

INCH-POUND

MIL-DTL-44360B

14 February 2003

W/CHANGE 04 24 Nov 08

SUPERSEDING

MIL-B-44360A

11 March 1993

## DETAIL SPECIFICATION

### BREAD, SHELF STABLE, FOR OPERATIONAL RATIONS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE

1.1 Scope. This specification covers shelf stable bread in flexible pouches intended for use by the Department of Defense with operational rations.

1.2 Classification. The product will be of the following types and styles as specified (see 6.1):

1.2.1 Types. The types are as follows:

Type I - White bread

Type II - Wheat bread

1.2.2 Styles. The styles are as follows:

Style A - Rectangular

Style B - Bun

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, U.S. Army Soldier and Biological Chemical Command, Natick Soldier Center, ATTN: AMSSB-RCF-F(N), 15 Kansas Street, Natick, MA 01760-5018 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 8920

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. None.

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Applicable provisions of the Federal Food, Drug and Cosmetic Act  
(21 CFR Parts 1-199).

(This document may be purchased from: Superintendent of Documents, ATTN: New Orders, P. O. Box 371954, Pittsburgh, PA 15250-7954. Credit Card (Mastercard or VISA) purchases may be made by calling the Superintendent of Documents on (202) 512-1803.)

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

National Primary Drinking Water Regulations

(Copies are available from the Office of Drinking Water, Environmental Protection Agency, WH550D, 401 M Street, S.W., Washington, DC 20460. Internet address: <http://www.epa.gov>)

2.3 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.1).

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AMERICAN ASSOCIATION OF CEREAL CHEMISTS (AACC)

Approved Methods of the American Association of Cereal Chemists

(Application for copies should be addressed to: American Association of Cereal Chemists, 3340 Pilot Knob Road, St. Paul, MN 55121.)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

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

(Application for copies should be addressed to: American Society for Quality Control, 611 East Wisconsin Avenue, Milwaukee, WI 53202.)

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS INTERNATIONAL (AOAC)

Official Methods of Analysis of the Association of Official Analytical Chemists

(Application for copies should be addressed to: AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877.)

NATIONAL ACADEMY OF SCIENCES

Food Chemicals Codex

(Application for copies should be addressed to the National Academy Press, 2101 Constitution Avenue, N.W., Washington, DC 20418.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

### 3. REQUIREMENTS

3.1 Product standard. A sample shall be subjected to first article (FA) or product demonstration model (PDM) inspection as applicable (see 6.1), in accordance with 4.2. 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.

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3.2 Ingredients. All ingredients shall be clean, sound, wholesome, and free from foreign material, evidence of rodent or insect infestation, extraneous material, off-flavors, off-odors, and off-colors.

3.2.1 Flour. The flour shall be matured, bleached, enriched, hard wheat flour which will produce a product in compliance with 3.5. Alternatively, unenriched flour may be used provided the equivalent enrichments required in the Code of Federal Regulations (CFR) for Standard of Identity for Enriched Flour (21 CFR, Part 137.165) are added at the time of production of the finished product. The flour used for preparation of the dough shall have a protein content of not less than 12.5 percent and a maltose content of not greater than 0.2 percent. Amylolytic enzyme activity, as determined by the "falling number" method, shall not exceed 240 seconds. Flour not meeting protein requirements but otherwise in compliance may be supplemented with vital wheat gluten to the required protein level.

3.2.2 Water. Water used for formulation and washing shall conform to the National Primary Drinking Water Regulations.

3.2.3 Shortening. The shortening shall be refined, hydrogenated vegetable oil or a combination of refined, hydrogenated vegetable oils which are commonly used by the baking industry and shall have a stability of not less than 100 hours as determined by the active oxygen method (AOM). Shortening used for greasing dough trough, dough pieces, or baking molds shall conform to the above requirements.

3.2.4 Glycerol. The glycerol shall comply with the Food Chemicals Codex.

3.2.5 Salt. Salt shall be noniodized, white, refined sodium chloride with or without anticaking agents.

3.2.6 Emulsifier. The emulsifier shall be sucrose fatty acid esters complying with 21 CFR, Part 172.859 and shall be limited to sucrose ester stearate having an Hydrophilic-Lipophilic Balance (HLB) number of approximately 16 (see 6.2.1).

3.2.7 Yeast. Yeast shall be good quality commercial active dry baker's yeast. Compressed or crumbled yeast may be used.

3.2.8 Gum arabic. Gum arabic shall comply with the Food Chemicals Codex and shall have been produced from a solution of gum arabic which has been spray dried.

3.2.9 Calcium sulfate. The calcium sulfate shall comply with the Food Chemicals Codex.

3.2.10 Xanthan gum. Xanthan gum shall comply with the Food Chemicals Codex.

3.2.11 ~~Sorbic acid, encapsulated. Encapsulated sorbic acid shall comply with the Food~~

**Comment [U1]:** Natick case ES09-014 (DSCP-SS-09-03177) change 04, 24-NOV-08. Section 3.2.11, delete entirely and insert the following:  
"3.2.11 Sorbic acid, encapsulated. Encapsulated sorbic acid shall comply with the Food Chemicals Codex. The encapsulated sorbic acid shall consist of 70 ± 2 percent sorbic acid and 30 ± 2 percent vegetable oil. The vegetable oil shall have a melting point of 141°F to 147°F (61°C to 64°C). (see 6.2.2)"

~~Chemicals Codex. The encapsulated sorbic acid shall consist of 70 ± 2 percent potassium sorbate and 30 ± 2 percent partially hydrogenated vegetable oil. The partially hydrogenated vegetable oil shall have a melting point of 141°F to 147°F (see 6.2.2).~~

Sorbic acid, encapsulated. Encapsulated sorbic acid shall comply with the Food Chemicals Codex. The encapsulated sorbic acid shall consist of 70 ± 2 percent sorbic acid and 30 ± 2 percent vegetable oil. The vegetable oil shall have a melting point of 141°F to 147°F (61°C to 64°C). (see 6.2.2)

3.2.12 Cream flavor, natural and/or artificial. The cream flavor shall be a white to off-white powder or liquid having a characteristic odor and flavor (see 6.2.3).

3.2.13 Sodium carboxymethylcellulose. Sodium carboxymethylcellulose (CMC) shall comply with the Food Chemicals Codex and shall be limited to a high viscosity type in a 1 percent aqueous solution with a viscosity range between 1500-3000 cps (see 6.2.4).

3.2.14 Vital wheat gluten. Vital wheat gluten shall be a cream to tan colored powder produced from wheat flour by drying freshly washed gluten under temperatures sufficiently low to preserve the vital characteristics of gluten. The rehydrated gluten shall absorb 2 times its weight in water and when rehydrated, it shall be capable of forming cohesive, elastic dough. Vital wheat gluten shall have a protein content (N x 5.7) of not less than 71.0 percent, total carbohydrate content not more than 15.0 percent, a moisture content of between 5 and 10 percent, fat (by hydrolysis) of not more than 6.5 percent, and ash not more than 1.0 percent.

3.2.15 Stabilized red wheat bran. Wheat bran, red, stabilized, shall be specially processed to increase the quality of fibers by stabilizing flavors and increasing shelf-life. Red wheat bran stabilized shall be red-brown in color, have a nutty flavor and be medium granulation (10 percent on a U.S.A. Standard sieve No. 18 max and 25 percent to 50 percent on a U.S.A. Standard sieve No. 60 max). Red wheat bran shall be 14-18 percent protein, 4-6 percent fat, 6-8 percent ash and not more than 10 percent moisture. Enzyme activity (peroxidase) shall be negative (see 6.2.5).

3.2.16 Maltol. Maltol shall comply with the Food Chemicals Codex (see 6.2.6).

3.3 Preparation and processing. Processing shall be on a continuous basis.

3.3.1 Preparation of bread. The bread shall be manufactured by the sponge and dough method or any other method yielding an equivalent product.

3.3.1.1 Preparation of white bread (type I). The bread shall be formulated from the following ingredients in the proportions specified:

<u>Ingredients</u>	<u>Percent by weight</u>
Flour <u>1/</u>	52.13
Water <u>1/</u>	28.66

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Shortening	8.53
Glycerol	6.36
Salt	1.29
Emulsifier	1.00
Yeast <u>1/</u> <u>2/</u>	0.90
Sodium carboxymethylcellulose	0.75
Calcium sulfate	0.25
Encapsulated sorbic acid	0.10
Cream flavor	0.03

1/ The percent by weight of flour, water, and yeast may be adjusted, if necessary, to compensate for inplant processing equipment, humidity and temperature conditions.

2/ When compressed or crumbled yeast is used, the percent by weight shall be adjusted to ensure compliance with finished product requirements.

3.3.1.2 Preparation of wheat bread (type II). The bread shall be formulated from the following ingredients in the proportions specified:

<u>Ingredients</u>	<u>Percent by weight</u>
Flour <u>1/</u>	47.42
Water <u>1/</u>	29.00
Shortening	8.00
Glycerol	6.34
Wheat bran	3.50
Yeast <u>1/</u> <u>2/</u>	2.25
Salt	1.29
Sucrose ester	1.00
Xanthum gum <u>1/</u>	0.50
Gum arabic <u>1/</u>	0.25
Calcium sulfate	0.25
Encapsulated sorbic acid	0.10
Maltol	0.07
Cream flavor	0.03

1/ The percent by weight of flour, water, yeast, gum arabic and xanthan gum may be adjusted, if necessary, to compensate for inplant processing equipment, humidity and temperature conditions.

2/ When compressed or crumbled yeast is used, the percent by weight shall be adjusted to ensure compliance with finished product requirements.

3.3.2 Preparation of dough. Commonly used dough improvers, yeast foods and/or dough relaxers are permitted when necessary. The sucrose ester emulsifier shall be dry blended with

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the flour. All ingredients shall then be combined and sufficiently mixed to develop the dough. The fermented bulk dough should be allowed a brief period of rest in accordance with American Baking Committee guidelines before dividing.

3.3.3 Dividing, depositing, and proofing. The fermented bulk dough, following a brief rest, shall be divided into pieces of sufficient weight to ensure compliance with finished product net weight requirements. The dough pieces shall be shaped and molded into form, as specified, prior to being deposited in the baking pan. The pans containing the molded dough pieces shall be placed on portable racks and placed in the proof box for a final proof. The panned dough shall be proofed to volume or height.

3.3.3.1 Formulation of split top (type I only). The sufficiently proofed dough pieces shall be split open on top extending down the center for the entire length of the bread as indicated in figure 3.

3.3.4 Baking. The proofed dough pieces shall be fully baked until the exterior is a uniform medium golden brown bread crust color. The bread shall be baked in rectangular molds, which may be tapered top to bottom for ease of depanning. Alternatively, the bread shall be baked in a typical hamburger bun configuration. The finished bread shall approximate the size and shape of figures 1, 2, or 3 as specified.

3.4 Packaging methods. An interim or continuous method may be used. The methods are specified in the contract or order (see 5.1).

3.5 Finished product requirements. The finished product shall comply with the following requirements:

a. There shall be no foreign materials such as, but not limited to, dirt, insect, insect parts, hair, wood, glass, or metal.

b. There shall be no foreign odor or flavor such as, but not limited to, burnt, scorched, moldy, rancid, sour, or stale.

c. There shall be no color foreign to the product.

d. No individual pouch shall contain less than 1.8 ounces of product.

e. The oxygen content in an individual pouch shall be not greater than 0.30 percent after 48 hours from time of sealing.

f. Each pouch shall contain one intact unit of bread and one intact packet of oxygen scavenger.

g. The water activity for an individual pouch shall be not greater than 0.90 when measured at 25°C.

h. The units of bread shall meet shape, dimension and appearance requirements as specified in figure 1 for the rectangular shape, split top bread, figure 2 for the hamburger bun shaped bread and figure 3 for the rectangular shape, split top bread.

i. The bread crust shall have a uniform medium golden brown baked bread color.

j. The bread crumb shall be white to off white, for type I or tan to light brown for type II.

k. The texture of the bread shall not be excessively dry, crumbly, or excessively moist and gummy.

l. The bread shall show no evidence of dense crumb compression streaks.

m. The split top opening (type I, style A only) shall extend down the center for the entire length of the bread as indicated in figure 3.

3.5.1 Overall appearance and palatability. The finished product shall be equal to or better than the approved product standard sample (see 6.1) in palatability and overall appearance.

3.6 Plant qualifications. The product shall be prepared, processed and packaged in establishments meeting the requirements of 21 CFR, Part 110 "Current Good Manufacturing Practice in Manufacturing, Processing, Packaging, or Holding of Human Food," and the plant sanitation requirements of the appropriate Government inspection agency.

3.7 Federal Food, Drug, and Cosmetic Act. All deliveries shall conform in every respect to the provisions of the Federal Food, Drug, and Cosmetic Act and regulations promulgated thereunder.

#### 4. VERIFICATION

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

a. Product standard inspection (see 4.2).

b. Conformance inspection (4.3).

4.2 Product standard inspection. The first article or product demonstration model shall be inspected in accordance with the provisions of this specification and evaluated for overall appearance and palatability. Any failure to conform to the requirements or any appearance or



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palatability failure, shall be cause for rejection of the lot. The approved product standard shall be used 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 Soldier & Biological Chemical Command  
Soldiers System Ctr., Natick Soldier Center  
Attn: AMSSB-RCF-F(N)  
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.

4.2.1 Product examination. The filled and sealed pouches shall be conditioned to 70°F to 80°F and examined for the defects listed in table I. The lot size shall be expressed pouches. The sample unit shall be the contents of one pouch. Utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 - 1993, 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.

TABLE I. Product defects. 1/ 2/

Category		Defect
<u>Major</u>	<u>Minor</u>	
101		Product not type and style as specified.
102		Oxygen content in pouch exceeding 0.30 percent. <u>3/</u>

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103		Pouch does not contain one intact unit of bread and one intact packet of oxygen scavenger.
104		Bread crumb color not white to off white for type I or tan to light brown for type II. <u>4/</u>
105		Texture of bread is excessively dry, crumbly, or excessively moist and gummy.
106		Bread shows evidence of dense crumb compression streaks. <u>4/</u>
107		Tear, hole, or open seal in oxygen scavenger packet.
	201	Pouch contains a unit of bread that does not have the required shape, appearance, or dimensions (see 3.3.4). <u>5/</u>
	202	Pouch contains a unit of bread that does not have uniform medium golden brown crust color.
108		Bread is missing the split top opening for type I, style A, as indicated in figure 3.
	203	Bread does not have minimum 2-1/2 inch split top opening extending down the center of the bread.
	204	Net weight of an individual pouch less than 1.8 ounces. <u>6/</u>

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1/ Presence of any foreign material for example, dirt, insect parts, hair, wood, glass, metal or mold, 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.

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 (see 3.5.1).

3/ Filled and sealed pouches shall be tested for oxygen content not less than 48 hours after sealing. Oxygen content testing shall be in accordance with any USDA approved test method. The oxygen scavenger shall be FDA approved as suitable for use with food. The oxygen scavenger packet shall be resistant to the migration of oil, moisture and scavenger components (see 6.3).

4/ To inspect for this defect, cut bread units in half along the length from top to bottom.

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5/ Bread shall be considered in compliance with the specification if not more than any two corner radii of the baked bread do not fill the dimensions specified to within 3/4 inches of the right angle corners (see figures 1 and 3). Slightly concave, convex or irregular bread surfaces shall not be cause for rejection provided all other end item requirements are met (see figures 1, 2 and 3).

6/ The net weight of the filled and sealed pouches shall be determined by weighing each sample on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1 ounce.

4.3 Conformance inspection. Conformance inspection shall include the examinations of 4.2.1, 4.3.1, 4.3.2, and the test of 4.4.1.

4.3.1 Component and material inspection. Components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this specification or applicable purchase document.

4.3.2 Ingredient and component examination. Conformance of ingredients and components to identity, condition, and other requirements specified in 3.2 shall be certified by the ingredient supplier or ingredient manufacturer, and compliance shall be verified by examination of pertinent labels, markings, US Grade Certificates, certificates of analyses, or other such valid documents acceptable to the inspection agency. If necessary, each ingredient shall be examined organoleptically or inspected according to generally recognized test methods such as the standard methods described in the Official Methods of Analysis of the Association of Official Analytical Chemists and in the Approved Methods of the American Association of Cereal Chemists, to determine conformance to the requirements. Any nonconformance to an identity, condition, or other requirement shall be cause for rejection of the ingredient or component lot or of any involved product.

4.4 Methods of inspection.

4.4.1 Water activity testing. Eight filled and sealed pouches shall be selected at random from the lot regardless of lot size. Water activity shall be determined not less than 4 days but not more than 14 days after baking to allow moisture equilibration in the product. The pouched product shall be individually tested for water activity in accordance with the Official Methods of Analysis of the AOAC method 978.18, using an electric hygrometer system self temperature controlled (at 25°C) or an equivalent instrument. The sample unit shall be a specimen from the center of the bread. The results of each Aw (water activity) determination shall be reported to

the nearest 0.01. Any test result failing to conform to the requirements in 3.5 shall be cause for rejection of the lot.

## 5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.1). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

## 6. NOTES

(This section contains information of a general or explanatory nature that may be helpful but is not mandatory.)

6.1 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of the specification.
- b. Type and style required (see 1.2).
- c. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.3).
- d. When other than first article or product demonstration model are to be furnished (see 3.1).
- e. Provisions for approved product standard samples (see 3.5.1).
- f. Packaging requirements (see 5.1).

6.2 Ingredient information.

6.2.1 Emulsifier. Emulsifier of sucrose fatty acid ester S-1670, supplied by Mitsubishi International Corporation, 520 Madison Avenue, New York, New York, 10022 meets the requirements of 3.2.6 and performs satisfactorily in this product.

6.2.2 Sorbic acid, encapsulated. Encapsulated sorbic acid, Cap-Shure Sorbic 70 manufactured by Balchem Corporation, Slate Hill, New York, 10973 meets the requirements of 3.2.11 and performs satisfactorily in this product.

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6.2.3 Natural cream flavor. Natural cream flavor No. 261045 (R-7052), produced by the Haarmann and Reimer Corporation, Teteboro, New Jersey, 07608 meets the requirements of 3.2.12 and performs satisfactorily in this product.

6.2.4 Sodium carboxymethylcellulose. CMC Gum, manufactured by Hercules Incorporated, Aqualon Division, Hercules Plaza 1313 North Market Street, Wilmington, DE 19891-0001, meets the requirements of 3.2.13 and performs satisfactorily in this product.

6.2.5 Stabilized red wheat bran. Stabilized red wheat bran, code 02-12-R, manufactured by Canadian Harvest USA, 1001 South Cleveland Street, Cambridge, MN, 55008, meets the requirements of 3.2.15 and performs satisfactorily in this product.

6.2.6 Maltol. Veltol, manufactured by Pfizer, 235 East 42nd Street, New York, 10017, meets the requirement of 3.2.16 and performs satisfactorily in this product.

6.3 Oxygen scavenger. Oxygen scavenger suitable for the purpose may be obtained from Multisorb Technologies, Inc., Buffalo, New York, 14224-1893. Other FDA approved oxygen scavengers may be used.

6.4 Subject term (key word) listing.

Combat field feeding  
Pouched bread  
Split top bread  
White bread  
Wheat bread

6.5 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Army - GL  
Navy - SA  
Air Force - 50

Preparing activity:

Army - GL  
(Project 8920-0595)

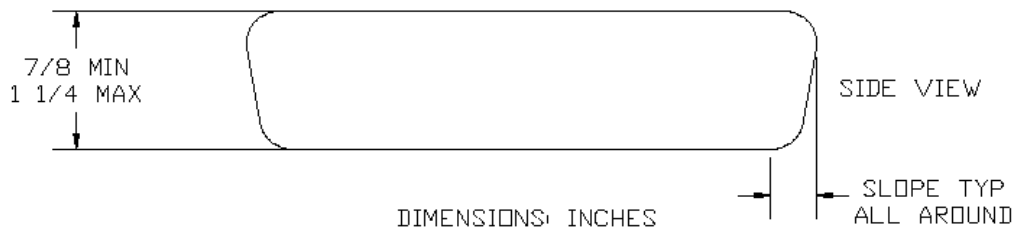
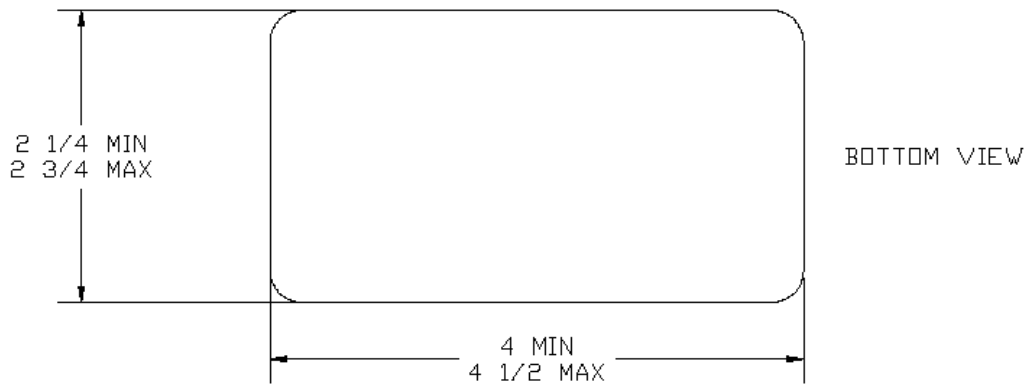
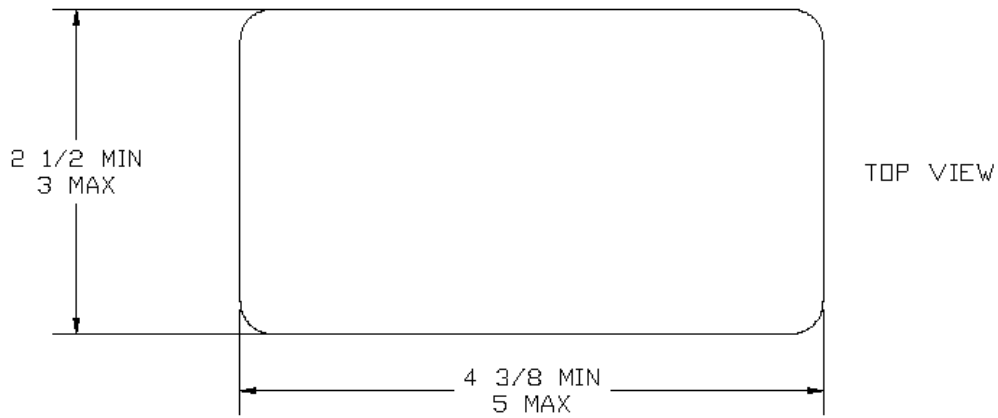
Review activities:

Army - MD, QM  
Navy - MC

DLA - SS

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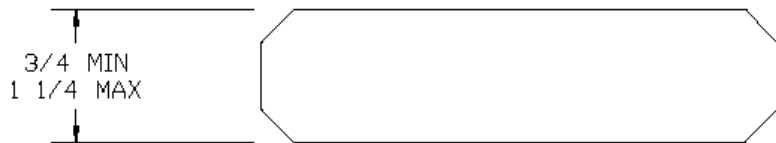
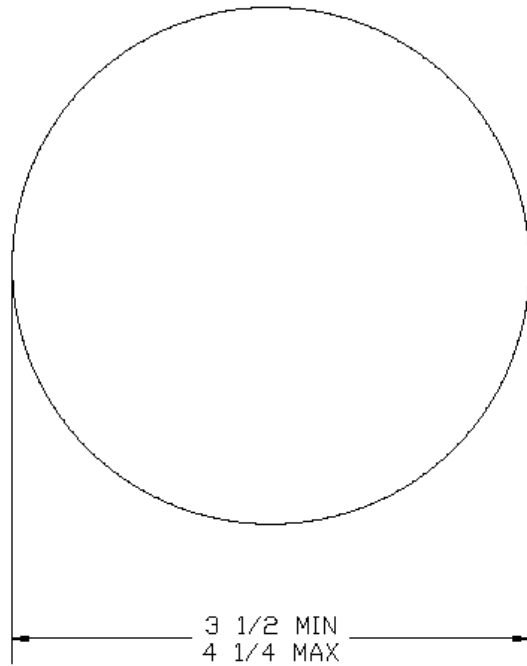
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DIMENSIONS: INCHES

BREAD, SHELF STABLE,  
RECTANGULAR SHAPE  
FIGURE 1

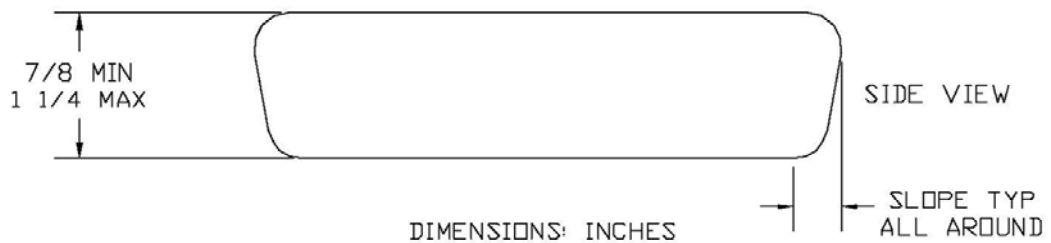
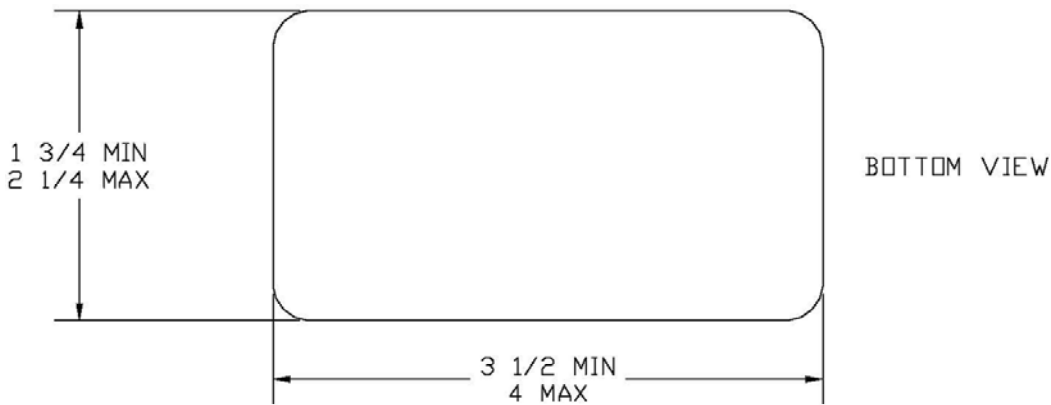
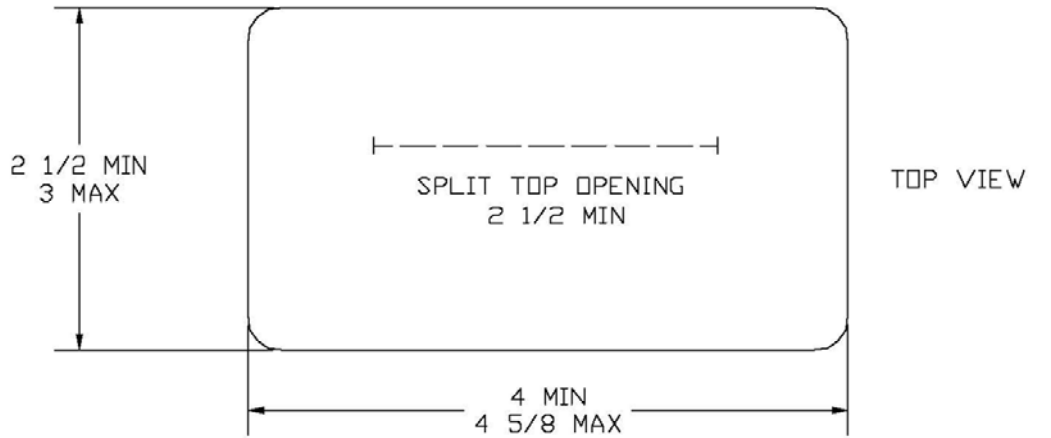
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DIMENSIONS: INCHES  
BREAD, SHELF STABLE,  
BUN SHAPE  
FIGURE 2



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DIMENSIONS: INCHES

BREAD, SHELF STABLE,  
RECTANGULAR SHAPE, SPLIT TOP  
FIGURE 3 CHANGE 02, 31 AUG 06

**STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL**

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7, and send to preparing activity.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

<b>I RECOMMEND A CHANGE:</b>	<b>1. DOCUMENT NUMBER</b> MIL-DTL-44360B	<b>2. DOCUMENT DATE (YYYYMMDD)</b> 2003 02 14

**3. DOCUMENT TITLE**  
  
BREAD, SHELF STABLE, FOR OPERATIONAL RATIONS

**4. NATURE OF CHANGE** (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

**5. REASON FOR RECOMMENDATION**

<b>6. SUBMITTER</b>		
a. NAME (Last, First, Middle Initial)	b. ORGANIZATION	
c. ADDRESS (Include ZIP code)	d. TELEPHONE (Include Area Code)	<b>7. DATE SUBMITTED</b> (YYYYMMDD)
	(1) Commercial  (2) DSN (If applicable)	

<b>8. PREPARING ACTIVITY</b>	
a. NAME US Army Soldier & Biological Chemical Command Natick Soldier Center	b. TELEPHONE (Include Area Code) (1) Commercial 508-233-5907 (2) DSN 256-5907
c. ADDRESS (Include ZIP code) US Army Soldier & Biological Chemical Command Natick Soldier Center Attn: AMSSB-RCF-FN 15 Kansas Street Natick, MA 01760-5018	<b>IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:</b> Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, Virginia 22060-6221 Telephone (703) 767-6888 DSN 427-6888

# For DSCP Website Posting

AMSRD-NSR-CF-F

24 November 2008

TO: DSCP-FTRE

SUBJECT: Followup to ES09-014 (DSCP-SS-09-03177) Request for Specification changes to MIL-DTL-32221 Filled Bakery Item and MIL-DTL-44360B Bread, Shelf Stable, For Operational Rations

1. Reference:

a. AMSRD-NSR-CF-F to DSCP-FTRE, dated 3 November 2008, SUBJECT: ES09-014 (DSCP-SS-09-03177) Request for Specification changes for MIL-DTL-32141 Sandwich Shelf Stable and MIL-DTL-32223 Sandwich Breakfast Shelf Stable; First Strike Ration (FSR)

2. Natick submits the following change to MIL-DTL-44360B Bread, Shelf Stable, For Operational Rations for all current, pending and future contracts until the document is formally amended or revised:

a. Section 3.2.11, delete entirely and insert the following:

“3.2.11 Sorbic acid, encapsulated. Encapsulated sorbic acid shall comply with the Food Chemicals Codex. The encapsulated sorbic acid shall consist of  $70 \pm 2$  percent sorbic acid and  $30 \pm 2$  percent vegetable oil. The vegetable oil shall have a melting point of 141°F to 147°F (61°C to 64°C). (see 6.2.2)”

3. Based on review of MIL-DTL-32221 Filled Bakery Item document, the correct ingredient paragraph for sorbic acid encapsulated is stated in section 3.

4. Attached is MIL-DTL-44360B Bread, Shelf Stable document with changes highlighted.