

SECTION C

This document covers fortified cocoa beverage powder packaged in a flexible pouch for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

PCR-C-041, COCOA BEVERAGE POWDER, FORTIFIED, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE

Packages.

- Package A – Meal, Cold Weather (MCW)
- Package B – Food Packet, Long Range Patrol (LRP)
- Package C – Meal, Ready-to-Eat (MRE)

C-2 PRODUCT REQUIREMENTS

A. Product standard. A sample shall be subjected to first article (FA) or product demonstration model inspection (PDM) as applicable, in accordance with the tests and inspections of Section E of this Product 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 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 food shall meet the minimum shelf life requirement of 36 months at 80°F.

C. Powdered product.

(1) Appearance. The fortified cocoa beverage powder shall be a free-flowing well-blended light brown homogenous mixture. The packaged food shall be free from foreign materials.

(2) Odor. The packaged food shall have an odor typical of cocoa and sweet milk solids. The packaged food shall be free from foreign odors.

(3) Texture. The fortified cocoa beverage powder shall be free from lumps that do not fall apart under light pressure between fingers and shall have a fine texture.

D. Rehydrated product.

(1) Appearance. The fortified cocoa beverage powder shall disperse readily in hot or cold water. The rehydrated product shall have a well-blended, uniform consistency and be free of floating, agglomerated cocoa particles. The fortified cocoa shall have a milk chocolate color.

(2) Odor and flavor. The fortified cocoa beverage powder shall have a sweet, chocolate cream-like odor and flavor. The rehydrated product shall be free from foreign odors and flavors.

E. Weight. The average net weight shall be not less than 42.5 grams. The net weight of an individual pouch shall be not less than 40.4 grams.

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) Moisture content. The moisture content shall be not greater than 3.0 percent.

(2) Vitamin B₁ (thiamine mononitrate). The Vitamin B₁ content shall be not less than 0.84 mg per pouch.

(3) Vitamin B₆ (pyridoxine hydrochloride). The Vitamin B₆ content shall be not less than 1.26 mg per pouch.

(4) Vitamin A. The Vitamin A content shall be not less than 752 retinol equivalents per pouch.

H. Microbiological requirement.

(1) Salmonella. The fortified cocoa beverage powder shall be salmonella negative.

I. Ingredient requirements.

(1) Sugar. Sugar shall be white, refined, granulated superfine, extrafine or smaller grind, cane or beet sugar or a combination thereof.

(2) Creamer, nondairy, dry. The dry, nondairy creamer shall contain not less than 30 percent fat and shall be a white to light cream color, free-flowing, uniformly granular powder that is free from foreign materials and free from noticeable scorched particles. The product shall

impart a sweet creamy flavor, free from foreign or objectionable flavors and odors (e.g., sour, malty, tallowy, stale, soapy, rancid, or bitter).

(3) Milk, nonfat dry (low heat). Nonfat dry milk shall be U.S. Extra Grade, Low Heat as defined in the U.S. Standards for Grades of Nonfat Dry Milk (spray process). The nonfat dry milk shall be fortified with vitamin D and may be fortified with vitamin A. The nonfat dry milk shall be spray dried not more than 60 days prior to the time the finished cocoa beverage powder is filled into the pouch and the pouch sealed. The nonfat dry milk shall be salmonella free.

(4) Cocoa. Cocoa powder shall be prepared from nibs of domestically roasted, mature, well fermented, sound and wholesome cocoa beans, which have been properly dried, cured, and mildly alkalized in accordance with the definitions and standards of the Food and Drug Administration. The pH shall be not less than 6.0 nor more than 7.5, and the fat content (cocoa butter) shall be not less than 14 percent. Chemically extracted cocoa, in part or whole, shall not be acceptable. When washed with petroleum ether, not less than 98 percent by weight shall pass through a U.S. Standard No. 200 sieve.

(5) Salt. Salt shall be iodized white, refined sodium chloride with or without anticaking agents.

(6) Vitamins. Vitamin A shall be the dry, water-dispersible vitamin A palmitate, stabilized in gelatin, gums, or other edible materials with or without sugar. One hundred percent of the stabilized vitamin A palmitate shall pass through a U.S. Standard No. 20 sieve, and not less than 90 percent shall pass through a U.S. Standard No. 30 sieve. Thiamine mononitrate, and pyridoxine hydrochloride shall be of U.S. Pharmacopoeia grade, and the particle size shall be such that the vitamins will be uniformly distributed throughout the cocoa beverage powder.

(7) Flavoring. Vanilla extract, pure vanilla sugar, vanillin, ethyl vanillin, methyl vanillin or combinations of these may be used.

(8) Lecithin. Lecithin shall comply with the Food Chemicals Codex description for lecithin.

(9) Stabilizers. Stabilizers shall be of cold water soluble type.

J. Ingredients and formulation. Ingredients shall be uniformly mixed in the following proportions:

| <u>Ingredient</u> | <u>Percent by weight</u> |
|--------------------------|---|
| Sugar | Not more than 45 percent |
| Nondairy creamer | Not more than 35 percent |
| Nonfat dry milk (solids) | Not less than 9.9 percent |
| Cocoa | Not less than 9.5 percent |
| Salt | Not more than 0.5 percent |
| Vitamins | As specified in C-2,G. |
| Flavoring | Sufficient to provide an acceptable flavor in the finished product. |
| Lecithin | Not more than 1 percent |
| Stabilizers | Not more than 1 percent |

SECTION D

D-1 PACKAGING

A. Packaging. A net weight of 42.5 grams of fortified cocoa beverage powder shall be filled into a preformed barrier pouch as described below.

(1) Preformed pouches.

a. Pouch material. The preformed pouches 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. The three plies shall be laminated with the polyester on the exterior of the pouch. All tolerances for thickness of pouch material shall be plus or minus 20 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, Colors Used in Government Procurement. For package B (LRP) and package C (MRE), 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 pouch having maximum inside dimensions of 3-7/8 inches wide by 5-1/4 inches long. The pouch shall be made by heat sealing three edges with 3/8 inch (-1/8 inch, +3/16 inch) wide seals. The heat seals shall be made in a manner that will assure hermetic seals. A tear notch shall be provided on one outside edge or two opposite outside edges of the pouch 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 to facilitate opening and filling of the pouch.

c. Pouch filling and sealing. The fortified cocoa beverage powder shall be filled into the pouch and the pouch sealed. 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 filled and sealed pouch shall not leak when tested in accordance with E-6, B,(1).

D-2 LABELING

A. Pouches. Each pouch shall be clearly printed or stamped, in a manner that does not conceal or impair visual examination of heat seals or damage the pouch, with permanent black ink or other, dark, contrasting color, which is free of carcinogenic elements. Preprinted information, information printed prior to sealing or information printed by non contact type printing equipment may be located anywhere on the pouch (in one complete print). Information printed subsequent to sealing by contact type printing equipment may be located anywhere on the pouch, except the closure seal area. The label shall contain the following information.

- (1) Name of product (letters not less than 1/8 inch high)
- (2) Ingredients
- (3) Date 1/
- (4) Net Weight
- (5) Contractor's name and address
- (6) "Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable FDA/USDA regulations.
- (7) DIRECTIONS FOR USE: Mix contents with 6 fluid ounces (1/4 canteen cup) water. For hot cocoa, add contents to hot water and stir until dissolved. For cold cocoa, mix contents with about 1 fluid ounce of water to make a smooth paste and then add remainder of cold water and stir until blended.

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, 26 November 2003 would be coded as 3330. The Julian day code shall represent the day the product was packaged into the pouch.

D-3 PACKING

A. Packing for shipment to ration assembler. Not more than 40 pounds of pouched product shall be packed flat in layers in a fiberboard shipping container constructed in accordance with style RSC-L, class domestic, variety SW, grade 200 of ASTM D5118/D5118M-95 (2001), Standard Practice for Fabrication of Fiberboard Shipping Boxes. Each container shall

be securely closed in accordance with ASTM D1974-98, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

D-4 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/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required. Unless otherwise specified, Single Sampling Plans indicated in ANSI/ASQC Z1.4-1993 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 overall appearance and palatability. Any failure to conform to the product 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 Center
AMSRD-NSC-CF-F
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 two (2) working days 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 examinations 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 product requirements specified in Section C of this document utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 - 1993. 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> | |
| 101 | | Product not fortified cocoa beverage powder. |
| <u>Powdered product</u> | | |
| <u>Appearance</u> | | |
| | 201 | Beverage powder not free flowing or not a light brown homogenous mixture. |
| <u>Odor</u> | | |
| 102 | | Powdered product does not have typical cocoa and sweet milk solids odor. |

TABLE I. Product defects cont'd 1/ 2/

| Category | | Defect |
|--------------|--------------|---|
| <u>Major</u> | <u>Minor</u> | |
| | | <u>Texture</u> |
| | 202 | Presence of hard lumps. <u>3/</u> |
| | 203 | Not fine in texture. |
| | | <u>Weight</u> |
| | 204 | Net weight of an individual pouch less than 40.4 grams. <u>4/</u> |
| | | <u>Rehydrated product 5/</u> |
| | | <u>Appearance</u> |
| 103 | | Does not disperse readily in hot or cold water. |
| | 205 | Not a uniform consistency. |
| 104 | | Not free of agglomerated cocoa particles. |
| | 206 | Not milk chocolate in color. |
| | | <u>Odor and flavor</u> |
| 105 | | Cocoa beverage not a sweet, chocolate cream-like odor or flavor. |

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

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

4/ Sample average net weight less than 42.5 grams shall be cause for rejection of the lot.

5/ Prepare beverage in accordance with instructions on primary container. Use a sufficient amount of product to prepare 6 ounces of beverage.

B. Methods of inspection.

(1) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year 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 pouches shall be determined by weighing each sample on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1gram.

(3) Analytical. The sample to be analyzed shall be a composite of eight filled and sealed pouches which have been selected at random from the lot. The composite sample shall be prepared and analyzed in accordance with the following methods of the Official Methods of Analysis of AOAC International:

| <u>Test</u> | <u>Method Number</u> |
|-------------|----------------------|
| Moisture | 925.45 |

Test results shall be reported to the nearest 0.1 percent. 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.

Using the same composite sample, the USDA shall select at random one of the following vitamins to test. The vitamins not tested shall be verified by a producer's certificate of conformance.

| <u>Test</u> | <u>Method Number</u> |
|------------------------|-----------------------------------|
| Vitamin A | 992.06 or 15.15 <u>1/ 2/</u> |
| Vitamin B ₁ | 986.27 or Thiamin <u>1/ 3/</u> |
| Vitamin B ₆ | 985.32 or Pyridoxine <u>1/ 3/</u> |

Test results shall be reported to the nearest 0.01 milligram for B₁ and B₆, and RE for Vitamin A. Any nonconforming result shall be cause for rejection of the lot.

1/ Tests will be conducted for Vitamins A, B₁, and B₆ on the first production lot and USDA will certify the formula. A certificate of conformance will be provided on all future lots. If the formula is changed, another set of tests shall be conducted.

2/ Vitamins A and D in Milk Products in Chapter 15 of Standard Methods For The Examination Of Dairy Products, 16th Edition, 1992.

3/ Simultaneous Analysis of Niacin, Niacinamide, Pyridoxine, Thiamin, and Riboflavin, Page 87, Methods of Vitamin Assay, 4th Edition.

(4) Microbiological testing. The finished product shall be tested for Salmonella. Five filled and sealed pouches shall be selected at random from the lot regardless of lot size. The pouched product shall be individually tested for Salmonella in accordance with the Official Methods of Analysis of the AOAC International, method 986.35, 996.08, and 2000.06 D (c). Verification will be conducted through actual testing by a Government laboratory. Any result not conforming to the microbiological requirements shall be cause for rejection of the lot.

NOTE: The following conditions apply for salmonella and microbiological testing:

- (1) For prepackaged product received from a supplier and is not further processed, the contractor will furnish a Certificate of Analysis that the product is Salmonella negative and meets all microbiological requirements.
- (2) For bulk product received, the contractor is responsible for providing a Certificate of Analysis stating that the bulk product is Salmonella negative and meets all microbiological requirements. USDA Salmonella and additional microbiological testing is required for each end item lot and shall be the basis for lot acceptance with respect to Salmonella and other microbiological testing requirements.

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

A. Packaging.

(1) Pouch material certification. Material listed below may be accepted on the basis of a contractor's certification of conformance to the indicated requirements. In addition, compliance to the requirements for inside pouch dimensions and dimensions of manufacturer's seals may be verified by certificate of conformance.

| <u>Requirement</u> | <u>Requirement paragraph</u> | <u>Test procedure</u> |
|--|------------------------------|--|
| Thickness of films for laminated material | D-1,A.(1)a. | As specified in ASTM D2103-97 <u>1/</u> |
| Aluminum foil thickness | D-1,A.(1)a. | As specified in ASTM B479-00 <u>2/</u> |
| Laminated material identification and construction | D-1,A.(1)a. | Laboratory evaluation |
| Color of laminated material | D-1,A.(1)a. | Visual evaluation by FED-STD-595 <u>3/</u> |

1/ ASTM D2103-97 Specification for Polyethylene Film and Sheeting

2/ ASTM B479-00 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 certification of conformance may be accepted as evidence that unfilled pouches conform to the requirements specified in D-1,A,(1) a and b.

(3) 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, hole, or open seal. |
| 102 | | Pouch leaks. <u>2/</u> |
| 103 | | Seal width less than 1/16 inch. <u>3/</u> |

TABLE II. Filled and sealed pouch defects cont'd 1/

| Category | | Defect |
|--------------|--------------|--|
| <u>Major</u> | <u>Minor</u> | |
| 104 | | Presence of delamination. <u>4/</u> |
| 105 | | Unclean pouch. <u>5/</u> |
| 106 | | Pouch has foreign odor. |
| 107 | | Any impression or design on the heat seal surfaces which conceals or impairs visual detection of seal defects. <u>6/</u> |
| 108 | | Not packaged as specified. |
| | 201 | Label missing, incorrect, or illegible. |
| | 202 | Tear notch missing or does not facilitate opening. |
| | 203 | Seal width less than 1/8 inch but greater than 1/16 inch. |
| | 204 | Presence of delamination. <u>4/</u> |

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

2/ Pouches shall be tested for leakage as specified in E-6,B.(1).

3/ 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.

4/ 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 ($\pm 1/16$ 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.

5/ 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).
- c. Water spots.

6/ 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.

B. Methods of Inspection.

(1) Leakage test. The 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. 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 defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

TABLE III. Shipping container and marking defects

| Category | | Defect |
|--------------|--------------|--|
| <u>Major</u> | <u>Minor</u> | |
| 101 | | Marking omitted, incorrect, illegible, or improper size, location sequence or method of application. |
| 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

DSCP FORMS

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

GOVERNMENT PUBLICATIONS

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

U.S. Standards for Grades of Nonfat Dry Milk

FEDERAL STANDARD

FED-STD-595 Colors Used in Government Procurement

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

ANSI/ASQCZ1.4-1993 Sampling Procedures and Tables for Inspection by
Attributes

ASTM International

B479-00 Standard Specification for Annealed Aluminum and Aluminum-
Alloy Foil for Flexible Barrier, Food Contact, and Other
Applications
D1974-98 Standard Practice for Methods of Closing, Sealing, and
Reinforcing Fiberboard Shipping Containers
D2103-97 Standard Specification for Polyethylene Film and Sheeting
D5118/D5118 Standard Practice for Fabrication of Fiberboard Shipping Boxes
M-95 (2001)

AOAC INTERNATIONAL Official Methods of Analysis of the AOAC International (OMA)

UNITED STATES PHARMACOPOEIA (USP)

NATIONAL ACADEMY OF SCIENCES Food Chemicals Codex

PCR-C-041
26 November 2003

U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND

NATICK SOLDIER CENTER

KANSAS STREET
NATICK, MA 01760-5018
November 26, 2003

Food Engineering Services Team

MEMORANDUM FOR Defense Supply Center Philadelphia
Directorate of Subsistence, Bldg. 6
ATTN: DSCP-HSL (Mr. Mike Malason)
700 Robbins Avenue
Philadelphia, PA 19111-5092

SUBJECT: Approved Document (MRE)

1. The U.S. Army Research, Development and Engineering Command, Natick Soldier Center is forwarding electronically the document listed below.

Document # and name

PCR-C-041, COCOA BEVERAGE POWDER, FORTIFIED, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE

2. This document replaces MIL-C-3031J, Cocoa Beverage Powder.

3. Mr. Raymond Valvano, telephone number DSN 256-4259, may be contacted if additional information is required regarding the document.

1 Enclosure

DONALD A. HAMLIN
Team Leader
Food Engineering Services Team
Combat Feeding Directorate
R Valvano