

USDA COMMODITY REQUIREMENTS

MC6

MACARONI AND CHEESE FOR USE IN DOMESTIC PROGRAMS

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Part 1 COMMODITY SPECIFICATIONS

Section 1.1 COMMODITIES

A. Pasta Specifications

- (1) All wheat shall be tested for vomitoxin in accordance with procedures approved by Federal Grain Inspection Service (FGIS). Any wheat testing higher than 2 parts per million (p.p.m.) shall not be used in production of the commodity. The final product shall not contain more than 1 p.p.m. of vomitoxin.
- (2) The commodities delivered shall meet the requirements as specified in the Commercial Item Description for Pasta Products, Enriched (CID) A-A-20062D (May 20, 2005), available at: <http://www.ams.usda.gov/fqa/aa20062d.htm>, except for the following:
 - (a) Only semolina flour shall be used.
 - (b) Only enriched elbow style macaroni shall be used.
 - (c) Size of the elbow style macaroni shall be:

Thickness	0.034 inch to 0.057 inch
Diameter	0.190 inch to 0.220 inch
Length (Outer Curvilinear)	1/4 inch to 1 1/2 inch

B. Cheese Sauce Specifications

- (1) The dry cheese sauce shall dissolve completely when mixed vigorously in hot water and shall conform in every respect with the following product characteristics:

Color	A dry mix with a pale yellow/peach color (viewed under normal, cool white florescent lights) similar to Pantone 148U with a slight speckled appearance.
Aroma	Mild cheddar cheese.
Flavor	Milk cheddar cheese flavor, with pronounced notes of tanginess, very slightly bitter and slightly salty. No objectionable aftertaste.
Mouth-feel	Smooth, moderately tick, no lumpiness.
Gel Strength	Weak.
Viscosity	Bostwick @ 160 degrees Fahrenheit for 30 seconds: 4.5 – 7.5 cm. (target 6.0 cm.).
Preparation	Shall not require the addition of milk or butter to the recipe.

- (2) Microbiological standards - The dry cheese sauce shall not exceed the

following microbiological standards:

SPC	N/A
Coliform	N/A
Staph. Aureus	<100/g
Salmonella	Negative
Yeast/Mold	N/A

(3) Nutritional requirements - Per 1/4 cup (25.8g.) per dry mix:

Amount Per Serving	Target	Maximum
Calories	110	140
Calories from Fat	45	60
Total Fat	5 grams	6 grams
Saturated Fat	2 grams	2.4 grams
Sodium	870 mg	1050 mg
Cholesterol	5 mg	6 mg

(4) The average analytical results of the dry cheese sauce sampled shall not exceed the specified viscosity, nutritional, and microbiological requirements.

Section 1.2 WARRANTY

The product shall have a shelf life of at least one year from date of manufacturer. Product shall not be manufactured more than 45 days prior to shipping.

Section 1.3 QUALITY ASSURANCE

- A. The contractor 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). If quality discounts are provided in the contract, and the product to be delivered by the contractor falls within the quality discount table, those factors shall be identified by an asterisk on the copies of the COA.
- B. Contractors shall notify the Government immediately of lots that fail to meet contract requirements.

Section 1.4 QUALITY DISCOUNTS

If the product does not meet the quality specifications of this contract but falls within the discounts listed below, the product may be delivered to the Government, but the purchase price will be reduced in accordance with the following schedule of discounts for each 100 pounds of commodity delivered:

Elbow Style Macaroni Discounts

Excess Ash		Excess Checks, Broken Units and Black Specs	
1.11% - 1.15%	\$0.06	11.0% - 15.0%	\$0.06

1.16% - 1.19%	\$0.12	16.0% - 20.0%	\$0.12
1.20% - 1.25%	\$0.21	21.0% - 25.0%	\$0.21
Excess Moisture			
13.1%	\$0.03		
13.2%	\$0.06		
13.3%	\$0.09		
13.4%	\$0.12		
13.5%	\$0.15		

Note: The above discounts are 60 percent of the pasta product discounts as elbow macaroni consist of 60 percent of the macaroni and cheese net weight.

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 CONTAINERS AND MATERIALS

- A. All containers and packaging materials shall be manufactured and assembled in the United States. The components that make up the fabricating materials of the containers and packaging materials shall be of U.S. origin to the extent that they are commercially available. Questions concerning the availability of a material should be directed to:
 USDA/FSA/DACO
 Room 5755 – South Bldg, STOP 0551
 1400 Independence Avenue SW
 Washington, DC 20250-0551
 ATTN: Packaging
- B. Constructed to meet the requirements of the Food and Drug Administration (FDA) for safe contact with the packaged product.
- C. 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 requirements.

Section 2.3 CORRUGATED FIBERBOARD CONTAINERS

- A. Twelve (12) meal units each shall be packed into a single fiberboard shipping container constructed of a minimum 32-pound ECT corrugated fiberboard. The closure and sealing of outer flaps with tape or adhesive shall be in accordance with UFC Rule 41, Section 9, as amended. The inner and outer flaps shall be drawn together as closely as possible to ensure a compact and tight pack.

- B. A meal unit is designated as one (1) 10-ounce package of dry blended cheese sauce enclosed within a fiberboard carton containing 1-pound of enriched elbow style macaroni.
 - (1) Cartons shall be constructed of at least 0.016 inch solid food grade fiberboard.
 - (2) The dry blended cheese sauce shall be individually packaged in vapor/moisture resistant foil laminated packages and hermetically sealed.

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 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) U.S. domestic origin of containers and packaging materials in Section 2.2.
 - (2) Unitization requirement in Section 2.4.

- (3) At contractor's option, a statement such as "Not for Retail Sale" may be printed on the principal display panel of the food label.
- (4) The manufacturer's lot code/lot identification number shall be shown on the commercial bill of lading.
- (5) 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.
- (6) For identification upon receipt at delivery warehouses, all commercial-labeled product shipping documents shall specify "FOR USDA FOOD DISTRIBUTION PROGRAMS."