# MILITARY SPECIFICATION

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

This specification is approved for use by all Departments and Agencies of the Department of Defense.

### 1. SCOPE

1.1 Scope. This document covers thermostabilized chicken and rice in flexible pouches for use as a component of the Meal, Ready-to-Eat, Individual and Meal, Flight Feeding, Individual.

#### 2. APPLICABLE DOCUMENTS

2.1 Government documents. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this document to the extent specified herein:

### **SPECIFICATIONS**

MILITARY

MIL-P-44073 - Packaging and Thermoprocessing of Foods in Flexible Pouches

### **STANDARDS**

**MILITARY** 

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

MIL-STD-900 - Bacterial Standards for Starches, Flour, Cereals, Alimentary Pastes, Dry Milks and Sugars Used in the Preparation of Thermostabilized Foods for the Armed Forces.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Natick Research, Development, and Engineering Center, Natick, MA 01760-5014 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 8940

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(Copies of documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

### OTHER GOVERNMENT DOCUMENTS

### U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder (21 CFR Parts 1-199)

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

## U.S. DEPARTMENT OF AGRICULTURE (USDA)

Poultry Products Inspection Regulations

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

### U.S. Standards for Grades of Canned Pimientos

(Application for copies should be addressed to the Chief, Processed Products Branch, Fruit and Vegetable Division, Agricultural Marketing Service, U.S. Department of Agriculture, Washington, DC 20250.)

## U.S. Standards for Milled Rice

(Application for copies should be addressed to the Federal Grain Inspection Service, Resource Management Division, 14th and Independence, S.W., Washington, DC 20250.)

### ENVIRONMENTAL PROTECTION AGENCY (EPA)

National Interim Primary Drinking Water Regulations

(Application for copies should be addressed to the Office of Drinking Water WH550, Environmental Protection Agency, Washington, DC 20460.)

2.2 Other publications. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this document to the extent specified herein.

### ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS (AOAC)

Official Methods of Analysis of the Association of Official Analytical Chemists

(Application for copies should be addressed to the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.)

# NATIONAL ACADEMY OF SCIENCE

### Food Chemicals Codex

(Application for copies should be addressed to the National Academy Press, 2101 Constitution Avenue, Washington, DC 20418.)

## AMERICAN DEHYDRATED ONION AND GARLIC ASSOCIATION (ADOGA)

Official Standards and Methods of the American Dehydrated Onion and Garlic Association for Dehydrated Onion and Garlic Products.

(Application for copies should be addressed to the American Dehydrated Onion and Garlic Association, 375 Sutter Street, Suite 700, San Francisco, CA 94108.)

(Technical society and technical association documents are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document shall take precedence.

### 3. REQUIREMENTS

- 3.1 <u>First article</u>. When specified, in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.4, 6.1, and 6.2).
- 3.2 <u>Ingredients</u>. All ingredients shall be clean, sound, wholesome, and free from foreign material, evidence of rodent and insect infestation, extraneous material, off-odors, off-flavors, and off-colors.
- 3.2.1 Chicken. The chicken shall be prepared from chilled or frozen ready-to-cook fowl (mature female chicken) which has been processed in accordance with USDA Poultry Products Inspection Regulations. All chicken (raw or cooked) shipped between plants shall be accompanied by a USDA Agricultural Marketing Service (AMS) Poultry Division Grading Branch certificate to certify class and condition of the product and either the initial chilling date or initial freezing (in-storage) date.

- 3.2.1.1 Chicken, chilled. Raw chicken, in either bone-in or boneless form, received in the chilled state shall not have been previously frozen and shall have been held at a temperature not to exceed 40°F for a period of time not to exceed 4 days following initial chilling and prior to preparation and further processing (see 3.3).
- 3.2.1.2 Chicken, frozen. Raw chicken in either bone-in or boneless form received in the frozen state shall have been held at a temperature not to exceed 0°F for a period of time not to exceed 120 days following initial freezing and prior to preparation and further processing (see 3.3).
- 3.2.1.3 Chicken, cooked, frozen. Chicken received in a frozen, cooked state shall be prepared from chilled chicken that complies with 3.2.1 and 3.2.1.1. Chicken shall be processed in accordance with 3.3.1, 3.3.1.1 and 3.3.1.2. Cooked chicken, in either log or dice form, 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 per mil thickness at 73°F and 0 percent relative humidity and shall be frozen to 0°F or below within 72 hours. Packaged, frozen, cooked chicken shall have been held at 0°F or below for a period not to exceed 30 days prior to pouch filling (see 3.4). Product compliance with processing and packaging requirements shall be certified by the ingredient supplier.
- 3.2.2 Rice, long grain, instant. The rice shall be No. 1 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 kernels having white ungelatinized areas and not less than 10 percent or more than 15 percent moisture.
- 3.2.3 Fat, chicken, rendered. Rendered chicken fat may be either chilled or frozen. The rendered chicken fat shall have a clear, yellow color and a characteristic mild chicken-fat odor and flavor. The rendered fat shall be produced in a USDA inspected plant and may contain USDA approved antioxidants. After rendering, the temperature of the chicken fat shall be reduced to 40°F or below, but not frozen, and the fat incorporated into the finished product within 72 hours. When frozen, rendered chicken fat is used, the fat shall have been held at 0°F or below for a period not to exceed 75 days prior to incorporation into the finished product. Frozen, rendered chicken fat shall have a peroxide value not to exceed 6 meg./kg, a free fatty acid value not to exceed 0.50 percent (expressed as oleic acid), and a moisture content not to exceed 0.25 percent.
- 3.2.4 Broth, chicken. Chicken broth may be frozen or canned (thermostabilized). The broth shall be clear, essentially fat free with percent solids sufficient to comply with the solids requirements in the sauce formulation, (see 3.3.5). The broth shall have a characteristic mild chicken-broth odor and flavor and may contain flavor enhancers in accordance with the Poultry Products Inspection Regulations. The chicken broth shall be produced in a USDA inspected plant and, when frozen, shall have been held at 0°F or below for a period not to exceed 75 days prior to sauce formulation (see 3.3.5).

- 3.2.5 <u>Pimientos, canned</u>. Pimientos shall be of the chopped style and shall be U.S. Grade C or better of the U.S. Standards for Grades of Canned Pimientos.
- 3.2.6 Celery, sliced, dehydrated. The dehydrated celery slices shall be obtained from clean, sound Pascal type celery. The celery slices shall be approximately 3/8 inch cross-cut stalk slices, with no leaf cuts. The slices shall be free flowing and have bright uniform color. The dehydrated celery shall have a moisture content not greater than 4.5 percent.
- 3.2.7 Starch, modified, high opacity. The high opacity starch shall be white, odorless, finely pulverized, modified maize food starch for use in canned foods and shall comply with MIL-STD-900. The modified starch shall demonstrate initial viscosity development in the temperature range of 1400 to 1700F and a typical viscosity (be fully hydrated) at common retort temperatures. The starch shall resist breakdown at low pH, under shear stress, and under conditions of cold storage. The cooked modified starch slurry shall be bland with essentially no cereal or starch taste.
- 3.2.8 <u>Salt</u>. Salt shall be noniodized, free flowing, white, refined sodium chloride with or without anticaking agents.
- 3.2.9 Onions, chopped, dehydrated. The dehydrated chopped onions shall be Fancy Grade as defined in the Official Standards and Methods of the American Dehydrated Onion and Garlic Association for Dehydrated Onion and Garlic Products.
  - 3.2.10 Lecithin. Lecithin shall comply with the Food Chemicals Codex.
- 3.2.11 Pepper, white, ground. Ground white pepper shall be derived from the dried mature berries of Piper nigrum L. from which the outer covering or the outer and inner coverings have been removed. The ground white pepper shall have a characteristic, penetrating odor, a hot biting pungent flavor and a light color. The white pepper shall contain not less than 1.0 mL of volatile oil per 100 grams of ground white pepper and be of such size that not less than 95 percent shall pass through a U.S. Standard No. 40 sieve.
- 3.2.12 Sauce, hot. Hot sauce shall be produced from ground, fermented hot red peppers, distilled vinegar, and salt and may contain stabilizers. The hot sauce shall be a smooth suspension with uniform particle size, and shall possess a pungent, peppery odor, and a reddish-orange color. The hot sauce shall have a heat value of not less than 500 Scoville heat units and a titratable acidity (as acetic acid) of not less than 8.2 percent nor more than 8.6 percent.

- 3.2.13 Allspice, ground. Ground allspice shall be derived from the dried, nearly ripe fruit of <u>Pimenta officinalis L</u>. and shall have a fragrant, clovelike aroma, strongly aromatic, pungent, clove-like flavor and a dark reddishbrown color. Allspice shall contain not less than 3.0 mL of volatile oil per 100 grams of ground allspice with 80 percent eugenol as a principal constituent. A minimum of 95 percent, by weight, shall pass through a U.S. Standard No. 25 sieve.
- 3.2.14 <u>Garlic powder</u>. Garlic powder shall be Fancy Grade as defined in the Official Standards and Methods of the American Dehydrated Onion and Garlic Association for Dehydrated Onion and Garlic Products.
- 3.2.15 Thyme, ground. Ground thyme shall be derived from the dried leaves and flavoring tops of Thymus vulgaris L., and shall have a fragrant, aromatic odor and a minty flavor. The thyme shall contain not less than 0.8 mL of volatile oil per 100 grams of ground thyme and be of such size that not less than 95 percent shall pass through a U.S. Standard No. 30 sieve.
- 3.2.16 <u>Sage, ground</u>. Ground sage shall be derived from the dried leaves of <u>Salvia officinalis L</u>. The sage shall be green to grayish-green in color and have a strong fragrant and aromatic odor, and a slightly bitter taste. The sage shall contain not less than 1.5 mL of volatile oil per 100 grams of ground sage and be of such size that not less than 95 percent shall pass through a U.S. Standard No. 20 sieve.
- 3.2.17 Color, annatto, dry. The annatto color shall be a reddish-orange water soluable powder of the extractive of Annatto bixa orellana. The powder shall contain less than 5.0 percent moisture. A minimum of 100 percent shall pass through a U.S. No. 10 sieve and shall be free from hard lumps. The total color (as percent Norbixin) shall be 15 percent.
- 3.2.18 <u>Sodium tripolyphosphate</u>. Sodium tripolyphosphate shall comply with the Food Chemicals Codex.
- 3.2.19 Starch, filling and processing aid (see 6.3). The filling and processing aid shall be white, odorless, finely pulverized, modified waxy maize starch for use as a filling and processing aid in canned, retorted foods and shall comply with MIL-STD-900. During retort temperatures of 1650 to 2000F, the starch shall form a clear, bland paste that retains its initial high viscosity under conditions of moderate shear and prolonged holding times. During the retort process the starch shall thin out and lend no appreciable viscosity to the final product.
- 3.2.20 <u>Water</u>. Water used for rehydration, blanching, ice-making, and washing shall conform to the National Interim Primary Drinking Water Regulations.

- 3.2.21 Preblended spice and seasoning mixture. Preblended spices and seasonings may be used. The spices and seasonings in the mixture shall comply with the requirements of this document. The containers used for the spice and seasoning blend shall be labeled with each ingredient and the percentage of each ingredient in the blend. The ingredients shall be in the same proportions as specified in the ingredient formula.
- 3.3 <u>Preparation and further processing</u>. Processing shall be on a continuous basis.
  - 3.3.1 Chicken preparation. The chicken shall be prepared as follows:
- 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 and of skin, blood clots, bruises, blemishes, ligaments, tendons, coarse connective tissue, cartilage and bone greater than 0.3 inch in any dimension. The boneless meat shall be comprised, by weight, of not less than 50 percent, but not more than 60 percent, white meat with the remaining percentage dark meat.
- b. The boned and trimmed chicken 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 chicken meat shall be ground within 24 hours following boning. The chicken meat shall be maintained in the temperature range of  $28^{\circ}$  to  $40^{\circ}$ F during this 24 hour time period.
- 3.3.1.1 Chicken log preparation and processing. The chicken logs shall be prepared and processed as follows:

Ingredients	Percent by weight
Chicken meat	95.75
Ice or ice water	3.00
Salt	1.00
Sodium tripolyphosphate	0.25

a. The coarse ground (chunked) chicken meat shall be mechanically vacuum 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 shall be maintained in the temperature range of 28° to 40°F during this 4 hour time period.

- b. The mixed meat shall immediately be mechanically tightly stuffed into prestuck, regenerated cellulose 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 for up to 24 hours, provided the meat logs are maintained in the temperature range of 28° to 40°F).
- c. The chicken logs shall be cooked in a cookhouse (smoke house without smoke) or by other commercially acceptable cook methods to provide a product meeting the finished product drained weight and other requirements.
- d. The cooked chicken logs shall be cooled to  $40^{\circ}F$  or below within 4 hours following the cooking process and shall be held not longer than 48 hours at a temperature not to exceed  $40^{\circ}F$  prior to dicing (see 3.3.1.2).
- e. If the cooked chicken is to be stored in the frozen log form (see 3.2.1.3), within 4 hours following the cooking process, the logs shall be packaged and vacuum-sealed in packaging material complying with the requirements specified in 3.2.1.3. Within 72 hours of packaging, the logs shall be frozen to 0°F or below. The packaged, frozen, cooked chicken shall be maintained at 0°F or below for a period not to exceed 30 days prior to pouch filling (see 3.4).
- 3.3.1.2 Dicing of cooked chicken logs. The cooked chicken logs shall be mechanically diced to yield uniform dices of approximately 3/8 to 1/2 by 3/8 to 1/2 by 1/2 inch dimensions. Fines shall be eliminated so that not less than 95 percent, by weight, of dices are retained on a U.S. Standard 1/4-inch sieve. The dices shall be held not longer than 4 hours in the temperature range of 28° to 40°F until filled into the pouches (see 3.4).
  - 3.3.2 Rice preparation. The rice shall be prepared as follows:
    - a. Batch weigh the instant rice (dry).
    - b. To the weighed rice, add an equal weight of warm water.
    - c. Soak the rice for a period of approximately 1/2 hour (or less time if the rice has completely absorbed all of the water).
    - d. Drain off the water and reweigh the soaked rice.
    - e. If the weight of the soaked rice is not double the batch weight of the dry rice, add the difference in weight as extra water to the sauce after adjustment of the cooked sauce volume for evaporation losses before filling.
    - f. The rice shall be filled into pouches within 2 hours after completion of soaking.
- 3.3.3 <u>Pimiento preparation</u>. The canned pimientos shall be thoroughly drained, then washed in six times their weight of water. The washed pimientos shall be thoroughly drained prior to incorporation into the sauce.

- 3.3.4 Filling and processing aid starch preparation. When a filling and processing aid starch is used, a solution (slurry) shall be prepared with the filling and processing aid starch and cold water in a concentration adequate to hold ingredients in suspension for uniform distribution during mixing and pumping of product.
- 3.3.5 Sauce formulation and preparation. The sauce shall be formulated and prepared as follows:

Ingredient	Percent by weight
Water	69.167
Fat, chicken	10.200
Broth, chicken 1/	8.400
Pimientos	3.000
Celery, sliced, dehydrate	ed 2.800
Starch, modified, high or	pacity 2.300
Salt 2/	1.900
Onion, chopped, dehydrate	ed 1.500
Lecithin	0.230
Pepper, white, ground	0.210
Sauce, hot	0.100
Allspice, ground	0.070
Garlic powder	0.060
Thyme, ground	0.050
Sage, ground	0.010
Color, annatto, dry	0.003

- 1/ The solids content of the chicken broth shall be adjusted to approximately 15.0 percent solids.
- 2/ The salt level shall be adjusted, as necessary, to comply with the finished product salt requirement (see 3.6).
  - a. A slurry shall be prepared by mixing the starch with a portion of the chicken broth.
  - b. An emulsion shall be prepared by mixing the chicken fat and lecithin with the balance of the chicken broth. The mixture shall be heated with continuous agitation to attain maximum emulsification of the fats.
  - c. To the emulsion, add the remaining ingredients, except the starch slurry. The emulsion shall be stirred to assure the salt is dissolved, the dehydrated vegetables are rehydrated, and the spices are uniformly dispersed.

- d. The starch slurry shall be added to the emulsion and the final mixture heated to 150°F to 180°F and held in this temperature range for 5 minutes.
- e. The volume of the final mixture shall be adjusted with water to compensate for evaporation loss during heating and holding.
- f. The sauce shall be filled within 4 hours after preparation. As a final step before filling, a filling and processing aid starch solution (see 3.3.4) may be uniformly blended into the sauce in the amount required to facilitate uniform ingredient distribution in single-stage filling operations. If a hot-fill method is used (see 3.4), the prepared sauce shall be held in the temperature range of 150° to 180°F prior to preparation of finished product. If a cold fill method is used, the prepared sauce shall be cooled immediately and held at a temperature not to exceed 40°F prior to preparation of finished product.
- 3.4 Pouch filling and sealing. Each pouch (see 5.1) shall be filled with product such as to conform to the finished product requirements and to the following requirements:
- a. Each pouch shall be filled and sealed in accordance with the pouch filling and sealing requirements specified for class 1 of MIL-P-44073.
- b. A hot fill system is permitted if compatible with the single-stage or multi-stage filling and sealing method used.
- c. The temperature of the chicken and sauce at time of filling shall be as specified (see 3.3.1.2 and 3.3.5) for the applicable filling process used.
- d. The product may be filled into the pouch using either a single-stage or multi-stage filling operation.
- e. Each filled and sealed pouch shall be in the retort process within 1 hour after sealing.
- 3.5 Pouch thermoprocessing. The filled and sealed pouches shall be thermostabilized by retorting until a sterilization value  $(F_0)$  of not less than 6 has been achieved. The thermoprocessing operation shall be in compliance with the thermoprocessing requirements for class 1 of MIL-P-44073.
- 3.6 Finished product requirements. The finished product shall comply with the following requirements:
- a. There shall be no foreign material such as, but not limited to, dirt, insect parts, hair, wood, paper, paint, glass, or metal.
- b. There shall be no foreign odors or flavors such as, but not limited to, burnt, scorched, stale, sour, rancid, musty, or moldy.

- c. There shall be no color foreign to the product.
- d. There shall be no feathers or feather parts.
- e. Total weight of skin, bone, cartilage, coarse connective tissue, section of tendons or ligaments, and discolored meat, collectively, shall be not more than 0.20 ounce.
  - f. The average net weight shall be not less than 8.0 ounces.
  - g. No individual pouch shall contain less than 7.5 ounces of product.
- h. No individual pouch shall contain less than 3.2 ounces of drained chicken.
- i. The average drained weight of chicken shall be not less than 3.5 ounces.
- j. No individual pouch shall contain less than 1.9 ounces of drained rice.
- k. The average drained weight of rice shall be not less than 2.3 ounces.
- 1. At least 75 percent of the chicken shall be discernible chicken dices.
  - m. Texture of the chicken dices shall not be dry, rubbery, or mushy.
- n. Texture of the rice shall not be mushy or dry (evidence of unrehydrated areas).
- o. Sauce consistency shall be smooth, without lumps, and shall not be excessively thick or thin.
- p. The product shall show no evidence of excessive heating (materially darkened or scorched).
  - q. The average fat content shall be not greater than 6.0 percent.
- r. The fat content of the product in any individual pouch shall be not greater than 8.0 percent.
- s. The salt content of the product in any individual pouch shall be not greater than 1.2 percent or less than 0.5 percent.

- 3.6.1 Palatability. The product shall be equal to or better than the approved preproduction sample (see 6.1) in palatability and overall appearance.
- 3.7 <u>Plant qualification</u>. The poultry component and the finished product shall originate and be produced, processed, and stored in plants regularly operating under Poultry Products Inspection Regulations of the U.S. Department of Agriculture.
- 3.8 Federal Food, Drug, and Cosmetic Act. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.
  - 4. QUALITY ASSURANCE PROVISIONS
- 4.1 <u>Contractor's responsibility</u>. Inspection and acceptance by the USDA shall not relieve the contractor of obligation and responsibility to deliver a product complying with all the requirements of this document. The contractor shall assure product compliance prior to submitting the product to the USDA for any inspection.
- 4.2 <u>Inspection and certification</u>. Product acceptability shall be determined by the USDA. The USDA will determine the degree of supervision necessary to assure compliance with the requirements of this document.
- 4.3 <u>Classification of inspection</u>. The inspection requirements specified herein are classified as follows:
  - a. First article inspection (see 4.4).
  - b. Quality conformance inspection (see 4.5).
- 4.4 First article inspection. When a first article is required (see 6.1), it shall be inspected in accordance with the quality assurance provisions of this document and evaluated for overall appearance and palatability. Any failure to conform to the quality assurance provisions of this document or any appearance or palatability failure shall be cause for rejection of the first article.
- 4.5 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.
- 4.5.1 <u>Component and material inspection</u>. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this document or applicable purchase document.
- 4.5.1.1 <u>Ingredient and component examination</u>. Conformance of ingrédients 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 evident by examination of pertinent labels, markings, U.S. Grade

Certificates, certificates of analyses, or other such valid documents acceptable to the inspection agency. In addition, prior to use, each ingredient shall be examined organoleptically, as necessary, to determine conformance to the condition requirements. Any nonconformance to any identity, condition, or other requirement shall be cause for rejection of the ingredient or component lot or of any involved product.

- 4.5.2 <u>In-process examination</u>. In-process examination shall be performed to determine conformance to the preparation, processing, filling, sealing, and packaging requirements. Any nonconformance revealed by actual examination or by review of records of time, temperature, and formulation or of other valid documents shall be cause for rejection of the involved product.
- 4.5.3 <u>Filled and sealed pouch inspection</u>. Inspection of filled and sealed pouches shall be in accordance with the quality assurance provisions of MIL-P-44073.
- 4.5.4 Net weight inspection. The net weight of the filled and sealed pouches shall be determined by weighing each sample unit on a suitable scale tared with a representative empty pouch. Any individual net weight of less than 7.5 ounces shall be scored as a minor defect. The lot size shall be expressed in pouches. The sample unit shall be one filled and sealed pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 2.5. Results shall be reported to the nearest 0.1 ounce. In addition, the lot shall be rejected if the sample average net weight is less than 8.0 ounces.
- 4.5.5 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 boiling water for 10 minutes, opened, and inspected for the defects indicated in table I. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 1.5.

# TABLE I. Product defects 1/2/

Category	Defect	
Major		
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.	

TABLE I. Product defects  $\frac{1}{2}$  (cont'd)

Category	Defect	
Major		
103	Drained weight of chicken in an individual pouch is less than 3.2 ounces. $3/4/$	
104	Drained weight of rice in an individual pouch is less than 1.9 ounces. $3/5/$	
105	Less than 75 percent of the chicken consists of discernible chicken dices. $\underline{6}/$	
106	Texture of chicken dices is dry, rubbery, or mushy. $\underline{6}/$	
107	Texture of rice is mushy or dry (evidence of unrehydrated areas). $\underline{6}/$	
108	Sauce consistency lumpy or is excessively thick or thin.	
109	Product shows evidence of excessive heating (materially darkened or scorched).	

- 1/ Presence of foreign material (e.g., glass, dirt, insect part, hair, wood, metal), foreign odor or flavor (e.g., stale, sour, rancid, musty, moldy), 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 and overall appearance shall be cause for rejection of the lot. (This comparison shall be performed only when deemed necessary by an AMS agent.)
- 3/ To determine drained weight, the free liquid in the pouch shall be poured off and the remaining contents shall be poured into a flat bottom container. A minimum of three times the pouch's volume of 190° to 212°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. Record the gross weight of the chicken dices and rice. Remove the chicken dices. Reweigh and record the gross weight of the rice. Subtract sieve tare weight to calculate the drained weights of chicken dices and rice and report to the nearest 0.1 ounce.

- 4/ If the sample average drained weight of chicken is less than 3.5 ounces, the lot shall be rejected.
- 5/ If the sample average drained weight of rice is less than 2.3 ounces, the lot shall be rejected.
- 6/ Examination for appearance and texture conformance of the chicken dices and rice shall be made of representative pieces immediately following the determination of drained weight.
- 4.5.6 Fat and salt content testing. The unopened sample pouches shall be warmed in a water bath to melt fat adhering to the inside of the pouches. The sample pouches shall be opened and the entire contents of each pouch shall be separately blended in a Waring blender or equivalent. The fat and salt content of the product from each pouch in the sample shall be determined in accordance with the Official Methods of Analysis of the Association of Official Analytical Chemists, Chapter: Meat and Meat Products. Test results shall be reported to the nearest 0.1 percent. Any result failing to conform to the fat or salt requirement in 3.6 shall be classified as a major defect. The lot size shall be expressed in pouches. The sample unit shall be one filled and sealed pouch. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 1.5.
- 4.5.7 Packaging inspection. Inspection of packaging shall be in accordance with the quality assurance provisions of MIL-P-44073.
  - PACKAGING
- 5.1 Packaging. Packaging shall be in accordance with the requirements of MIL-P-44073.
  - 6. NOTES
  - 6.1 Ordering data. Acquisition documents should specify the following:
    - a. Title, number, and date of this document.
    - b. When a first article is required (see 3.1, 4.4, and 6.2).
    - c. Provisions for approved preproduction samples (see 3.6.1 and 6.2).

- 6.2 <u>First article</u>. When a first article is required, it shall be inspected and approved under the appropriate provisions of FAR 52.209. The first article should be a preproduction sample. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for selection, inspection, and approval of the first article.
- 6.3 Starch, filling and processing aid. Shur-Fil R CS-500 starch, A.E. Staley Mfg. Co., Decatur, IL 62525 has been found to be satisfactory in holding ingredients in suspension for uniform distribution during mixing and pumping of product for single-stage filling operations.

Custodians:

Preparing activity:

Army - GL Navy - SA Army - GL

Air Force - 50

Project No. 8940-0517

Review activities:

Army ~ MD, TS

Navy - MC, MS

DP - SS

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL (See Instructions - Reverse Side)			
1. DOCUMENT NUMBER	2. DOCUMENT TITLE		
30. NAME OF SUBMITTING ORG	ANIZATION	4. TYPE OF ORGANIZATION (Merk one)  VENDOR  USER	
b. ADDRESS (Street, City, State, Z	IP Code)	MANUFACTURER  OTHER (Specify):	
5. PROBLEM AREAS			
, a, Peregraph Number and Wordin	eg:		
b. Recommended Wording:			
c. Resson/Rationale for Recomm	nendation:		
5. REMARKS			
7a. NAME OF SUBMITTER (Last, i	First, Mil) - Optional	b. WORK TELEPHONE NUMBER (Include Area Code) — Optional	
c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional		8. DATE OF SUBMISSION (YYMMDD)	