SECTION C

This document covers shelf stable poultry sausage links in brine packaged in a No. 10 metal can for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

PCR-P-055, POULTRY SAUSAGE LINKS IN BRINE, PACKAGED IN A No. 10 METAL CAN, SHELF STABLE

Types.

Type I - Turkey
Type II - Chicken

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 Performance-based Contract Requirements (PCR) 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 for approval. In any event, all product produced must meet all requirements of this document including product standard comparability.

B. Commercial sterility. The packaged food shall be processed until commercially sterile.

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

D. Appearance.

(1) General. The finished product shall be cooked poultry sausage links in brine. Each individual can shall contain not less than 75 intact poultry sausage links. The cooked poultry sausage links shall be uniform in size and shape. The packaged food shall be practically free of skin, bone or bone fragments, cartilage, course connective tissue, tendons or ligaments, and discolored meat. The finished product shall be free from foreign materials.

(2) Type I. The cooked turkey sausage links shall have a light tan to brown surface color.

(3) Type II. The cooked chicken sausage links shall have a light tan to brown surface color and shall have a grilled or browned exterior surface.

E. Odor and flavor. The packaged food shall have an odor of cooked poultry with a slight sausage seasoning. The packaged food shall be free from foreign odors and flavors.

(1) Type I. The packaged food shall have a flavor of cooked turkey with salt, black pepper, and other sausage seasonings.

(2) Type II. The packaged food shall have a flavor of cooked chicken with salt, black pepper, and other sausage seasonings.

F. Texture. The poultry sausage links shall have a course grind and shall be moist and moderately firm.

G. Net weight.

(1) Type I. The average net weight shall be not less than 94 ounces (2665 grams). The net weight of an individual can shall be not less than 92 ounces (2609 grams).

(2) Type II. The average net weight shall be not less than 106 ounces (3005 grams). The net weight of an individual can shall be not less than 104 ounces (2948 grams).

H. Drained weight.

(1) Type I. The average drained weight shall be not less than 45.0 ounces (1276 grams). The drained weight of 75 turkey sausage links in an individual can shall be not less than 43.0 ounces (1219 grams).

(2) Type II. The average drained weight shall be not less than 48.0 ounces (1361 grams). The drained weight of 75 chicken sausage links in an individual can shall be not less than 46.0 ounces (1304 grams).

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

J. Analytical requirements.

(1) Fat. The fat content shall be not greater than 17.0 percent.

(2) Salt.

a. Type I. The salt content shall be not less than 0.7 percent and not greater than 1.3 percent.

b. Type II. The salt content shall be not less than 1.1 percent and not greater than 1.7 percent.

SECTION D

D-1 PACKAGING

A. Packaging. The product shall be packaged and processed in a No. 10 metal can in accordance with good commercial practice. The filled can shall be sealed under a vacuum of not less than 20 inches of mercury. The filled, sealed, and processed can shall conform to the United States Standards for Condition of Food Containers.

D-2 LABELING

A. Metal cans. The metal cans shall be labeled in accordance with DLA Troop Support Form 2997, Labeling of Metal Cans for Subsistence. The following information shall be included on a label or printed directly on one end of the can:

(1) Product name 1/
(2) Net weight
(3) Name and address of packer
(4) Can code includes: 2/

Lot number
Filling equipment identification number
Retort identification number and retort cook number (Optional)
Time stamp (Hour and minute of filling/sealing operation)

(5) Official establishment number
(6) USDA official inspection legend for the packer's plant
(7) Ingredients statement

1/ The product shall be formulated and labeled in accordance with all USDA labeling regulations and policies. The cans shall be labeled with the following product name:

Type	Product name
I	TURKEY SAUSAGE LINKS IN BRINE
II	CHICKEN SAUSAGE LINKS IN BRINE

2/ The lot number shall be expressed as either a four-digit code or five-digit code. When using the four-digit code, begin with the final digit of the current year followed by the three-digit Julian code. For example, 14 February 2050 would be coded as 0045. When using the five-digit code, begin with the decade digit of the current year followed by the three-digit Julian code. For example, 14 February 2050 would be coded as 50045. The Julian code shall represent the day the product was packaged into the can and processed. Sublotting (when used) shall be represented by an alpha character immediately following the four-digit or five-digit code. Following the four-digit or five-digit code and the alpha character (when used), the other required code information shall be printed in the sequence as listed above.

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 (Regular Slotted Container) of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, minimum burst grade 200 or ECT 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. Alternatively, six cans of product may be packed in a shipping container complying with ASTM D3951, Standard Practice for Commercial Packaging.

D-4 UNITIZATION

A. Unit loads. Unit loads shall be as specified in accordance with DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

D-5 MARKING

A. Shipping containers and unit loads. Shipping containers and unit loads 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 American National Standards Institute (ANSI)/American Society for Quality (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 U.S. Department of Agriculture (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:

COMBAT CAPABILITIES DEVELOPMENT COMMAND (DEVCOM) SOLDIER CENTER
FCDD-SCD-SCR
10 GENERAL GREENE AVENUE
NATICK, MA 01760-5000

One lot shall be randomly selected during each calendar month of production or as otherwise specified in the contract. Two (2) sample units shall be randomly selected from that one production lot. The two (2) sample units shall be shipped to DEVCOM Soldier Center 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 methods of inspection cited in this section.

E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. Product examination. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Product Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in cans. The sample unit shall be the contents of one can. The inspection level shall be S-3 and the acceptance quality limit (AQL), expressed in terms of defects per hundred units, shall be 4.0 for major defects and 6.5 for minor defects. Defects and defect classifications are listed in table I. The samples for drained weight inspection shall be selected using the same sampling criteria as above.

TABLE I. Product defects 1/ 2/

Category		Defect
Major	Minor	
		Appearance
101		Product not cooked poultry sausage links in brine or not type as specified.
102		Contains less than 75 intact poultry sausage links. 3/
103		Bone or bone fragment measuring more than 0.3 inch in any dimension.
	201	Cooked poultry sausage links not uniform in size or not shape.
	202	Type I cooked turkey sausage links not a light tan to brown surface color.
	203	Type II cooked chicken sausage links not a light tan to brown surface color or not grilled and not browned exterior surface.

TABLE I. Product defects 1/ 2/ - Continued

Category		Defect
Major	Minor	
	204	Total weight of skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat more than 1.0 ounce.
		Odor and flavor
104		The packaged food does not have an odor of cooked poultry or not with a slight sausage seasoning.
105		Type I packaged food does not have a flavor of cooked turkey or not salt or not black pepper or not other sausage seasonings.
106		Type II packaged food does not have a flavor of cooked chicken or not salt or not black pepper or not other sausage seasonings.
		Texture
	205	Poultry sausage links do not have a course grind or not moist or not moderately firm.
		Net weight
	206	Type I net weight of an individual can less than 92 ounces (2609 grams). 4/
	207	Type II net weight of an individual can less than 104 ounces (2948 grams). 5/
		Drained weight
	208	Type I drained weight of 75 turkey sausage links in an individual can less than 43.0 ounces (1219 grams). 6/
	209	Type II drained weight of 75 chicken sausage links in an individual can less than 46.0 ounces (1304 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/ Not intact is defined as more than three poultry sausage links in an individual can broken into two or more pieces.

4/ Type I sample average net weight less than 94 ounces (2665 grams) shall be cause for rejection of the lot.

5/ Type II sample average net weight less than 106 ounces (3005 grams) shall be cause for rejection of the lot.

6/ Type I sample average drained weight of the turkey sausage links less than 45.0 ounces (1276 grams) shall be cause for rejection of the lot.

7/ Type II sample average drained weight of the chicken sausage links less than 48.0 ounces (1361 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/Food Safety and Inspection Service (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 can shall be determined by weighing each sample unit on a suitable scale tared with a representative empty can and lid. Results shall be reported to the nearest 1 ounce or to the nearest 1 gram.

(4) Drained weight. Weigh a U.S. Standard 1/4 inch sieve to obtain the sieve tare weight. The can contents shall be poured into a flat-bottom container. A minimum of three times the can's volume 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 sausage links. The contents shall then be poured into a U.S. Standard 1/4 inch sieve in a manner that will distribute the product over the sieve without breaking the sausage links. 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 ensure 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 0.5 ounce or to the nearest 1 gram.

(5) Analytical. The sample to be analyzed shall be a one-pound composite of three thoroughly drained, filled and sealed cans that have been selected at random from one production lot. 1/ The composite sample shall be prepared using Method 983.18 and analyzed in accordance with the following methods of the Official Methods of Analysis (OMA) of AOAC International:

Test	Method Number
Fat	985.15, 996.06, or 2008.06
Salt	935.47 or 971.27

Test results shall be reported to the nearest 0.1 percent. Government verification will be conducted through actual testing by a Government laboratory. Any result not conforming to the analytical requirements shall be cause for rejection of the lot.

1/ Drain cans thoroughly for two minutes.

E-6 QUALITY ASSURANCE PROVISIONS (PACKAGING AND PACKING MATERIALS, No. 10 METAL CAN)

A. Packaging.

(1) Can condition examination. Examination of filled and sealed cans shall be in accordance with the United States Standards for Condition of Food Containers. In addition, scratches, scuffs or abrasions that occur on the outside coating as a result of the filling, sealing, and processing of the cans shall not be scored as a defect.

(2) Can closure examination. Can closures shall be examined visually and by teardowns in accordance with the can manufacturer's requirement and 21 CFR, Part 113, Subpart D, or 9 CFR, Part 318, Subpart G, as applicable. Any nonconformance based on observation of can seam teardowns or on record of can seam teardowns shall be classified as a major defect and shall be cause for rejection of any involved product.

(3) Can vacuum examination. The filled and sealed cans selected for the product examination shall be examined for vacuum. The cans and contents shall be allowed to reach 70° to 80°F. The vacuum reading shall be taken with a puncture-type vacuum gauge making

the puncture as near as possible to the double seam to minimize error due to distortion of the end. A correction of 1 inch of vacuum shall be added to the gauge reading for each 1000 feet above sea level at which the determination is made. Failure of any can to meet the vacuum requirement of 5 inches shall be cause for rejection of the lot.

B. Labeling.

(1) Can labeling examination. The can labeling shall be examined in accordance with the requirements of DLA Troop Support Form 2997, Labeling of Metal Cans for Subsistence. Any nonconformance shall be classified as a major defect.

C. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table II below. 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.

D. Unitization.

(1) Unit load examination. The unit load shall be examined in accordance with the requirements of DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items. Any nonconformance shall be classified as a major defect.

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 Forms

Form 2997	Labeling of Metal Cans for Subsistence
Form 3507	Loads, Unit: Preparation of Semiperishable Subsistence Items
Form 3556	Marking Instructions for Boxes, Sacks and Unit Loads of Perishable and Semiperishable Subsistence

(These forms are available online at https://www.dla.mil/Troop-Support/Subsistence/Operational-rations/PCR-ACR/)

GOVERNMENT PUBLICATIONS

Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder (21 CFR Parts 1-199) and (9 CFR Parts 1-391)

U.S. Standards for Condition of Food Containers

(These CFRs and Standards are available online at https://www.ecfr.gov/)

NON-GOVERNMENTAL STANDARDS

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

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

AOAC INTERNATIONAL www.aoac.org

Official Methods of Analysis (OMA) of the AOAC International

ASTM INTERNATIONAL www.astm.org

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes

D3951	Standard Practice for Commercial Packaging
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