFR § 101.56 for food nutrient content claims for light or lite, 21 CFR §101.13 for general principles for nutrient content claims, 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.**

C. Product Age and Temperature Requirements

Each vat of Low Moisture Part-Skim and Lite Mozzarella cheese shall comply with the following product age and temperature requirements:

Requirement	Description
Aging	Cheese shall be aged not less than 5 days and not more than 15 days at 38° to 42° F (3.5° to 5.5° C), unless the cheese is manufactured and immediately shredded and frozen. (i.e. Individual Quick Frozen [IQF])
Testing and Inspection	Immediately after the aging process is completed, the following shall be performed: <ul style="list-style-type: none"> • Product samples pulled and submitted for product testing; and • Physical analysis.
Frozen	<p>Immediately after physical analysis is completed, cheese shall be placed in a freezer and the product temperature reduced to 20° F (-6.7° C) within a 24-hour period and held at such temperature until delivered.</p> <p>Exception: If such freezer space is unavailable at the manufacturing plant, the contractor may transport the cheese to a freezer facility at another location provided that the shipment to such facility is completed within 24 hours after the physical analysis is completed. During transportation, the cheese must be maintained at temperatures not higher than 35° F (1.7° C). Contractors are cautioned to take care that the cheese is not crushed or misshaped during the transport from the plant to the freezer facility. Once the cheese is delivered to the alternate facility, it shall be placed in a freezer and the product temperature reduced to 20F (- 6.7° C) and held at such temperature until delivered.</p> <p>Cheese may be manufactured and frozen prior to offering to the Government. All frozen cheese may not be more than 180 days old on the date of delivery based on the date of manufacture as shown.</p>
Unfrozen	<p>Cheese to be delivered unfrozen shall be maintained at a temperature between 32 to 36° F (0° to 2.2° C) after the physical analysis has been completed.</p> <p>All unfrozen cheese shall be delivered within 19 days of manufacture date.</p>

D. Composition Requirements

Each vat of Low Moisture Part-skim mozzarella and Lite mozzarella cheese shall comply with the following composition requirements:

Composition	Low Moisture Part-skim Mozzarella	Lite Mozzarella	Report test results to the nearest:
Milk fat %	Greater than or equal to 30% but less than 45% by weight of the solids	Not more than 10.8% (as marketed)	0.1%
Moisture %	Greater than 45%, but equal to or less than 50%	Range 52.0% - 60.0%	0.1%
Salt %	Range 1.2% - 1.6%	Range 1.2% - 1.6%	0.1%
pH value ¹	Range 5.0 – 5.4	Not to exceed 5.3	0.01 value

E. Physical Analysis

The following physical attributes are required for each vat of Low Moisture Part-Skim (LMPS) and Lite Mozzarella cheese:

General Requirements	
Physical Attributes	Description for all Mozzarella Unless Specifically Noted
Flavor and Odor	<ul style="list-style-type: none">• Shall have a mild pleasing flavor and may possess a slight acid and slight feed flavors, but not possess any undesirable flavors or odors.• Vinegar flavor will not be acceptable.
Color	<ul style="list-style-type: none">• Shall have a natural white to light cream, uniform bright color, and an attractive sheen.• The loaf style may possess waviness to a very slight degree and may have a slight variation in color due to salt penetration.
Body and Texture	<p>Loaf style:</p> <ul style="list-style-type: none">• A slice or plug drawn shall be flexible. (Except for lite mozzarella.)• Shall be smooth and pliable, and shall not possess sweet holes or be gassy.• Shall be free from all foreign and extraneous materials• May possess the following defects to a slight degree:<ul style="list-style-type: none">- open- lacking flexibility

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

	<ul style="list-style-type: none"> - mealy - weak <p>Note: Lite mozzarella may also be sticky and rubbery to a slight degree.</p>
Meltability	<ul style="list-style-type: none"> • When a pizza is baked in a preheated conventional oven at 425°F for 12 minutes and a pizza is baked in an impinger oven at 475°F for 6 minutes, the cheese must: <ul style="list-style-type: none"> - melt completely; - not exhibit shreds of unmelted cheese or excessive blistering; - any blistering must be light brown in color - stretch to a minimum of 3 inches of unbroken string; and may be chewy but not gummy. <p>* The test results for meltability shall be reported in accordance with DA Instruction 918-RL, Laboratory Methods and Procedures.</p>
Appearance	No visible signs of mold.
Additional Shredded Requirements	
Body and Texture	<ul style="list-style-type: none"> • May also be coarse and pasty to a slight degree. • Shall be shredded to a nominal: height and width of: 1/8 inch x 1/8 inch or 1/16 inch x 1/16 inch • Length of 1/8 inch to 1 1/2 inches. • Shall be loose and free from clumps except those that readily break up with slight pressure. • Shall be free flowing and shall not be matted. An approved anti-caking agent may be used as a processing aid. If an anti-caking 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 cheese.
Fines	<ul style="list-style-type: none"> • Shall contain not more than 8.0% fines. • Test results shall be reported to the nearest 0.1%. • Fines shall be tested using a U.S. Standard Test Sieve: <ul style="list-style-type: none"> - #8 for a size greater than 1/16 inch x 1/16 inch shreds. - #14 (1.4 mm) for 1/16 inch x 1/16 inch shreds or less.

- 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. Regulatory Requirements.** 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 cheese within the commercial marketplace. The delivered a cheese shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder. The cheese shall comply with the allergen labeling requirements of the Federal Food, Drug, and Cosmetic Act. When the cheese is used for the National School Lunch Program, the cheese must comply with all applicable provisions of the Child Nutrition Programs.
- I. Liability**
- (1) Frozen Cheese - The contractor shall be liable for losses due to excessive deterioration, mold development, or spoilage, which are discovered within 180 days of the date of delivery to the Government.
 - (2) Unfrozen Cheese - The contractor shall be liable for losses due to excessive deterioration, mold development or spoilage which are discovered within 30 days of the date of delivery to the Government.

Section 1.2 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 quality, date(s) of manufacture, and weight of the cheese shall be evidenced by a Certificate of Analysis (COA) maintained by the contractor. The COAs shall be issued by AMS, an independent commercial laboratory using AOAC International approved methodology, or the contractor's laboratory that complies with the inspection

clause of this 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.**
 - **Mozzarella Cheese Requirements (Sec 1.1).**
 - **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.**
 - **Packaging requirements (Part 2).**

Section 1.3 WEIGHT REQUIREMENTS

The cheese delivered shall be packaged as indicated in the table below.

Type of Mozzarella	Shredded, Frozen or Unfrozen	Net Weight Packaging Options
Low Moisture Part Skim (LMPS)	Shredded, Frozen	30 pound box
	Frozen	8/6 pound loaves
	Unfrozen, Processor Packs ²	200/5 pound tote 120/6 pound tote 96/10 pound tote

² Unfrozen LMPS Mozzarella shall be packaged in totes (master bag). Cheese packaged in totes CANNOT be individually wrapped.

		96/12 pound tote 60/20 pound tote 48/20 pound tote 72/20 pound tote
Lite	Shredded, Frozen	30 pound box
	Frozen	8/6 pound loaves

Part 2 CONTAINER AND PACKAGING REQUIREMENTS

Section 2.1 GENERAL

This part provides the container specifications and packaging materials requirements used under this 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 in the Master Solicitation, Part 3, Section A, Number 3.

- B. Questions concerning the containers and materials should be directed to:
USDA/FSA/DACO
Room 5755 – South Bldg, STOP 0551
1400 Independence Avenue SW
Washington, DC 20250-0551
ATTN: Packaging
- C. 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 similar to but not inclusive of, “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 shipping containers.
- B. A date fill code may be applied in addition to, but not in lieu of, the month/year 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.