**PCR-B-053B**
**19 May 2022**
**SUPERSEDING**
**PCR-B-053A**
**19 Aug 2020**

## SECTION C

This document covers shelf stable breakfast skillet (shredded potatoes and scrambled eggs mixed with meat or poultry sausage, bell peppers and onions), cooked, dehydrated, packaged in a boil-in-bag (BIB) then overpacked in a barrier pouch or packaged in a stand up pouch for use by the Department of Defense as a component of operational rations.

## C-1 ITEM DESCRIPTION

### PCR-B-053B, BREAKFAST SKILLET (SHREDDED POTATOES AND SCRAMBLED EGGS MIXED WITH MEAT OR POULTRY SAUSAGE, BELL PEPPERS AND ONIONS), COOKED, DEHYDRATED, PACKAGED IN A BOIL-IN-BAG (BIB) OR STAND UP POUCH, SHELF STABLE

Class, type, style, and flavors.

Class.

Class 2 - BIB with large opening fitment and cap
For use in Unitized Group Ration – Heat & Serve (UGR-H&S)

Type.

Type II - BIB without center seal

Style.

Style I - Stand up pouch
For use in Meal, Cold Weather (MCW)

Flavors.

Flavor 1 - Pork sausage
Flavor 2 - Turkey sausage

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

C. Dehydrated product.

(1) Appearance.

a. General. The finished product shall be a cooked, dehydrated mixture of shredded potatoes, scrambled eggs, meat or poultry sausage appropriate for the specific flavor, bell peppers and onions. The finished product shall be fully dehydrated. The finished product shall be free from foreign materials.

b. Shredded potatoes. The cooked, dehydrated potatoes shall be shreds and shall be an off-white to light cream exterior and interior color.

c. Eggs. The cooked, dehydrated scrambled egg pieces shall be a yellow color.

d. Vegetables. The cooked, dehydrated green bell pepper pieces shall be a green color and red bell pepper pieces shall be a red to reddish-orange color. The cooked, dehydrated onion pieces shall be an off-white color.

e. Flavor 1. The cooked, dehydrated pork sausage pieces shall be a brown color.

f. Flavor 2. The cooked, dehydrated turkey sausage pieces shall be an off-white to light tan color.

(2) Odor. The dehydrated packaged food shall have a smoked egg odor. The packaged food shall be free from foreign odors.

a. Flavor 1. The breakfast skillet with pork sausage shall have a pork sausage odor.

b. Flavor 2. The breakfast skillet with turkey sausage shall have a turkey sausage odor.

(3) Texture. The product shall not have wet or soft spots indicating incomplete dehydration.

D. Net weight.

(1) Class 2, Type II, BIB. The average net weight shall be not less than 24.7 ounces (700 grams). The net weight of an individual BIB shall be not less than 23.7 ounces (672 grams).

(2) Style I, Stand up pouch. No individual pouch shall have a net weight of less than 3.3 ounces (93 grams).

E. Rehydrated product.

(1) Appearance.

a. General. The finished product shall be a rehydrated mixture of shredded potatoes, scrambled eggs, meat or poultry sausage (for specified flavor), bell peppers and onions. The rehydrated finished product shall be free from foreign materials.

b. Shredded potatoes. The rehydrated potatoes shall be discernable shreds and shall be an off-white to light cream exterior and interior color.

c. Eggs. The rehydrated scrambled egg pieces shall be a yellow color.

d. Vegetables. The rehydrated green bell pepper pieces shall be a green color and red bell pepper pieces shall be a red to reddish-orange color. The rehydrated onion pieces shall be translucent white to off-white color.

e. Flavor 1. The rehydrated pork sausage pieces shall be 1/4 to 3/4 inch in length. The pork sausage shall be a light to medium brown color. The packaged food shall be

practically free of bone or bone fragments, cartilage, coarse connective tissue, tendons or ligaments, and glandular material.

f. Flavor 2. The rehydrated turkey sausage pieces shall be 1/8 to 1/4 inch in length. The turkey sausage shall be a light tan color. The packaged food shall be practically free of skin, bone or bone fragments, cartilage, coarse connective tissue, tendons or ligaments, glandular material, and discolored meat.

(2) Odor and flavor. The rehydrated packaged food shall have a smoked egg, shredded potatoes, bell peppers and onions odor and flavor. The packaged food shall be free from foreign odors and flavors.

a. Flavor 1. The breakfast skillet with pork sausage shall have a cooked pork sausage odor and flavor.

b. Flavor 2. The breakfast skillet with turkey sausage shall have a cooked turkey sausage odor and flavor.

(3) Texture.

a. General. The Class 2, Type II, BIB product shall rehydrate in accordance with label instructions and shall show complete water penetration within five minutes. The Style I, stand up pouch product shall fully rehydrate within twelve minutes.

b. Shredded potatoes. The rehydrated potato shreds shall be moist and tender.

c. Eggs. The rehydrated scrambled egg pieces shall be moist and tender and may be slightly spongy.

d. Vegetables. The rehydrated bell pepper pieces and onion pieces shall be soft and tender.

e. Flavors 1 and 2. The rehydrated pork sausage and turkey sausage pieces shall be moist and tender.

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

G. Analytical requirements.

(1) Protein.

a. For flavor 1, the protein content shall be not less than 22.0 percent.

b. For flavor 2, the protein content shall be not less than 20.0 percent.

(2) Fat. For flavors 1 and 2, the fat content shall be not greater than 35.0 percent.

(3) Sodium.

a. For flavor 1, the sodium content shall be not greater than 1540 mg per 100 grams.

b. For flavor 2, the sodium content shall be not greater than 1600 mg per 100 grams.

(4) Moisture. The moisture content of the dehydrated product shall be not greater than 3.0 percent.

(5) Oxygen.

a. Class 2, Type II, BIB. The oxygen content of the headspace gas in the barrier pouch shall not exceed 2.0 percent.

b. Style I, Stand up pouch. The oxygen content in the filled and sealed pouch shall not exceed 0.50 percent.

H. Microbiological requirements.

(1) Aerobic plate count. The aerobic plate count shall be not greater than 75,000 Colony Forming Units (CFU) per gram in four of five samples and not greater than 150,000 CFU per gram in any individual sample.

(2) *Escherichia coli (E. coli)* count. *E. coli* shall have less than 10 CFU per gram or less than 3 Most Probable Number (MPN) per gram, where findings indicate zero colonies CFU per plate or zero tubes producing gas for MPN.

(3) S*almonella*. The *Salmonella* test shall be negative for each of five BIBs or pouches tested per production lot.

I. BIB filling and sealing.

(1) Class 2, Type II, BIB. The combined dehydrated product shall be inserted into the BIB and then into the barrier pouch within 96 hours from combining individual components. If the product cannot be packaged within 96 hours, then the remaining product shall be adequately protected from moisture by either holding under a nitrogen atmosphere with 2.0 percent or less oxygen, or under a vacuum of at least 27 inches of mercury (27 Hg). If a vacuum is used, it shall be broken with nitrogen. Product may be held for a period not to exceed 30 days prior to packaging into BIBs.

## SECTION D

## D-1 PACKAGING

A. Packaging.

(1) Class 2, Type II, BIB. A net weight of 24.7 ounces (700 grams) of dehydrated product shall be filled and sealed in a preformed BIB in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A BOIL-IN-BAG (BIB).

a. Barrier pouch. One Class 2, Type II BIB and oxygen scavenger (in accordance with the applicable assembly document) shall be placed in a barrier pouch having maximum outside dimensions of 18 by 18 inches. The pouch shall be made from a heat sealable barrier material. Note that material conforming to MIL-PRF-131 has been used. All four edges of the pouch shall be heat-sealed with seals not less than 1/8 inch wide. The BIB and oxygen scavenger shall not be entrapped in the heat seals. The side, bottom and closure seals shall have an average seal strength of not less than 6 pounds per inch of width and no individual specimen shall have a seal strength of less than 5 pounds per inch of width. Alternatively, the filled and sealed pouch shall exhibit no rupture or seal separation greater than 1/16 inch or seal separation that reduces the effective closure seal width to less than 1/16 inch when tested for internal pressure resistance. A tear nick, notch or serrations shall be provided to facilitate opening of the filled and sealed pouch.

b. Oxygen scavenger. The oxygen scavenger shall be constructed of materials that are safe for direct food contact. The oxygen scavenger shall be in compliance with all applicable Food and Drug Administration (FDA) regulations.

c. Box. One barrier pouch with one Class 2, Type II BIB and oxygen scavenger shall be packed in a box in accordance with the applicable assembly document. The box shall be style RSC, or telescoping design. If paperboard is used, it shall be minimum 0.028 inch thick and shall have a minimum basis weight of 100 pounds per square feet. The material may be coated. The material may be bleached. Corrugated materials of E, B, or C flute may also be used. The use of materials composed of the highest percentage of recovered materials practicable is encouraged. The outside dimensions of the carton shall not exceed 12-1/2 by 11-1/2 by 4-1/2 inches.

(2) Style I, Stand up pouch. Product shall be filled and sealed into a pouch with an oxygen scavenger in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH.

## D-2 LABELING

A. Labeling.

(1) Class 2, Type II, BIB. The product shall be formulated and labeled in accordance with all USDA labeling regulations and policies. Each BIB shall be correctly and legibly labeled. Printing ink shall be permanent black ink or other dark contrasting color, which is free of carcinogenic elements. A carcinogenic-free pre-printed self-adhering clear polyester label printed with indelible contrasting ink may also be used. The label shall contain the following information:

(1) Name of product (letters not less than 1/4 inch high)
(2) Ingredients
(3) Date 1/
(4) Net weight
(5) Contractor's name and address
(6) USDA plant number
(7) “Nutrition Facts” label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable USDA regulations

NOTE: There shall be a black line, minimum 1/16 inch thick, indicating the fill level.

1/ Each BIB shall have the date of pack noted by using a four digit code beginning 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. The Julian code shall represent the day the product was packaged into the BIB.

The following instructions shall be printed on the Class 2, Type II, BIB:

**YIELD:** Serves 10 portions of approximately 1 cup each.

**PREPARATION**:

1. Shake BIB to settle contents. Open cap.
2. Support BIB on flat surface.
3. Add about 56 ounces (7 cups) of potable water to fill line. Replace cap.
4. Shake BIB until contents are rehydrated. Knead if necessary.

**WARNING:** Do not heat BIB in oven.
**Rehydrated breakfast skillet should be used within one hour unless refrigerated for use within 24 hours.**

**COOKING**

**IN WATER:** Place rehydrated closed BIB in boiling water. Simmer gently 35 minutes or until breakfast skillet is hot. Avoid overcooking (BIB may show evidence of bulging).

**TO TRANSPORT AFTER HEATING:** Insert BIB into an insulated food container or empty cooked breakfast skillet into an insulated food container to protect during transport.

**CAUTION:** Use care when opening as pressure may have been generated within the BIB.

**TO OPEN:** Cut bottom of BIB with clean knife.

Note: The font tested by DEVCOM Soldier Center was Microsoft Helvetica. The font used shall be similarly clear/easy to read as Helvetica. The recommended font sizes are as follows: 22 for the product name, 14 for "yield" and "cooking/heating." If an additional note is required on the label it should also be in font size 14. All other information should be in font size 9.

(2) Style I, stand up pouch. The product shall be formulated and labeled in accordance with all USDA labeling regulations and policies. Each pouch shall be correctly

and legibly labeled. Printing ink shall be permanent ink in a contrasting color which is free of carcinogenic elements. The label shall contain the following information:

(1) Product name (letters not less than 1/8 inch high)
(2) Ingredients
(3) Date 1/
(4) Net weight
(5) Name and address of packer
(6) "Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable USDA regulations
(7) Directions for preparation: Label shall include package opening instructions, instructions for removal and discard of oxygen scavenger, and amount of boiling water and time required to fully rehydrate the product.

1/ Each stand up pouch shall have the date of pack noted by using a four-digit code beginning 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. The Julian code shall represent the day the product was packaged into the stand up pouch.

(3) The BIBs shall be labeled with the following product name:

BREAKFAST SKILLET WITH TURKEY SAUSAGE, COOKED, DEHYDRATED

B. Barrier pouch (Class 2, Type II, BIB). Each barrier pouch shall be correctly and legibly labeled. Printing ink shall be permanent black ink or other dark contrasting color, which is free of carcinogenic elements. The label shall contain the following information:

(1) Name of product (letters not less than 1/4 inch high)
(2) Contents
(3) Date 1/
(4) Contractor's name and address

1/ Each barrier pouch shall have the date of pack noted by using a four digit code beginning 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. The Julian code shall represent the day the product was packaged into the BIB.

C. Box (Class 2, Type II, BIB). Each box shall be correctly and legibly labeled. Printing ink shall be permanent black ink or other, dark, contrasting color. The label shall contain the following information:

(1) Name of product (letters not less than 1/4 inch high)
(2) Contents
(3) Date 1/
(4) Contractor's name and address

1/ Each box shall have the date of pack noted by using a four digit code beginning 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. The Julian code shall represent the day the product was packaged into the BIB.

## D-3 PACKING

A. Packing.

(1) Class 2, Type II, BIB. 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, 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.

(2) Style I, stand up pouch. Packing for shipment to ration assembler shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH.

## D-4 UNITIZATION

A. Unit loads.

(1) Class 2, Type II, BIB. Unit loads shall be as specified in DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

## D-5 MARKING

A. Shipping containers and unit loads.

(1) Class 2, Type II, BIB. 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.

(2) Style I, stand up pouch. Marking of shipping containers shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH.

## 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:

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

a. Class 2, Type II, BIB. One lot shall be randomly selected during each calendar month of production or as otherwise specified in the contract. The sample unit shall be one paperboard carton or barrier pouch containing one BIB of breakfast skillet. 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.

b. Style I, stand up pouch. 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 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.

a. Class 2, Type II, BIB. Conformance inspection shall include the examinations/tests and the methods of inspection cited in this section and in PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A BOIL-IN-BAG (BIB).

b. Style I, stand up pouch. Conformance inspection shall include the examinations/tests and the methods of inspection cited in this section and in the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH.

## E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. Product examination.

(1) Class 2, Type II, BIB. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in BIBs. The sample unit shall be the contents of one BIB. The inspection level shall be S-2 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 6.5 for minor defects. Defects and defect classifications are listed in table I.

(2) Style I, stand up pouch. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. 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 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/

| Category | | Defect |
|---|---|---|
| Major | Minor | |
| | | **Dehydrated product** |
| | | Appearance |
| 101 | | Product not a cooked or not a dehydrated mixture of shredded potatoes or not scrambled eggs or not meat or not poultry sausage (for specified flavor) or not bell peppers or not onions. |
| 102 | | Product not fully dehydrated. 3/ |
| 103 | | Product not type or style as specified. |

TABLE I. Product defects 1/ 2/ - Continued

| Category | | Defect |
|---|---|---|
| Major | Minor | |
| 104 | | Pouch does not contain intact oxygen scavenger. 4/ |
| 105 | | Style 1, tear or hole or open seal in oxygen scavenger. 4/ |
| | 201 | Cooked, dehydrated potatoes not shreds or not an off-white to light cream exterior or interior color. |
| | 202 | Cooked, dehydrated scrambled egg not pieces or not a yellow color. |
| | 203 | Cooked, dehydrated green bell pepper not pieces or not a green color and red bell pepper not pieces or not a red to reddish-orange color. |
| | 204 | Cooked, dehydrated onion not pieces or not an off-white color. |
| | 205 | Flavor 1 cooked, dehydrated pork sausage not pieces or not a brown color. |
| | 206 | Flavor 2 cooked, dehydrated turkey sausage not pieces or not an off-white to light tan color. |
| | | Odor |
| 106 | | Product does not have a smoked egg odor. |
| 107 | | Flavor 1 breakfast skillet with pork sausage not a pork sausage odor. |
| 108 | | Flavor 2 breakfast skillet with turkey sausage not a turkey sausage odor. |
| | | Texture |
| 109 | | Product has wet or soft spots indicating incomplete dehydration. |

TABLE I. Product defects 1/ 2/ - Continued

| Category | | Defect |
|---|---|---|
| Major | Minor | |
| | | Net weight |
| | | Class 2, Type II, BIB |
| | 207 | Net weight of an individual BIB less than 23.7 ounces (672 grams). 5/ |
| | | Style I, Stand up pouch |
| | 208 | Net weight of an individual pouch less than 3.3 ounces (93 grams). |
| | | **Rehydrated product** 6/ |
| | | Appearance |
| 110 | | Product not a rehydrated mixture of shredded potatoes or not scrambled eggs or not meat or poultry sausage (for specified flavor) or not bell peppers or not onions. |
| 111 | | Bone or bone fragment measuring more than 0.3 inch in any dimension. |
| | 209 | Class 2, Type II, flavor 1, total weight of cartilage, coarse connective tissue, tendons or ligaments, and glandular material more than 2.0 ounces (57 grams). |
| | 210 | Class 2, Type II, flavor 2, total weight of skin, cartilage, coarse connective tissue, tendons or ligaments, and discolored meat more than 1.0 ounce (28 grams). |
| | 211 | Style I, flavor 1, total weight of cartilage, coarse connective tissue, tendons or ligaments, and glandular material more than 0.2 ounce (5.7 grams). |
| | 212 | Rehydrated potatoes not discernable shreds or not an off-white to light cream exterior or interior color. |

TABLE I. Product defects 1/ 2/ - Continued

| Category | | Defect |
|---|---|---|
| Major | Minor | |
| | 213 | Rehydrated scrambled egg not pieces or not a yellow color. |
| | 214 | Rehydrated green bell pepper not pieces or not a green color and red bell pepper not pieces or not a red to reddish-orange color. |
| | 215 | Rehydrated onion not pieces or not translucent white to off-white color. |
| | 216 | Flavor 1 rehydrated pork sausage not pieces or not 1/4 to 3/4 inch in length or not a light to medium brown color. |
| | 217 | Flavor 2 rehydrated turkey sausage not pieces or not 1/8 to 1/4 inch in length or not a light tan color. |
| | | Odor and flavor |
| 112 | | Rehydrated packaged food does not have a smoked egg odor or flavor or not shredded potatoes, or not bell peppers or not onions odor or flavor. |
| 113 | | Flavor 1 breakfast skillet with pork sausage not a cooked pork sausage odor or flavor. |
| 114 | | Flavor 2 breakfast skillet with turkey sausage not a cooked turkey sausage odor or flavor. |
| | | Texture |
| | 218 | Rehydrated potato shreds not moist or not tender. |
| | 219 | Rehydrated scrambled egg pieces not moist or not tender. |
| | 220 | Rehydrated bell pepper pieces or onion pieces not soft or not tender. |
| | 221 | Rehydrated pork sausage or turkey sausage pieces not moist or not tender. |

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. Foreign flavor is not applicable to dehydrated product.

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. Palatability not applicable to dehydrated product.

3/ Presence of dark colored cores or a glazed surface area more than 0.25 inch in any dimension.

4/ Construction of the oxygen scavenger and compliance with FDA regulations will be verified by Certificate of Conformance (CoC).

5/ Sample average net weight less than 24.7 ounces (700 grams) shall be cause for rejection of the lot.

6/ Prior to conducting the rehydrated product examination, the breakfast skillet shall be rehydrated per BIB or stand up pouch instructions. BIB product that does not show complete water penetration within five minutes or stand up pouch product does not rehydrate within twelve minutes, shall be cause for rejection of the lot.

B. Methods of inspection.

(1) 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.

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

(3) Analytical. The sample to be analyzed shall be a one pound composite from three filled and sealed BIBs or a composite of eight filled and sealed pouches which have been

selected at random from one lot. The composite sample shall be blended to uniformity using a blender or a food processor. The blending must be rapid and conducted in such a way that minimum heat is transferred to the product and that the product has minimum exposure to atmospheric moisture. The composite sample shall be analyzed in accordance with the following methods of the Official Methods of Analysis (OMA) of AOAC International:

| Test | Method Number |
|---|---|
| Protein | 988.05 or 992.15 |
| Fat | 925.32, 991.36, 2007.04, or 2008.06 |
| Sodium | 984.27, 985.35, 2011.14 or 2011.19 |
| Moisture 1/ | 950.46A 2/, 985.14 3/, or 2008.06 |

1/ Moisture determination may be performed on a calibrated Brookfield Ametek Computrac Moisture Analyzer using the manufacturer's recommended instructions for test method and sample preparation. Moisture analysis on this device shall be performed at 110°C.

2/ When AOAC method 950.46A is performed, the temperature-time cycle for moisture analysis shall be modified by using a temperature of 70°C for 16 hours at a pressure of not more than 100 mm of mercury.

3/ AOAC method 985.14 may also be performed after the method has been validated against method 950.46A 2/

Test results for the protein, fat and moisture shall be reported to the nearest 0.1 percent. Test results for sodium shall be reported to the nearest 1 milligram per 100 grams. Government verification will be conducted through actual testing by a Government laboratory. Any result not conforming to the analytical requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

(4) Oxygen testing. Eight filled and sealed pouches shall be randomly selected from one production lot and individually tested for oxygen content. Testing shall be accomplished after the filled and sealed pouches have been allowed to equilibrate at room temperature for not less than 96 hours from the time of sealing. Test results shall be reported to the nearest 0.01 percent. Government verification will be conducted through actual testing by a Government laboratory. Any individual result not conforming to the oxygen content requirement shall be classified as a major defect and shall be cause for rejection of the lot.

(5) Microbiological testing. Five filled and sealed BIBs or pouches shall be selected at random from one lot regardless of lot size. The product shall be individually tested for

microbiological levels in accordance with the OMA of AOAC International or the Food and Drug Administration (FDA) Bacteriological Analytical Manual (BAM). Any result not conforming to the microbiological requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

| Test | Method Number |
|---|---|
| Aerobic plate count | 966.23, 990.12, or BAM Ch. 3 |
| *E. coli* | 991.14 or BAM Ch. 4 |
| *Salmonella* | 967.26, 967.28, 991.13, 2003.09, 2004.03, 2013.09, or BAM Ch. 5 |

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

(1) Class 2, Type II, BIB. Inspection for packaging, labeling, packing, and marking shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A BOIL-IN-BAG (BIB).

(2) Style I, stand up pouch. Inspection for packaging, labeling, packing, and marking shall be in accordance with the PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH.

## 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 3507 | Loads, Unit: Preparation of Semiperishable Subsistence Items |
| Form 3556 | Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence |

DEPARTMENT OF DEFENSE SPECIFICATION

| | |
|---|---|
| MIL-PRF-131 | Barrier Materials, Watervaporproof, Greaseproof, Flexible, Heat-Sealable |

(Copies of these documents are available from http://quicksearch.dla.mil/qsSearch.aspx or from the Standardization Document Order Desk, 700 Robbins Ave, Building 4D, Philadelphia, PA 19111-5094.)

SPECIFICATIONS

PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A BOIL-IN-BAG (BIB)

PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR PRODUCT PACKAGED IN A STAND UP POUCH

GOVERNMENT PUBLICATIONS

FOOD AND DRUG ADMINISTRATION Bacteriological Analytical Manual (BAM) http://www.fda.gov/food/foodscienceresearch/laboratorymethods/ucm2006949.htm

Federal Meat Inspection Act (FMIA) and regulations promulgated thereunder (9 Code of Federal Regulations (CFR) Parts 1-391)

Poultry Products Inspection Act (PPIA) and regulations promulgated thereunder (9 Code of Federal Regulations (CFR) Parts 1-391)

Food Standards and Labeling Policy Book

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 AOAC International

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 |