PKG&QAP A-A-20352B
23 May 2014
W/Change 01 12 September 2014 (ES14-041 (DSCP-SS-14-01469)
SUPERSEDING
PKG&QAP A-A-20352
9 November 2006

SECTION C

This document covers chicken chunks packaged in flexible pouches, shelf stable for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR CID A-A-20352B, CHICKEN CHUNKS, WHITE, COOKED, CANNED OR IN FLEXIBLE POUCHES

Types.

Type V - Pouch – 142 g (5 oz)
Type VI - Pouch – 198 g (7 oz)

Packages.

Package C – Meal, Ready-to-Eat™ (MRE™)
Package J – First Strike Ration® (FSR™)

C-2 PERFORMANCE REQUIREMENTS

A. Product standard. A sample shall be subjected to first article (FA) or product demonstration model (PDM) inspection as applicable, in accordance with the tests and inspections of Section E of this Packaging Requirements and Quality Assurance Provisions document. The approved sample shall serve as the product standard. Should the contractor at any time plan to or actually produce the product using different raw material or process methodologies from the approved product standard, which result in a product noncomparable to the product standard, the contractor shall submit a replacement FA or PDM approval. In any event, all product produced must meet all requirements of this document including product standard comparability.

B. Shelf life. The packaged product shall meet the minimum shelf life requirement of 36 months at 80°F.

C. Appearance. The packaged product shall be whole muscle, white meat chicken chunks

of various sizes. The exterior color of the chicken chunks shall be light tan. The interior chicken chunks color shall be light tan to pale pink and have a distinct fibrous appearance.

D. Odor and flavor. The odor and flavor of the chicken chunks shall be mild white meat chicken.

F. Net weight.

(1) Type V. The average net weight shall be not less than 5.0 ounces (142 grams). The net weight of an individual pouch shall be not less than 4.7 ounces (133 grams).

(2) Type VI. The average net weight shall be not less than 7.0 ounces (198 grams). The net weight of an individual pouch shall be not less than 6.7 ounces (190 grams).

G. Drained weight.

(1) Type V. The average drained weight shall be not less than 4.2 ounces (119 grams). The drained weight of an individual pouch shall be not less than 3.9 ounces (111 grams).

(2) Type VI. The average drained weight shall be not less than 5.8 ounces (164 grams). The drained weight of an individual pouch shall be not less than 5.5 ounces (156 grams).

H. Palatability and overall appearance. The finished product shall be equal to or better than the approved product standard in palatability and overall appearance.

I. Analytical requirements. For all types specified, analytical procedures and testing shall be in accordance with A-A-20352B.

SECTION D

D-1 PACKAGING

The specified product shall be filled into pouches and shall be packed in accordance with MIL-PRF-44073, Packaging of Food in Flexible Pouches, Type I. Type VI may be packaged in commercial gusseted pouches.

D-2 LABELING

A. Pouches. Each pouch shall be correctly and legibly labeled. Printing ink shall be permanent black ink or any other contrasting color, which is free of carcinogenic elements. Prior to thermal processing of the pouches, the product name, lot number, filling equipment number and time stamp shall be applied. All other marking may be applied before or after thermal processing.

(1) Product name (not less than 1/8 inch high). Commonly used abbreviations may be used.

(2) Pouch code includes: 1/

Lot Number
Filling equipment identification number
Official establishment number (optional)
Retort identification number and Retort cook number (optional)
Time stamp (hour and minute of filling/sealing operation)

1/ The lot number shall be expressed as a four digit Julian code. The first digit shall indicate the year of production and the next three digits shall indicate the day of the year (Example, 14 February 2015 would be coded as 5045). The Julian code shall represent the day the product was packaged into the pouch and processed. Following the four digit Julian code, the other required code information shall be printed in the sequence as listed above.

(3) USDA official inspection legend for the packer's plant 1/

1/ May be placed on the paperboard sleeve if labeled under USDA/FSIS supervision as an identification service.

B. Paperboard sleeves.

(1) The sleeves shall be clearly printed on one of the panels with permanent black ink as follows: 1/

Product name (7/32 to 9/32 inch block letters)
Ingredients
Net weight
Name and address of packer
"Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable USDA regulations

1/ With contracting officer approval, this information may be printed on the pouch in lieu of the paperboard sleeve.

(2) Military nutrition information entitled "Military Rations Are Good Performance Meals" shall be printed on the entrée sleeve's panel opposite to the panel printed with the data in D-2,B(1) above, as applicable. The information, provided by the contracting officer, shall be clearly printed with permanent black ink in an area no smaller than 4 inches by 5-1/4 inches.

(3) The product shall be formulated and labeled in accordance with all USDA labeling regulations and policies.

NOTE: Commercial graphics (colors, design and labeling) shall be submitted to the Contracting Officer for review and approval and to US Army Research, Development and Engineering Command Natick Soldier Research, Development and Engineering Center (RDNS-CFF) for review.

D-3 PACKING

A. Packing. Not more than 40 pounds of product shall be packed in a fiberboard shipping box constructed in accordance with style RSC of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, burst grade 200 or ECT grade 32 of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut

Shapes. Each box shall be closed in accordance with ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

D-5 MARKING

A. Shipping containers. Shipping containers shall be marked in accordance with DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence.

SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing ANSI/ASQ Z1.4, Sampling Procedures and Tables for Inspection by Attributes, are required. Unless otherwise specified, Single Sampling Plans indicated in ANSI/ASQ Z1.4 will be utilized. When required, the manufacturer shall provide the Certificate(s) of Conformance to the appropriate inspection activity. Certificate(s) of Conformance not provided shall be cause for rejection of the lot.

A. Definitions.

(1) Critical defect. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.

(2) Major defect. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

(3) Minor defect. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

B. Classification of inspections. The inspection requirements specified herein are classified as follows:

(1) Product standard inspection. The first article or product demonstration model shall be inspected in accordance with the provisions of this document and evaluated for appearance, odor, flavor, and texture. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection of the lot.

(2) Periodic review evaluation. The approved first article or product demonstration model shall be used as the product standard for periodic review evaluations. All food components that are inspected by the USDA shall be subject to periodic review sampling and evaluation. The USDA shall select sample units during production of contracts and submit them to the following address for evaluation:

US Army Research, Development and Engineering Command
Natick Soldier Research, Development and Engineering Center
RDNS-CFF
15 Kansas Street
Natick, MA 01760-5056

One lot shall be randomly selected during each calendar month of production or as otherwise specified in the contract. Three (3) sample units shall be randomly selected from that one production lot. The three (3) sample units shall be shipped to Natick within five (5) working days from the end of the production month from which they are randomly selected and upon completion of all USDA inspection requirements. The sample units will be evaluated for overall quality against the current first article or product demonstration model.

(3) Conformance inspection. Conformance inspection shall include the examinations/tests and the methods of inspection cited in this section and in section 4 of MIL-PRF-44073.

E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. Product examination. The finished product shall be examined for compliance with the performance requirements specified in A-S-20352B and Section C of this PKG&QAP document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in bottles or pouches. The sample unit shall be the contents of one bottle or one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in table I.

TABLE I. Product defects 1/ 2/ 3/

Category		Defect
Major	Minor	
101		Product not whole muscle, white meat chicken chunks.
		Appearance
102		Bone or bone fragment measuring more than 0.30 inch in any dimension.
	201	Exterior color not light tan.
	202	Interior color not light tan to pale pink.
	203	Broth not a golden translucent color.
	204	Product not discernible chunks.
	205	Total weight of skin, blood spots, cartilage, coarse connective tissue, tendons or ligaments, and glandular material more than 0.2 ounce (5.7 grams).
	206	Not a distinct fibrous appearance.
		Odor and flavor
103		Odor or flavor not mild white meat chicken.
		Texture
	207	Chicken chunks not tender or not moist or not firm.
	208	Chicken chunks dry or tough or mushy.
		Weight
	209	Type V net weight of individual pouch less than 4.7 ounces (133 grams). 4/
	210	Type VI net weight of individual pouch less than 6.7 ounces (190 grams). 5/

TABLE I. Product defects 1/ 2/ 3/ - Continued

Category		Defect
Major	Minor	
	211	Type V drained weight of individual pouch less than 3.9 ounces (111 grams). 6/
	212	Type VI drained weight of individual pouch less than 5.5 ounces (156 grams). 7/

1/ Presence of any foreign materials such as, but not limited to dirt, insect parts, hair, glass, wood, or metal, or any foreign odors or flavors such as, but not limited to burnt, scorched, rancid, sour, stale, musty or moldy shall be cause for rejection of the lot.

2/ Finished product not equal to or better than the approved product standard in palatability and overall appearance shall be cause for rejection of the lot.

3/ Type requirements for chicken meat shall be verified by the Certificate of Conformance.

4/ Sample average net weight less than 5.0 ounces (142 grams) shall be cause for rejection of the lot.

5/ Sample average net weight less than 7.0 ounces (198 grams) shall be cause for rejection of the lot.

6/ Sample average drained weight of chicken less than 4.2 ounces (119 grams) shall be cause for rejection of the lot.

7/ Sample average drained weight of chicken less than 5.8 ounces (164 grams) shall be cause for rejection of the lot.

B. Methods of inspection.

(1) Commercial sterility. Commercial sterility shall be verified in accordance with USDA/FSIS regulations.

(2) Shelf life. The contractor shall provide a Certificate of Conformance that the product has a 36 month shelf life when stored at 80°F. Government verification may include storage for 6 months at 100°F or 36 months at 80°F. Upon completion of either storage

period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point quality scale to be considered acceptable.

(3) Net weight. The net weight of the filled and sealed pouches shall be determined by weighing each sample on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1 ounce or to the nearest 1 gram.

~~Drained weight. The pouch contents shall be poured into a flat-bottom container. A minimum of three times the volume of the pouch of not less than 140°F and not greater than 190°F water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat without breaking the chicken. The contents shall then be poured into a U.S. Standard No. 7 sieve in a manner that will distribute the product over the sieve without breaking the chicken. The 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 such an angle to assure complete drainage of liquid from the product. Drain product for two minutes before determining the combined drained weight by subtracting the sieve tare weight from the gross weight. Remove chicken from the sieve and record weight of sieve plus its contents. Subtract the weight of the sieve plus its contents from the combined drained weight and sieve to determine the weight of the chicken. The drained weight shall be reported to the nearest 0.1 ounce or to the nearest 1 gram.~~

(4) Drained weight. Weigh a U.S. Standard No. 7 sieve to obtain the sieve tare weight. The pouch contents shall be poured into a flat-bottom container. A minimum of three times the volume of the pouch of not less than 140°F and not greater than 190°F water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat without breaking the chicken. The contents shall then be poured into a U.S. Standard No. 7 sieve in a manner that will distribute the product over the sieve without breaking the chicken. The 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 such an angle to assure complete drainage of liquid from the product. Drain product for two minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. The drained weight shall be reported to the nearest 0.1 ounce or to the nearest 1 gram.

Comment [MMDCTS1]: 12 September 2014, ch 01, (ES14-041 (DSCP-SS-14-01469)

E-6 QUALITY ASSURANCE PROVISIONS (PACKAGING AND PACKING MATERIALS)

A. Packaging.

(1) Pouch material testing. The pouch material shall be examined for the characteristics listed in table I of MIL-PRF-44073 for Type I. The lot size, sample unit, and inspection level criteria for each of the test characteristics are listed below. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

Characteristic	Lot size expressed in	Sample unit	Inspection level
Oxygen transmission rate	yards	1/2 yard	S-1
Water vapor transmission rate	yards	1/2 yard	S-1
Camouflage	yards	1/2 yard	S-1
Thermal processing	pouches	1 pouch	S-2
Low temperature	pouches	1 pouch	S-2
High temperature	pouches	1 pouch	S-2

(2) Filled and sealed pouch testing. The filled and sealed thermoprocessed or hot-fill processed pouches shall be examined for the characteristics listed in table I of MIL-PRF-44073 for Type I. The lot size, sample unit, and inspection level criteria for each of the test characteristics are listed below. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

Characteristic	Lot size expressed in	Sample unit	Inspection level
Residual gas volume	pouches	1 pouch	S-2
Internal pressure	pouches	1 pouch	S-2 1/
Directional tear	pouches	1 pouch	S-2

1/ When a three-seal tester is used, a separate set of samples is required for testing of the closure seal.

(3) Pouch examination. The pouches shall be examined for the defects listed in table II of MIL-PRF-44073 for Type I. The lot size shall be expressed in pouches. The sample unit shall be one thermal processed pouch. The inspection level shall be I and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major A defects, 2.5 for major B defects, and 4.0 for minor defects. Two hundred sample units shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot.

(4) Sleeve examination. The sleeves shall be examined for the defects listed in table III of MIL-PRF-44073 for Type I. The lot size shall be expressed in units of sleeves. The sample

unit shall be one sleeve. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major defects and 2.5 for minor defects.

B. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table II. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container fully packed. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

TABLE II. Shipping container and marking defects

Category		Defect
Major	Minor	
101		Marking missing or incorrect or illegible.
102		Inadequate workmanship. 1/
	201	More than 40 pounds of product.

1/ Inadequate workmanship is defined as, but not limited to, incomplete closure of container flaps, loose strapping, inadequate stapling, improper taping, or bulged or distorted container.

SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the applicable version of these documents is that which is active on the date of the solicitation or contract.

DLA Troop Support Form

Form 3556	Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence

MILITARY SPECIFICATIONS

MIL-PRF-44073	Packaging of Food in Flexible Pouches

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ) www.astm.org

ANSI/ASQ Z1.4	Sampling Procedures and Tables for Inspection by Attributes

ASTM INTERNATIONAL www.astm.org

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D4727/D4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D5118/D5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes

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For DLA Troop Support Website Posting

RDNS-SEC-F 12 September 2014

TO: DLA Troop Support - Subsistence

SUBJECT: ES14-041 (DSCP-SS-14-01469); Document Change; Packaging Requirements And Quality Assurance Provisions (PKG&QAP) For CID A-A-20352B, Chicken Chunks, White, Cooked, Canned or in Flexible Pouches to correct the drained weight procedure

Date received: 11 September 2014
Date due: 10 December 2014
Date replied: 12 September 2014

1. Natick has initiated an Engineering Support change to correct the drained weight procedure.
in the PKG&QAP A-A-20352B, Chicken Chunks, White, Cooked, Canned or in Flexible Pouches.

2. Natick submits the following change to the subject document for MRE 35 and all future MRE procurements until the document is formally amended or revised.

a. Page 9, Paragraph E-5, B(4), After "(3) Net Weight." delete entire "Drained weight." paragraph and insert a new paragraph:

"(4) Drained weight. Weigh a U.S. Standard No. 7 sieve to obtain the sieve tare weight. The pouch contents shall be poured into a flat-bottom container. A minimum of three times the volume of the pouch of not less than 140°F and not greater than 190°F water shall be added to the container so as to cover the contents. The contents and water shall be gently agitated so as to liquefy rendered fat without breaking the chicken. The contents shall then be poured into a U.S. Standard No. 7 sieve in a manner that will distribute the product over the sieve without breaking the chicken. The 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 such an angle to assure complete drainage of liquid from the product. Drain product for two minutes before determining the drained weight by subtracting the sieve tare weight from the gross weight. The drained weight shall be reported to the nearest 0.1 ounce or to the nearest 1 gram."

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3. Attached is Change 01, PKG&QAP for CID A-A-20352B, Chicken Chunks, White, Cooked, Canned or in Flexible Pouches dated 12 September 2014, with the change highlighted.