

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

**SECTION C**

This document covers beverage bases (powdered) in a flexible pouch 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-20098E BEVERAGE BASES (POWDERED)**

Types, flavors, formulations, designs and packages.

Types.

- Type II – Sweetened with nutritive sweetener
- Type III – Sweetened with non-nutritive sweetener

Flavors.

- Flavor 1 – Orange
- Flavor 2 – Lemon
- Flavor 3 – Lime
- Flavor 4 – Lemon-Lime
- Flavor 5 – Grape
- Flavor 6 – Cherry
- Flavor 7 – Fruit Punch
- Flavor 8 – Lemonade
- Flavor 10 – Tropical Punch
- Flavor 12 – Apple Cider
- Flavor 13 – Raspberry
- Flavor 14 – Cranberry
- Flavor 15 – Tangerine Strawberry
- Flavor 18 – Cranberry Pomegranate

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

Formulations.

- Formulation a – Not fortified
- Formulation b – Fortified with not less than 20 milligrams ascorbic acid per serving
- Formulation c – Fortified with vitamin pre-mix
- Formulation d – Fortified with ascorbic acid and enhanced with maltodextrin
  - Ascorbic acid – Not less than 45 milligrams per serving
  - Maltodextrin – Not less than 13 grams per serving
- Formulation e – Fortified with ascorbic acid and enhanced with maltodextrin
  - Ascorbic acid – Not less than 30 milligrams per serving
  - Maltodextrin – Not less than 30 grams per serving
- Formulation f – Fortified with ascorbic acid and enhanced with caffeine
- Formulation g – Fortified with potassium and vitamin pre-mix and enhanced with sodium
- Formulation h – Fortified with ascorbic acid and calcium
- Formulation i – Fortified with ascorbic acid, calcium and vitamin pre-mix
- Formulation n – Fortified with not less than 90 milligrams ascorbic acid per serving

Designs.

- Design A – Flat pouch
- Design B – Flat interlocking closure pouch
- Design C – Envelope pouch
- Design D – Lap or fin seal pouch
- Design E – Small flat pouch

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

Packages.

Package A – Meal, Cold Weather (MCW)  
Package B – Food Packet, Long Range Patrol (LRP)  
Package C – Meal, Ready-to-Eat™ (MRE™)  
Package E – Unitized Group Ration™ (UGR™) - Heat & Serve™ (UGR-H&S™)  
Package I – Unitized Group Ration™ - (UGR-B™)  
Package J – First Strike Ration® (FSR®)  
Package K – Unitized Group Ration™ – Express™ (UGR-E™)  
Package L – Food Packet, Modular Operational Ration Enhancement (MORE)

**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 the Packaging Requirements and Quality Assurance Provisions. 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 non comparable to the product standard, the contractor shall arrange for a new or alternate 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. Odor and flavor. The packaged product shall be free from foreign odors and flavors.

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

E. Net weight.

(1) Type II, flavors 1 through 6, 10, and 12, formulation b and d, design B, C or E, package A, B, or C. The net weight shall be not less than 34 grams or not less than 17 grams, as applicable.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(2) Type II, flavor 1, formulation c, design B, package A or B or C. The net weight shall be not less than 50 grams.

**Comment [C1]:** Natick case ES10-122, change 03, 27 Sep 10, to provide reference for MRE beverage.

(3) Type III, flavors 8 and 13, formulation a, design D, package A, C, K or J. The net weight shall be not less than 2.2 grams.

(4) Type II, flavors 1, 4, 5, 7, 8 and 10, formulation e, design B, package J or L. The net weight shall be not less than 47 grams.

(5) Type III, flavors 1 and 14, formulation f, design D, package E. The net weight shall be not less than 6.0 grams.

(6) Type III, flavors 4 and 10, formulation g, design D, package E. The net weight shall be not less than 4.0 grams.

(7) Type III, flavor 1, formulation h, design D, package C. The net weight shall be not less than 3.0 grams.

(8) Type III, flavor 15, formulation i, design D, packages C, E and K. The net weight shall be not less than 5.0 grams.

(9) Type III, flavor 7, formulation n, design D, packages E and K. The net weight shall be not less than 2.0 grams.

(10) Type III, flavor 18, formulation n, design D, packages E and K. The net weight shall be not less than 2.4 grams.

F. Nutrient content.

(1) Formulation a. Not fortified.

(2) Formulation b. The ascorbic acid content shall be not less than 20 milligrams per serving.

(3) Formulation c. The packaged product per serving shall contain not less than the following amounts:

**PKG & QAP**  
**A-A-2009E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-2009D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

Ascorbic acid	80 milligrams
Vitamin D	6.5 micrograms
Calcium	300 milligrams
Vitamin E	2.0 milligrams
Riboflavin	0.6 milligram
Niacin	0.6 milligram
Thiamin	0.4 milligram
Vitamin B6	0.25 milligram

(4) Formulation d. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	45 milligrams
Maltodextrin	13 grams

(5) Formulation e. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	30 milligrams
Maltodextrin	30 grams

(6) Formulation f. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	75 milligrams
---------------	---------------

(7) Formulation g. The packaged product per serving shall contain not less than the following amounts:

Sodium	95 milligrams
Potassium	35 milligrams
Vitamin A	335 milligrams
Ascorbic acid	60 milligrams
Vitamin E	2 milligrams
Riboflavin	0.17 milligrams
Niacin	2 milligrams
Vitamin B6	0.2 milligrams

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(8) Formulation h. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	120 milligrams
Calcium	200 milligrams

(9) Formulation i. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	30 milligrams
Calcium	100 milligrams
Vitamin A	2500 IU per
Vitamin D	5 micrograms
Vitamin K	32.5 micrograms
Iron	9 milligrams
Vitamin E	13.6 milligrams
Niacin	10 milligrams
Vitamin B6	1 milligram
Folic Acid	200 micrograms
Vitamin B12	3 micrograms
Zinc	7.5 milligrams
Selenium	22.5 micrograms

(10) Formulation n. The packaged product per serving shall contain not less than the following amounts:

Ascorbic acid	90 milligrams
---------------	---------------

G. Moisture content. The moisture content requirements, procedures and testing shall be in accordance with A-A-20098E.

H. Caffeine content. For formulation f, the caffeine content requirements, procedures and testing shall be in accordance with A-A-20098E. A serving shall be considered 8 fluid ounces.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

## **SECTION D**

### **D-1 PACKAGING**

#### **A. Packaging.**

(1) Design A. Flat pouch. When specified, beverage base shall be filled into a flat pouch. The pouch shall be used as a package and as a hydrating pouch for the beverage.

a. Pouch material. The pouch shall be fabricated from 0.002 inch thick ionomer or polyethylene film laminated or extrusion coated to 0.00035 inch thick aluminum foil which is then laminated to 0.0005 inch thick polyester. Tolerances for thickness of plastic films shall be plus or minus 20 percent and tolerance for foil layer shall be plus or minus 10 percent. The material shall show no evidence of delamination, degradation, or foreign odor when heat sealed or fabricated into pouches. The material shall be suitably formulated for food packaging and shall not impart an odor or flavor to the product. The complete exterior surface of the pouch shall be uniformly colored in the range of 20219, 30219, 30227, 30279, 30313, 30324, or 30450 of FED-STD-595, Colors Used in Government Procurement.

b. Pouch construction. The pouch shall be a flat design preformed or vertical form-fill-seal pouch having inside dimensions of 4-7/8 ( $\pm 1/8$ ) inches in width by 8-3/8 ( $\pm 1/8$ ) inches in length. The pouch shall be made by heat sealing three edges with 3/8 inch ( $-1/8$  inch,  $+3/16$  inch) wide seals. The side and bottom 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 when tested as specified in E-6,B(1)a. A tear nick, notch or serrations shall be provided to facilitate opening of the filled and sealed pouch. A 1/8 inch wide lip may be incorporated at the open end of the pouch.

c. Pouch filling and sealing. Product shall be inserted into the pouch and the filled pouch shall be sealed with a minimum 1/8 inch wide heat seal. The closure seal shall be free of foldover wrinkles or entrapped matter that reduces the effective closure seal width to less than 1/16 inch. Seals shall be free of impression or design on the seal surface that would conceal or impair visual detection of seal defects. The average seal strength shall be 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 when tested as specified in E-6,B(1)b. Alternatively, the pouch shall exhibit no rupture or seal separation greater than 1/16 inch when tested for internal pressure resistance as specified in E-6,B(1)c.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(2) Design B, Flat interlocking closure pouch. When specified, Type II beverage base shall be filled into a flat interlocking closure pouch. The pouch shall be used as a package and as a hydrating pouch for the beverage.

a. Pouch material. The pouch shall be fabricated from 0.002 inch thick ionomer or polyethylene film laminated or extrusion coated to 0.00035 inch thick aluminum foil which is then bonded to 0.0005 inch thick polyester. Tolerances for thickness of plastic films shall be plus or minus 20 percent and tolerance for foil layer shall be plus or minus 10 percent. The material shall show no evidence of delamination, degradation, or foreign odor when heat sealed or fabricated into pouches. The material shall be suitably formulated for food packaging and shall not impart an odor or flavor to the product. For package A (MCW), the complete exterior of the pouch shall be colored overall with a color in the range of 37778 through 37886 of FED-STD-595. For package B (LRP), package J (FSR®), package K (UGR-E™) and package L (MORE), the complete exterior surface of the pouch shall be uniformly colored in the range of 20219, 30219, 30227, 30279, 30313, 30324, or 30450 of FED-STD-595.

b. Pouch construction. The pouch shall be a flat design preformed or vertical form-fill-seal pouch with an interlocking closure. The design and dimensions shall be as specified in figure 1. The pouch shall be made by heat sealing the sides and top of the pouch with 3/8 (+1/8,-1/4) inch wide seals. The pouch shall exhibit no rupture or seal separation greater than 1/16 inch when tested for internal pressure resistance as specified in E-6,B(1)c. The interlocking closure of the pouch shall not leak more than 15 ml when tested in accordance with E-6,B(2). A tear nick, notch, or serrations shall be provided on one or two opposite edges of the pouch above the interlocking closure to facilitate opening of the filled and sealed pouch. A 1/8 inch wide lip may be incorporated at the open end of the pouch.

c. Pouch filling and sealing. Product shall be inserted into the pouch and the filled pouch shall be sealed with 1/8 to 1 inch wide heat seal. The closure seal shall be applied not more than 1/2 inch from the open end of the pouch. The closure seals shall be free of foldover wrinkles or entrapped matter that reduces the effective closure seal width to less than 1/16 inch. Seals shall be free of impression or design on the seal surface that would conceal or impair visual detection of seal defects. The average seal strength shall be 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 when tested as specified in E-6,B(1)b. Alternatively, the

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

pouch shall exhibit no rupture or seal separation greater than 1/16 inch when tested for internal pressure resistance as specified in E-6,B(1)c.

(3) Design C, Envelope pouch. When specified, type II beverage base shall be filled into an envelope pouch. The pouch shall be made from a heat-sealable, laminated material, one lamina of which shall be a minimum of 0.00035 inch thick aluminum foil. The pouch shall be heat sealed on all four edges or on three edges with the fourth edge being formed by folding the material on an anvil prior to filling. The filled and sealed pouch shall have dimensions of not more than 3-1/2 inches in length, 2-1/2 inches in width, and 1/8 inch in thickness. The closure seals shall be free of foldover wrinkles or entrapped matter that reduces the effective closure seal width to less than 1/16 inch. The seals shall be a minimum 1/8 inch in width. A tear nick, notch or serrations shall be provided to facilitate opening of the filled and sealed pouch. The sealed pouch shall not leak when tested in accordance with E-6,B(3).

(4) Design D, Lap or fin seal pouch. When specified, type III beverage base shall be filled into a lap or fin seal pouch. The lap or fin-seal pouch shall be a heat-sealable, laminated material, one lamina of which shall be a minimum of 0.00035 inch thick aluminum foil. The pouch shall be heat sealed with a length-wise lap or fin seal and heat sealed at each end. The filled and sealed pouch shall have dimensions of not more than 5-3/8 inches in length, 1 1/2 inches in width, and 3/8 inch in thickness. All seals shall be a minimum of 1/8 inch in width. A tear nick, notch or serrations shall be provided to facilitate opening of the filled and sealed pouch. The sealed pouch shall not leak when tested in accordance with E-6,B(3).

(5) Design E, Small flat pouch. When specified, type II beverage base shall be filled into a small flat pouch.

a. Pouch material. The pouch shall be fabricated from 0.002 inch thick ionomer or polyethylene film laminated or extrusion coated to 0.00035 inch thick aluminum foil which is then laminated to 0.0005 inch thick polyester. Tolerances for thickness of plastic films shall be plus or minus 20 percent and tolerance for foil layer shall be plus or minus 10 percent. The material shall show no evidence of delamination, degradation, or foreign odor when heat sealed or fabricated into pouches. The material shall be suitably formulated for food packaging and shall not impart an odor or flavor to the product. For package A (MCW), the complete exterior surface of the pouch shall be colored white overall with a color in the range of 37778 through 37886 of FED-STD-595. For package B (LRP), package C

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(MRE™), and package J (FSR®), the complete exterior surface of the pouch shall be uniformly colored in the range of 20219, 30219, 30227, 30279, 30313, 30324, or 30450 of FED-STD-595.

b. Pouch construction. The pouch shall be a flat style preformed or vertical form-fill-seal pouch. For 17 grams of product, the pouch shall have maximum inside dimensions of 3 inches by 4 inches. For 34 grams of product, the pouch shall have maximum inside dimensions of 3-7/8 inches by 4-3/4 inches. The pouch shall be made by heat sealing three edges with 3/8 inch (-1/8 inch, +3/16 inch) wide seals. A tear nick, notch or serrations shall be provided to facilitate opening of the filled and sealed pouch. A 1/8 inch wide lip may be incorporated at the open end of the pouch.

c. Pouch filling and sealing. Product shall be filled into the pouch. The closure seal shall be free of foldover wrinkles or entrapped matter that reduces the effective closure seal width to less than 1/16 inch. Seals shall be free of impression or design on the seal surface that would conceal or impair visual detection of seal defects. The sealed pouch shall not leak when tested in accordance with E-6,B(3).

**D-2 LABELING**

A. Pouches. Each pouch shall be correctly and legibly labeled. Printed ink shall be permanent black ink or other dark contrasting color which is free of carcinogenic elements.

(1) The label shall contain the following information:

Name and flavor of product (letters not less than 1/8 inch high). **Commercial product names are acceptable provided the flavor is identified.**

Ingredients

Date 1/

Net Weight

Name and address of packer

“Nutrition Facts” label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable FDA regulations

1/ Each 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 day code. For example, 14

**Comment [C2]:** Natick case ES10-115, change 03, 27 Sep 10, to allow commercial names.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

February 2010 would be coded as 0045. The Julian day code shall represent the day the product was packaged into the pouch.

(2) The label shall also show the following applicable directions:

a. Directions for design A flat pouch: Tear pouch at notch. Add 12 ounces of cold water (about 1/2 canteen cup) to pouch. Fold over top of pouch and shake or stir to mix. *SINGLE USE ONLY*. Allow water just chemically purified to stand 30 minutes before adding beverage powder.

b. Directions for design B flat interlocking closure pouch: Tear pouch at notch. Open zipper, add 12 ounces of cold water (about 1/2 canteen cup) to fill line. Close zipper. Shake to mix. *SINGLE USE ONLY*. Allow water just chemically purified to stand 30 minutes before adding beverage powder.

c. Fill line for design B flat interlocking closure pouch: A fill line (not less than 1/32 inch thick, not less than 2 inches long and centered) shall be placed on the pouch or label for 12-ounce fill for Formulation b at  $5\text{-}1/4 \pm 1/4$  inches from the inside edge of the closure seal; for Formulation d at  $6\text{-}1/4 \pm 1/4$  inches from the inside edge of the closure seal; and for Formulations c and e at  $6\text{-}1/2 \pm 1/4$  inches from the inside edge of the closure seal.

d. Directions for a 17 gram pouch, design C envelope pouch or design E small flat pouch: Add 6 ounces (about 1/4 canteen cup) of water to contents and stir. Allow water just chemically purified to stand 30 minutes before adding beverage powder.

e. Directions for a 34 gram, design C envelope pouch or design E small flat pouch: Add 12 ounces of cold water (1/2 canteen cup) to contents and stir. Allow water just chemically purified to stand 30 minutes before adding beverage powder.

f. Directions for design D lap or fin seal pouch: Add 20 ounces of cold water to contents and stir (about 1 canteen cup). Alternatively, add the contents of one pouch to a 20 ounce bottle of water. Allow water just chemically purified to stand 30 minutes before adding beverage powder.

**PKG & QAP**  
**A-A-2009E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-2009D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

### **D-3 PACKING**

A. **Packing**. Not more than 40 pounds of pouched product shall be packed in a fiberboard shipping box constructed in accordance with style RSC-L of ASTM D 5118/D 5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, grade 200 of ASTM D 4727/D 4727M Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes. Each box shall be closed in accordance with ASTM D1974, 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 DSCP 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.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(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 overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection of the lot. 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 01760-5018

One lot shall be randomly selected during each calendar month of production. Six (6) sample units of each item produced shall be randomly selected from that one production lot. The six (6) sample units shall be shipped to Natick within five working days from the end of the production month and upon completion of all USDA inspection requirements. The sample units will be evaluated for the characteristics of appearance, odor, flavor, texture and overall quality.

(2) Conformance inspection. Conformance inspection shall include the product examination and the 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 A-A-20098E and Section C of the Packaging Requirements and Quality Assurance Provisions document utilizing the double sampling

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

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
<u>Major</u>	<u>Minor</u>	
		<b><u>Dehydrated product</u></b>
101		Product not type, flavor, formulation, or design as specified.
	201	Beverage base not uniformly blended or not free flowing or not a homogenous dry mixture.
	202	Presence of hard lumps. <u>3/</u>
		<u>Net weight</u>
	203	Net weight of an individual pouch for type II, flavors 1 through 6 or flavor 10 or flavor 12, formulation b or d less than 34 grams or less than 17 grams, as applicable.

TABLE I. Product defects 1/ 2/ - Continued

Category		Defect
<u>Major</u>	<u>Minor</u>	
	204	Net weight of an individual pouch for type II, flavor 1 formulation c, less than 50 grams.
	205	Net weight of an individual pouch for type III, flavors 8 and 13 formulation a, less than 2.2 grams.
	206	Net weight of an individual pouch for type II, flavors 1, 4, 5, 7, 8 and 10 formulation e, less than 47 grams.
	207	Net weight of an individual pouch for type III, flavors 1 and 14 formulation f, less than 6.0 grams.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

- 208 Net weight of an individual pouch for type III, flavors 4 and 10 formulation g, less than 4.0 grams.
- 209 Net weight of an individual pouch for type III, flavor 1, formulation h, less than 3.0 grams
- 210 Net weight of an individual pouch for type III, flavor 15, formulation i, less than 5.0 grams.
- 211 Net weight of an individual pouch for type III, flavor 7, formulation n, less than 2.0 grams
- 212 Net weight of an individual pouch for type III, flavor 18, formulation n, less than 2.4 grams.

**Rehydrated product 4/**

Appearance

- 102 Color not of the applicable flavor specified.
- 103 Beverage not sediment free.

TABLE I. Product defects 1/ 2/ - Continued

Category		Defect
<u>Major</u>	<u>Minor</u>	
	213	Beverage not clear to slightly cloudy.
		<u>Odor and flavor</u>
104		Odor or flavor not of the applicable flavor specified.

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 is not applicable to dehydrated product.

**PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10**

3/ Lumps that do not fall apart under light pressure between the fingers shall be scored as a defect.

4/ Prior to conducting the rehydrated product examination, the beverage base shall be reconstituted per label instructions. Product that does not fully dissolve within 2 minutes with constant stirring 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 hedonic scale to be considered acceptable.

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

(3) Nutrient content. The sample to be analyzed shall be a composite of the product from eight filled and sealed pouches which have been selected at random from the lot. The composite sample shall be prepared and analyzed for vitamin C in formulation b, c, d, e, f, g, h, and i in accordance with the following methods of the Official Methods of Analysis (OMA) of AOAC International:

<u>Test</u>	<u>Method Number</u>
Vitamin C	984.26 or 967.21 <u>1/</u>

Using the same composite sample, testing for formulation c is listed below:

<u>Test</u>	<u>Method Number</u>
Vitamin E	992.03 <u>1/ 3/</u>
Thiamin	986.27 <u>1/ 4/</u>
Riboflavin	985.31 <u>1/ 4/</u>
Niacin	985.34 <u>1/ 4/</u>

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

Vitamin B6	985.32 <u>1/ 4/</u>
Vitamin D <u>2/</u>	
Calcium	985.35 <u>1/</u>

Using the same composite sample, testing for formulation g is listed below 5/:

<u>Test</u>	<u>Method Number</u>
Vitamin A	941.15 <u>1/ 3/</u>
Vitamin E	992.03 <u>1/ 3/</u>
Riboflavin	985.31 <u>1/ 4/</u>
Niacin	985.34 <u>1/ 4/</u>
Vitamin B6	985.32 <u>1/ 4/</u>
Calcium	985.35 <u>1/</u>

Using the same composite sample, testing for formulation h is listed below 5/:

<u>Test</u>	<u>Method Number</u>
Calcium	985.35 <u>1/</u>

Using the same composite sample, testing for formulation i is listed below 5/:

<u>Test</u>	<u>Method Number</u>
Calcium	985.35 or 984.27 <u>1/</u>
Vitamin A	2001.13 <u>1/ 3/</u>
Vitamin D <u>2/</u>	
Vitamin K <u>2/</u>	
Iron	985.35 or 984.27 <u>1/</u>
Vitamin E	992.03 <u>1/ 3/</u>
Niacin	985.34 <u>1/ 4/</u>
Vitamin B6	2004.07 or 985.32 <u>1/ 4/</u>
Folic Acid <u>2/</u>	
Vitamin B12 <u>2/</u>	
Zinc	985.35 or 984.27 <u>1/</u>
Selenium <u>2/</u>	

**PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10**

Test results shall be reported to the nearest milligram or microgram, as applicable. Government verification will be conducted through actual testing by a Government laboratory. Any nonconforming result shall be cause for rejection of the lot.

1/ As applicable for formulation b, c, d, e, f, g, h, or i tests will be conducted for calcium, vitamin A, vitamin C, vitamin E, riboflavin, thiamin, niacin and vitamin B<sub>6</sub>, iron and zinc on the first production lot and USDA will verify the formula. A Certificate of Conformance (CoC) will be provided on all future lots. If the formula is changed or a new contract starts, then another set of tests shall be conducted and a Certificate of Analysis (CoA) will be provided and USDA will verify the formula.

2/ Verification shall be by a producer's CoA for the vitamin premix.

3/ The composite sample may also be prepared and analyzed for vitamin A and vitamin E in formulations c, g, or i as applicable, in accordance with Approved Methods of the American Association of Cereal Chemists (AACC), 10<sup>th</sup> edition, AACC Method 86-06 "Analysis of Vitamins A and E by High Performance Liquid Chromatography".

4/ The composite sample may also be prepared and analyzed for thiamin, riboflavin, niacin and vitamin B<sub>6</sub> in formulations c, g, or i, as applicable, in accordance with Methods of Vitamin Assay, 4<sup>th</sup> edition, "Simultaneous Analysis of Niacin, Niacinamide, Pyridoxine, Thiamin, and Riboflavin".

5/ Using the same composite sample, for formulation g or i as applicable, the sodium and potassium content shall be verified by the NLEA "Nutrition Facts" label. Product not conforming to the sodium and potassium content as specified in section C of this document shall be cause for rejection of the lot.

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

A. Packaging.

(1) Pouch material certification. The pouch material shall be tested for these characteristics. A CoC may be accepted as evidence that the characteristics conform to the specified requirements.

**PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10**

<u>Characteristic</u>	<u>Requirement paragraph</u>	<u>Test procedure</u>
Thickness of films for laminated material	D-1,A(1)a and D-1,A(2)a	ASTM D 2103 <u>1/</u>
Aluminum foil thickness	D-1,A(1)a and D-1,A(2)a	ASTM B 479 <u>2/</u>
Laminated material identification and construction	D-1,A(1)a and D-1,A(2)a	Laboratory evaluation
Color of laminated material	D-1,A(1)a and D-1,A(2)a	FED-STD-595 <u>3/</u>

1/ ASTM D 2103 Standard Specification for Polyethylene Film and Sheeting

2/ ASTM B 479 Standard Specification for Annealed Aluminum and Aluminum-Alloy Foil for Flexible Barrier, Food Contact, and Other Applications

3/ FED-STD-595 Colors Used in Government Procurement

(2) Unfilled preformed pouch certification. A CoC may be accepted as evidence that unfilled pouches conform to the requirements specified in D-1,A(1)a and b, D-1,A(2)a and b, and D-1,A(5) a and b. When deemed necessary by the USDA, testing of the unfilled preformed pouches for the seal strength shall be as specified in E-6,B(1)a.

(3) Pouch material certification. For designs C, D and E, all material, construction and sealing requirements shall be verified by a CoC.

(4) Filled and sealed pouch examination. The filled and sealed pouches shall be examined for the defects listed in table II. The lot size shall be expressed in pouches. The sample unit shall be one pouch. The inspection level shall be I and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major defects and 2.5 for minor defects.

TABLE II. Filled and sealed pouch defects 1/

<u>Category</u>		<u>Defect</u>
<u>Major</u>	<u>Minor</u>	
101		Tear or hole or open seal.
102		Seal width less than 1/16 inch. <u>2/</u>

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

- 103 Presence of delamination. 3/
- 104 Unclean pouch. 4/
- 105 Pouch has foreign odor.
- 106 Any impression or design on the heat seal surfaces which conceals or impairs visual detection of seal defects. 5/

TABLE II. Filled and sealed pouch defects 1/

Category		Defect
<u>Major</u>	<u>Minor</u>	
107		Leakage. <u>6/</u>
108		Fill line missing or does not measure 5-1/4 ± 1/4 inches from the inside edge of the closure seal for formulation b; 6-1/4 ± 1/4 inches from the inside edge of the closure seal for formulation d; and 6-1/2 ± 1/4 inches from the inside edge of the closure seal for formulations c and e.
	201	Label missing or incorrect or illegible.
	202	Tear nick or notch or serrations missing or does not facilitate opening.
	203	Seal width less than 1/8 inch but greater than 1/16 inch.
		TABLE II. <u>Filled and sealed pouch defects</u> <u>1/</u> - Continued
	204	Presence of delamination. <u>3/</u>
	205	Design B pouch does not meet design cited in figure 1.
	206	Fill line on pouch not required thickness or length.
	207	Design B pouch closure seal more than 1/2 inch from the open end of the pouch.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

1/ Any evidence of rodent or insect infestation shall be cause for rejection of the lot.

2/ The effective closure seal is defined as any uncontaminated, fusion bonded, continuous path, minimum 1/16 inch wide, from side seal to side seal that produces a hermetically sealed pouch.

3/ Delamination defect classification:

Major - Delamination of the outer ply in the pouch seal area that can be propagated to expose aluminum foil at the food product edge of the pouch after manual flexing of the delaminated area. To flex, the delaminated area shall be held between the thumb and forefinger of each hand with both thumbs and forefingers touching each other. The delaminated area shall then be rapidly flexed 10 times by rotating both hands in alternating clockwise- counterclockwise directions. Care shall be exercised when flexing delaminated areas near the tear notches to avoid tearing the pouch material. After flexing, the separated outer ply shall be grasped between thumb and forefinger and gently lifted toward the food product edge of the seal or if the separated area is too small to be held between thumb and forefinger, a number two stylus shall be inserted into the delaminated area and a gentle lifting force applied against the outer ply. If separation of the outer ply can be made to extend to the product edge of the seal with no discernible resistance to the gentle lifting, the delamination shall be classified as a major defect. Additionally, spot delamination of the outer ply in the body of the pouch that is able to be propagated beyond its initial borders is also a major defect. To determine if the laminated area is a defect, use the following procedure: Mark the outside edges of the delaminated area using a bold permanent marking pen. Open the pouch and remove the contents. Cut the pouch transversely not closer than 1/4 inch (+1/16 inch) from the delaminated area. The pouch shall be flexed in the area in question using the procedure described above. Any propagation of the delaminated area, as evidenced by the delaminated area exceeding the limits of the outlined borders, shall be classified as a major defect.

Minor - Minor delamination of the outer ply in the pouch seal area is acceptable and shall not be classified as a minor defect unless it extends to within 1/16 inch of the food product edge of the seal. All other minor outer ply delamination in the pouch seal area or isolated spots of delamination in the body of the pouch that do not propagate when flexed as described above shall be classified as minor defects.

**PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10**

4/ Outer packaging shall be free from foreign matter which is unwholesome, has the potential to cause pouch damage (for example, glass, metal filings) or generally detracts from the clean appearance of the pouch. The following examples shall not be classified as defects for unclean:

a. Foreign matter which presents no health hazard or potential pouch damage and which can be readily removed by gently shaking the package or by gently brushing the pouch with a clean dry cloth.

b. Dried product which affects less than 1/8 of the total surface area of one pouch face (localized and aggregate).

5/ If doubt exists as to whether or not the sealing equipment leaves an impression or design on the closure seal surface that could conceal or impair visual detection of seal defects, samples shall be furnished to the contracting officer for a determination as to acceptability.

6/ Examine envelope pouch after removal from leakage test apparatus.

**B. Methods of Inspection.**

(1) Seal testing. The pouch seals shall be tested for seal strength as required in a, b or c, as applicable.

a. Unfilled preformed pouch seal testing. The seals of the unfilled preformed pouch shall be tested for seal strength in accordance with ASTM F 88, Seal Strength of Flexible Barrier Materials. The lot size shall be expressed in pouches. The sample unit shall be one unfilled pouch. The sample size shall be the number of pouches indicated by inspection level S-1. Three specimens shall be cut from each of the three sealed sides of each pouch in the sample. The average seal strength of any side shall be calculated by averaging the three specimens cut from that side. Any average seal strength of less than 6 pounds per inch of width or any test specimen with a seal strength of less than 5 pounds per inch of width shall be classified as a major defect and shall be cause for rejection of the lot.

b. Pouch closure seal testing. The closure seals of the pouches shall be tested for seal strength in accordance with ASTM F 88. The lot size shall be expressed in pouches. The sample unit shall be one pouch. The sample size shall be the number of pouches indicated by inspection level S-1. For the closure seal on preformed pouches, three specimens shall be cut

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

from the closure seal of each pouch in the sample. For vertical form-fill-seal pouches, three adjacent specimens shall be cut from each side and each end of each pouch in the sample. The average seal strength of any side, end or closure shall be calculated by averaging the three specimens cut from that side, end or closure. Any average seal strength of less than 6 pounds per inch of width or any test specimen with a seal strength of less than 5 pounds per inch of width shall be classified as a major defect and shall be cause for rejection of the lot.

c. Internal pressure test (design A and B). The internal pressure resistance shall be determined by pressurizing the pouches while they are restrained between two rigid plates. The lot size shall be expressed in pouches. The sample unit shall be one pouch. The sample size shall be the number of pouches indicated by inspection level S-1. If a three seal tester (one that pressurizes the pouch through an open end) is used, the closure seal shall be cut off for testing the sides and end of the pouch. For testing the closure seal for design A pouches, when applicable, the bottom seal shall be cut off. For design B pouch, when testing the closure seal, the top and interlocking closure shall be cut off. The pouches shall be emptied prior to testing. If a four-seal tester (designed to pressurize filled pouches by use of a hypodermic needle through the pouch wall) is used, all four seals can be tested simultaneously. The distance between rigid restraining plates on the four-seal tester shall be equal to the thickness of the product + 1/16 inch. Pressure shall be applied at the approximate uniform rate of 1 pound per square inch gage (psig) per second until 14 psig pressure is reached. The 14 psig pressure shall be held constant for 30 seconds and then released. The pouches shall then be examined for separation or yield of the heat seals. Any rupture of the pouch or evidence of seal separation greater than 1/16 inch in the pouch manufacturer's seal shall be considered a test failure. Any seal separation that reduces the effective closure seal width to less than 1/16 inch (see table II, footnote 2/) shall be considered a test failure. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

(2) Interlocking closure test (design B). The interlocking closure of the pouch shall be tested. The lot size shall be expressed in pouches. The sample size shall be the number of pouches indicated by inspection level S-2. Open a filled and sealed interlocking pouch and prepare beverage in accordance with instructions using 70°F (± 5°F) water. Close pouch. Invert pouch and suspend pouch for 15 seconds. Collect and measure any liquid that drips. Pouches that leak more than 15 ml shall be a major defect and shall be cause for rejection of the lot.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

(3) Leakage test. For designs C and E, filled and sealed pouches shall be tested by placing them in a dry desiccator, or similar apparatus, and subjecting them to a vacuum of 26 inches of mercury (atmospheric pressure is 29.9 inches of mercury) for 30 seconds. For design D, filled and sealed lap-seal or fin-seal pouches shall be tested by placing them in a dry desiccator, or similar apparatus, and subjecting them to a vacuum of 15 inches of mercury (atmospheric pressure is 29.9 inches of mercury) for 30 seconds. Any pouch that does not swell to form a tightly distended package having at least one distorted edge during the test shall be recorded as a leaker. After vacuum testing, the pouches shall be visually inspected for evidence of delamination and for seal separation. Any leakage, any delamination, or any seal separation of more than 1/16 inch from the product edge of any seal shall be recorded 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 III 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 III. <u>Shipping container defects</u>	
Category	Defect
<u>Major</u> 101	<u>Minor</u> Marking missing or incorrect or illegible.
102	Inadequate workmanship. <u>1/</u>
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 issues of these documents are those active on the date of the solicitation or contract.

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

DSCP FORMS

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

FEDERAL STANDARD

FED-STD-595 Colors Used in Government Procurement

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ) [www.asq.org](http://www.asq.org)

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

ASTM International [www.astm.org](http://www.astm.org)

B 479 Standard Specification for Annealed Aluminum and  
Aluminum-Alloy Foil for Flexible Barrier, Food  
Contact, and Other Applications

D 1238 Standard Test Method for Melt Flow Rates of  
Thermoplastics by Extrusion Plastometer

D 1505 Standard Test Method for Density of Plastics by the  
Density-Gradient Technique

D 1974 Standard Practice for Methods of Closing, Sealing,  
and Reinforcing Fiberboard Boxes

D 2103 Standard Specification for Polyethylene Film and  
Sheeting

D 4727/D 4727M Standard Specification for Corrugated and Solid Fiberboard

**PKG & QAP**  
**A-A-2009E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-2009D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

Sheet Stock (Container Grade) and Cut Shapes

D 5118/D 5118M Standard Practice for Fabrication of Fiberboard Shipping  
Boxes

F 88 Standard Test Method for Seal Strength of Flexible  
Barrier Materials

AOAC INTERNATIONAL [www.aoac.org](http://www.aoac.org)

Official Methods of Analysis (OMA) of AOAC International

PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10

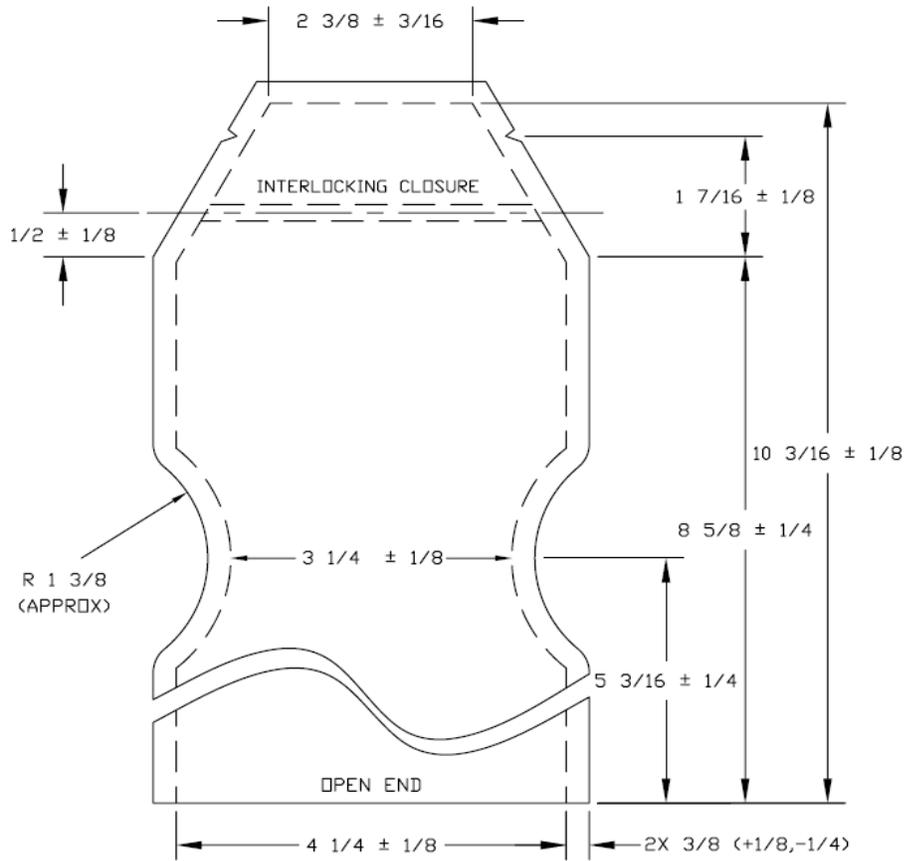


FIGURE 1. Design B Flat, Interlocking Closure Pouch  
(Not actual size)

**PKG & QAP**  
**A-A-20098E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-20098D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

## For DSCP Website Posting

RDNS-CFF

27 September 2010

TO: DLA Troop Support- Subsistence DSCP-FTRA

SUBJECT: ES10-122; Citation of Packaging Requirements for Beverage Bases (Powdered) in ACR-M-031, Meal, Ready-to-Eat™ (MRE™), Assembly Requirements and PKG & QAP for A-A-20098E, Beverage Bases (Powdered)

1. Natick and DLA Troop Support - Subsistence noticed an incomplete citation of the packaging requirements for one of the beverage bases used in MRE 31.
2. A-A-20098E, Beverage Bases (Powdered) and its PKG & QAP describe the Type II, Flavor 1, Formulation c, Design B item as sweetened with nutritive sweetener, orange, fortified with vitamin pre-mix, in a flat interlocking closure pouch and with a net weight of 50 grams. This item is used in Packages A, B and C: Meal, Cold Weather; Food Packet, Long Range Patrol and Meal, Ready-to-Eat™.
3. The following changes to ACR-M-031 are recommended for current, pending and future contracts:
  - a. Table I. After “Sweetened with Nutritive Sweetener Type II”, insert:  
“Flat Interlocking Closure Pouch Design B  
Orange, Fortified with Vitamin Pre-mix Flavor 1, Formulation c”
  - b. Table I. After “Small flat Pouch Design E”, delete:  
“Orange, Fortified with Vitamin Pre-mix Flavor 1, Formulation c”
4. The following change to PKG & QAP of A-A-20098E, Beverage Bases (Powdered) is recommended for current, pending and future contracts:

Para C-2,E(2), in title. Delete “or B” and insert “,B or C”.

**PKG & QAP  
A-A-20098E  
23 September 2009  
SUPERSEDING  
A-A-20098D  
1 November 2006  
W/Change 03 27 Sep 10**

## For DSCP Website Posting

RDNS-CFF

27 September 2010

TO: DLA Troop Support- Subsistence DSCP-FTRA

SUBJECT: ES10-115; Modification of Beverage Label Requirements; PKG & QAP, A-A-20098E, Beverage Bases (Powdered)

1. A beverage powder manufacturer expressed interest in using commercial names/fanciful names on the beverage powder label. With the proliferation of commercial packaging and labels in the rations, a review of the labeling requirements for PKG & QAP, A-A-20098E, Beverage Bases (Powdered) was conducted by Natick.
2. The use of a fanciful name, such as "Morning Orange", by a beverage powder manufacturer is deemed acceptable.
3. Consideration was given to reducing the required directions in recognition of the small label area available on the packets of sugar free beverage powders. Verification that the Marines still use a canteen supported retention of the instructions for the canteen cup. Most requirements are legally mandated by FDA. Therefore, no other changes to the beverage powder labeling requirements are recommended at this time. It is emphasized that the manufacturers are required to print all required information and use exact wording where applicable in accordance with PKG & QAP, A-A-20098E, Beverage Bases (Powdered).
4. The following change to PKG & QAP A-A-20098E is recommended for current, pending and future contracts:
  - a. Para D-2, A(1). After "1/8 inch high)" insert "Commercial product names are acceptable provided the flavor is identified."
5. Current inventories of labels or pre-printed packages may be used. Future stock of labels/packages shall be printed with all required information as regulated by FDA and shall contain any additional information cited in PKG & QAP, A-A-20098E, Beverage Bases (Powdered).

**PKG & QAP**  
**A-A-2009E**  
**23 September 2009**  
**SUPERSEDING**  
**A-A-2009D**  
**1 November 2006**  
**W/Change 03 27 Sep 10**

6. Attached is Change 03, PKG & QAP A-A-2009E, Beverage Base Powder, dated 27 September 2010, with changes highlighted.