

MIL-C-44210
AMENDMENT-1
1 December 1987

MILITARY SPECIFICATION

CHICKEN AND RICE, THERMOSTABILIZED, FOR MEAL, READY-TO-EAT

This amendment forms a part of Military Specification MIL-C-44210 dated 30 January 1986, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 3

2.2: Add:

"AMERICAN ASSOCIATION OF CEREAL CHEMISTS (AACC)

Approved Methods of the American Association of Cereal Chemists

(Application for copies should be addressed to the American Association of Cereal Chemists, 3340 Pilot Knob Road, St. Paul, MN 55121.)"

PAGE 4

3.2.1.3, line 3: Delete ", 3.3.1.1 and 3.3.1.2" and substitute "or 3.3.1.1".
Line 6: Delete "per mil thickness".
Line 11: After "supplier.": Add the following new sentence:

"Alternatively, the diced frozen chicken may be packaged and placed in a freezer at 0°F after cooking and frozen to 0°F within 24 hours after placement in the freezer. Packaged, frozen, cooked chicken shall have been held at 0°F or below for a period not to exceed 14 days".

3.2.2: Delete and substitute:

"3.2.2 Rice, long grain, parboiled. Rice shall be parboiled long grain, milled rice, U.S. No. 2 or better of the U.S. Standards for Milled Rice and of such varieties as: Belle patina, Bluebelle, Bluebonnet, and Lebonnet or similar varieties. The rice shall contain not more than 2 percent of the kernels having white ungelatinized areas and not less than 10 percent or more than 15 percent moisture."

AMSC N/A

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DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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PAGE 7

3.3.1: Delete and substitute:

"3.3.1 Preparation of individually quick frozen (IQF) chicken dices.

"a. The chicken shall be made boneless and skinless. The wing tips, giblets, neck, feet, and viscera shall be excluded. The boned meat shall be free of pin feathers, skin, blood clots, bruises, blemishes, ligaments, tendons, coarse connective tissue, cartilage, and bone greater than 0.3 inch in any dimension. The boneless chicken meat shall be comprised of at least 50 percent white meat.

b. The chicken meat shall be cooked in a cook house (smoke house without smoke) or by other commercially acceptable cook methods in accordance with USDA Poultry Products Inspection Regulations.

c. The cooked chicken meat shall be cooled to 40°F or below within 4 hours following the cooking process and shall be held not longer than 48 hours at a temperature not to exceed 40°F prior to dicing.

d. The cooked chicken meat shall be mechanically diced with dicer settings at 5/8 by 5/8 by 5/8 inch dimensions. The diced meat shall be held not longer than 4 hours in the temperature range of 28° to 40°F from time of dicing to the beginning of the individual quick freezing process.

e. Immediately after the individual quick freezing process, the frozen chicken dices shall be screened to eliminate fines. The frozen and screened chicken dices shall be packaged and vacuum sealed in water impermeable material having an oxygen permeability rate of not more than 10cc of oxygen per square meter per 24 hours at 73°F and 0 percent relative humidity. Frozen, cooked chicken meat shall not have been prepared from raw (uncooked) chicken."

PAGES 7 and 8

3.3.1.1: Delete subparagraphs a. through e. and substitute:

"a. The chicken shall be made boneless and skinless. The wing tips, giblets, neck, feet, and viscera shall be excluded. The boned meat shall be free of pin feathers, skin, blood clots, bruises, blemishes, ligaments, tendons, coarse connective tissue, cartilage, and bone greater than 0.3 inch in any dimension. The boneless chicken meat shall be comprised of at least 50 percent white meat.

b. Fresh chilled chicken meat processed on the day of boning shall be coarse ground within 24 hours following boning. If fresh-chilled (not previously frozen) chicken meat is transported between plants, it shall be maintained in the temperature range of 28° to 40°F and coarse ground within 4 days following boning. Frozen chicken meat shall be maintained at 0°F or lower until further

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PAGE 7 (cont'd)

processing and be coarse ground within 120 days after boning. The meat shall be mechanically coarse ground through a grinder plate having kidney-shaped openings measuring not less than 2 inches in the shortest dimension. The grinder shall be equipped with a 2-blade knife.

c. The coarse ground (chunked) chicken meat shall be mechanically mixed with the salt and sodium tripolyphosphate. The mixing shall continue until the mixture exhibits a sticky (tacky) consistency. Time from grinding to mixing shall not exceed 4 hours. The ground chicken meat shall be maintained in the temperature range of 28° to 40°F during this time period.

d. The mixed meat shall immediately be mechanically stuffed tightly into casings of a size to accommodate the finished product meat dimension requirement. The stuffed meat logs shall be in the cooking process within 4 hours after being stuffed. (This period of time may be extended up to 24 hours, provided the meat logs are maintained in the temperature range of 28° to 40°F).

e. Immediately after completion of the cooking process, the cooked meat logs shall be placed in an ice water bath, or cooled by other commercially acceptable cooling method and rapidly cooled to 130°F or below. The chicken logs shall be further cooled from 130° to 80°F or below within 2 hours and further cooled from 80° to 40°F or below within 4 hours. The cooled logs shall be held for not more than 48 hours in the temperature range of 28° to 40°F prior to dicing or packaging for frozen storage (see 3.2.1.3).

f. The cooked chicken logs shall be mechanically diced with dicer settings at 5/8 by 5/8 by 5/8 inch dimensions. After dicing, the meat shall be screened through a U.S. Standard 1/2-inch sieve to eliminate fines. Not less than 95 percent, by weight, of the dices shall be retained on the sieve. The diced meat shall be held not longer than 4 hours in the temperature range of 28° to 40°F until preparation of the finished product or, if stored in frozen form, until packaged and vacuum-sealed (see 3.2.1.3)."

PAGE 8

3.3.1.2: Delete.

3.3.2: Delete.

PAGE 9

3.3.4, line 3: Delete "cold water" and substitute "part of the sauce formula".

3.3.5, line 4: Delete "69.167" and substitute "72.407"
Line 8: Delete "2.800" and substitute "0.560"
Line 11: Delete "1.500" and substitute "0.500"

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PAGE 10

3.3.5, e and f: Delete and substitute:

"e. The volume of the final sauce mixture shall be adjusted with water to compensate for evaporation loss during heating and holding."

f. The sauce shall be combined with the chicken dices and dry rice immediately after preparation of the sauce."

Add new paragraph:

"3.3.6 Product preparation. The product shall be formulated and prepared as follows:

<u>Ingredient</u>	<u>Percent by weight</u>
Chicken, diced	50.00
Rice, dry	8.30
Sauce	41.70

a. The rice shall be added to the prepared sauce and mixed for sufficient time to prevent clumping.

b. The chicken dices shall be added to the rice and sauce mixture and mixed only to the extent necessary to form a uniform mixture of chicken and rice.

c. The volume of the final mixture shall be adjusted with water to compensate for evaporation loss during heating and holding.

d. The product shall be maintained in the temperature range of 150° to 180°F and filled into the pouches within 1 hour after preparation."

3.4 b, c, d and e: Delete and substitute:

"b. The temperature of the product at time of filling shall be 150° to 180°F.

c. Each filled and sealed pouch shall be in the retort process within 2 hours after sealing."

PAGE 11

3.6 h through k: Delete and substitute:

"h. No individual pouch shall contain less than 4.9 ounces drained weight of chicken and rice (combined).

i. The average drained weight shall be not less than 5.4 ounces.

j. Of the 4.9 ounces drained weight of product, not less than 2.2 ounces shall be whole intact chicken pieces."

4.5.1.1: Delete and substitute:

"4.5.1.1 Ingredient and component examination. Conformance of ingredients and components to identity, condition, and other requirements specified in 3.2 shall be certified by the ingredient supplier or ingredient manufacturer, or compliance be verified by examination of pertinent labels, markings, U.S. Grade Certificates, certificates of analyses, or other such valid documents acceptable to the inspection agency. If necessary, each ingredient shall be examined organoleptically or inspected according to generally recognized test methods, such as the standard methods described in the Official Methods of Analysis of the Association of Official Analytical Chemists and in the Approved Methods of the American Association of Cereal Chemists, to determine conformance to the requirements. Any nonconformance to an identity, condition, or other requirement shall be cause for rejection of the ingredient or component lot or of any involved product."

PAGES 13, 14, and 15

4.5.5 and table I: Delete and substitute the following new paragraphs and tables:

"4.5.5 Product and drained weight inspection.

4.5.5.1 Product inspection. The filled and sealed sample pouches shall be held for a minimum of 72 hours at room temperature (65° to 75°F) after completion of the thermoprocessing operation. The pouches shall be heated in 180° to 190°F water for 10 minutes, opened, and inspected. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The sample size shall be as indicated by the sampling plan specified in table I. The contents shall be inspected for the defects indicated in table II.

TABLE I. Double sampling plan for product inspection ^{1/}

Lot size (pouches)	Sample size (pouches)	Cumulative sample	Acceptance number	Rejection number
0 to 500,000	20	--	0	2
	20	40	1	2

- ^{1/} a. If no defects are found in the first sample, the lot shall be accepted.
- b. If the number of defects found in the first sample equals or exceeds the rejection number, the lot shall be rejected.

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PAGES 13, 14, and 15 (cont'd)

- c. If the number of defects found in the first sample exceeds the acceptance number but is less than the rejection number, the second sample shall be inspected. Defects found in the first and second sample shall be combined and if the number of defects in the cumulative sample equals or exceeds the rejection number, the lot shall be rejected.

TABLE II. Product defects 1/ 2/

<u>Category</u>	<u>Defect</u>
<u>Major</u>	
101	Presence of feathers or feather parts.
102	Total weight of skin, bone, cartilage, coarse connective tissue, section of tendons or ligaments, and discolored meat, collectively, is more than 0.20 ounce.
103	Texture of chicken dices is dry, rubbery, or mushy.
104	Texture of rice is mushy or dry (evidence of unhydrated areas).
105	Sauce consistency lumpy or is excessively thick or thin.
106	Product shows evidence of excessive heating (materially darkened or scorched).

1/ The presence of foreign material (e.g., glass, dirt, insect parts, hair, wood, metal), foreign odor or flavor (e.g., burnt, scorched, moldy, rancid, sour, stale), or foreign color shall be cause for rejection of the lot.

2/ Product not equal to or better than the approved preproduction sample (see 6.1) in palatability or overall appearance shall be cause for rejection of the lot. (This comparison shall be performed only when deemed necessary by an AMS agent.)

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4.5.5.2 Drained weight inspection. The filled and sealed sample pouches shall be held for a minimum of 72 hours at room temperature (65° to 75°F) after completion of the thermoprocessing operation. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The sample size shall be as indicated by the double sampling plan specified in table III. The drained weight shall be determined and inspected for the defects listed in table IV.

TABLE III. Double sampling plan for drained weight inspection 1/ 2/

Lot size (pouches)	Sample size (pouches)	Cumulative sample	Acceptance number	Rejection number
0 to 500,000	20	--	0	2
	20	40	1	2

- 1/ a. If not defects are found in the first sample, the lot shall be accepted.
- b. If the number of defects found in the first sample equals or exceeds the rejection number, the lot shall be rejected.
- c. If the number of defects found in the first sample exceeds the acceptance number but is less than the rejection number, the second sample shall be inspected. Defects found in the first and second sample shall be combined and if the number of defects in the cumulative sample equals or exceeds the rejection number, the lot shall be rejected.
- 2/ To determine drained weight, the pouch contents shall be poured into a flat bottom container. A minimum of three times the pouch's volume of 180° to 190°F water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated such as to liquify rendered fat and to remove the sauce without breaking the chicken dices. The contents shall then be poured into a U.S. Standard No. 7 (0.111 inch) sieve in a manner that will distribute the product over the sieve without breaking the chicken dices. Sieve area shall be such that the distributed product does not completely cover all the openings of the sieve. The sieve shall be tilted at an approximate 45 degree angle and allowed to drain for 2 minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. Report results to the nearest 0.1 ounce.

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TABLE IV. Drained weight defects

<u>Category</u>	<u>Defect</u>
<u>Major</u>	
101	Drained weight of chicken and rice (combined) in a pouch is less than 4.9 ounces. <u>1/</u>
102	Of the 4.9 ounces drained weight of product in a pouch, less than 2.2 ounces is whole intact chicken pieces. <u>2/</u>

1/ If the sample average drained weight of product is less than 5.4 ounces, the lot shall be rejected.

2/ For purpose of this examination, the definition of a whole chicken piece is one that measures not less than 1/4 inch in each of two separate dimensions."

Custodians:

Army - GL
Navy - SA
Air Force - 50

Preparing activity:

Army - GL
Project No. 8940-0621

Review activities:

Army - MD, TS
Navy - MC
DP - SS