## PACKAGING REQUIREMENTS AND QUALITY ASSURANCE PROVISIONS FOR MIL-DTL-32235B; UNITIZED GROUP RATION – EXPRESS (UGR-E) HEATER MODULE, GENERAL SPECIFICATION FOR, AND APPLICABLE SPECIFICATION SHEETS

#### SECTION D

#### **D-1 PACKAGING**

A. <u>Material safety data sheets</u>. When required, a material safety data sheet (MSDS) shall be prepared in accordance with the requirements of FED-STD-313.

#### **D-2 LABELING**

A. <u>MSDS</u>. The MSDS, when required, shall be attached to the unit loads.

#### **D-3 PACKING**

A. <u>Packing</u>. One complete or partially assembled heater module or one or more complete or partially assembled Boil-In-Bag (BIB) module(s) in a fiberboard box shall require no additional packing. When packing components, not more than 40 pounds of product shall be packed in a fiberboard shipping box constructed in accordance with style RSC-L of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes. The fiberboard shall conform to type CF, class D, variety SW, minimum burst grade 200 or ECT 32 of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes. Each box shall be closed in accordance with ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

#### **D-4 UNITIZATION**

A. <u>Unit loads</u>. Boxes shall be arranged in unit loads in accordance with Type I, Class A of DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

#### **D-5 MARKING**

A. <u>Shipping containers and unit loads</u>. Shipping containers and unit loads shall be marked in accordance with DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence.

## SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing 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) <u>Critical defect</u>. 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) <u>Major defect</u>. 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) <u>Minor defect</u>. 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.

## E-5 QUALITY ASSURANCE PROVISIONS (PRODUCT)

A. <u>Product examination</u>. The finished product shall be examined for compliance with the requirements specified in MIL-DTL-32235B, the applicable specification sheets and as specified in this Packaging Requirements and Quality Assurance Provisions (PKG&QAP) document.

(1) <u>Heater module testing</u>. The heater module shall be tested for the requirements listed in table I of MIL-DTL-32235B. The lot size, sample unit, and inspection level criteria for each test are listed below.

Requirement	Lot size expressed in	Sample unit	Inspection level
Heater module use	Modules	1 module	S-2
Heating performance	Modules	1 module	S-2

(2) <u>Conformance inspection</u>. The following heater module requirements listed in table I of MIL-DTL-32235B and in this document shall be verified with a Certificate of Conformance (CoC):

Polymeric food tray Institutional Size Pouch (ISP) Boil-In-Bag (BIB) Activated heater module Shelf life Temperature range of operation Food safety Health hazard assessment Material Safety Data Sheet (MSDS)

(3) <u>Heater module examination</u>. The heater module shall be examined for the defects listed in table II of MIL-DTL-32235B. The lot size shall be expressed in modules. The sample unit shall be one module. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.0 for major defects and 4.0 for minor defects. Five heater modules shall be examined for critical defects. The finding of any critical defect shall be cause for the rejection of the lot.

(4) <u>Heater module and BIB heater module examination</u>. In addition to the heater module examination cited in E-5,A(3), the heater module and BIB heater module, as applicable, shall be examined for the defects listed in table I in the applicable specification sheets. The lot size shall be expressed in modules. The sample unit shall be one module. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 1.0 for major defects and 4.0 for minor defects.

(5) <u>Heater module single heater capacity test</u>. The single heater shall be tested for the requirements specified in MIL-DTL-32235B/4, utilizing the double sampling plans indicated in ANSI/ASQ Z1.4. The lot size shall be expressed in heaters. The sample unit shall be one heater. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

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

A. Packing.

(1) <u>Shipping container and marking examination</u>. The filled and sealed shipping containers shall be examined for the defects listed in table II. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container fully packed. The

inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

TABLE II. Shipping container and marking defects		
Category		Defect
<u>Major</u>	Minor	
101		Marking missing or incorrect or illegible.
102		Inadequate workmanship. <u>1</u> /
	• • •	
	201	More than 40 pounds of product.
102		
103		MSDS, when required, missing or incorrect or illegible.

 $\underline{1}$ /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.

(2) <u>Unit load examination</u>. The unit load shall be examined in accordance with the requirements of DLA Troop Support Form 3507. Any nonconformance shall be a major defect.

## SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the applicable version of these documents is that which is active on the date of the solicitation or contract.

DLA Troop Support Forms

Form 3556	Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence	
Form 3507	Loads, Unit: Preparation of Semiperishable Items	
FEDERAL STANDARD		
FED-STD-313	Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished To Government Activities	
DEPARTMENT OF DEFENSE SPECIFICATIONS		

MIL-DTL-32235B	Unitized Group Ration – Express (UGR-E) Heater Module, General Specification for
MIL-DTL-32235B/3A	Unitized Group Ration – Express (UGR-E) Heater Module: Boil-In-Bag (BIB) Module
MIL-DTL-32235B/4	Unitized Group Ration – Express (UGR-E) Heater Module: Assembled

(Copies of these documents are available online at <u>https://quicksearch.dla.mil</u> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

### NON-GOVERNMENTAL STANDARDS

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

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

# ASTM INTERNATIONAL www.astm.org

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D4727/D4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D5118/D5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes