

## SECTION C

### QUALITY ASSURANCE PROVISIONS AND PACKAGING REQUIREMENTS FOR CID A-A-59489, MATCHES, SAFETY

23 March 2000

SUPERSEDING

17 February 2000

#### C-1 ITEM DESCRIPTION

##### Type.

Type I, Class A - Paper, 20 splint book

##### Packages.

Package A. Meal, Cold Weather (MCW)

Package B. Food Packet, Long Range Patrol (LRP)

Package C. Meal, Ready to Eat (MRE)

Each component is used by combat personnel under worldwide environmental extremes as part of an operational ration.

#### C-2 PERFORMANCE REQUIREMENTS

A. Product standard. A sample shall be subjected to first article or product demonstration model inspection as applicable, in accordance with the tests and inspections of Section E of this Quality Assurance Provision and Packaging Requirements document.

B. Shelf life. The matches shall meet the minimum shelf life requirement of 36 months at 80°F.

C. Overall appearance. The finished product shall be equal to or better than the approved product standard in overall appearance.

D. Color of match book. The matchbook for Packages A, B and C shall be colored a drab green, tan or brown

## SECTION D

#### D-1 PACKAGING

A. Packaging. Matches shall be packaged in accordance with ASTM D 3951, standard Practice for Commercial Packaging.

#### D-2 LABELING

A. Labeling. Each book of matches shall be clearly printed or stamped in a manner that does not damage the item, with permanent black ink or any other contrasting color, which is free of carcinogenic elements or ingredients. Each book shall be labeled with the contractor's name and address. Commercial advertising is not permitted. The cover of each book shall be labeled with the following statement:

CLOSE COVER BEFORE STRIKING

#### D-3 PACKING

A. Packing for shipment to ration assembler. Not more than 40 pounds of product shall be packed in a fiberboard shipping container constructed in accordance with style RSC-L, class domestic, variety SW, grade 200 of ASTM D 5118, Standard Practice for Fabrication of Fiberboard Shipping Boxes. Each container shall be securely closed in accordance with ASTM D 1974, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers.

#### **D-4 MARKING**

A. Shipping containers. Shipping containers shall be marked in accordance with DPSC Form 3556, Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized 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. 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 Quality Assurance Provisions and Packaging Requirements document and evaluated for palatability and overall appearance. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection.

(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 CID A-A-59489 and Section C of this Quality Assurance Provisions and Packaging Requirements document utilizing the double sampling plans indicated in ANSI/ASQC Z1.4-1993. The lot size shall be expressed in books. The sample unit shall be the contents of one book. 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/

Category		Defect
<u>Major</u>	<u>Minor</u>	
101		Match not made of splint board.
102		Quantity of matches per book not as specified.
103		Dimensions of match not as specified.
104		Striking surface not as specified.
	201	Color of matchbook not as specified.
	202	Labeling missing, incorrect or illegible.
	203	Head material not evenly applied.
	204	Splints broken, split, crushed, adhering, chipped, or cracked.

1/ Finished product not equal to or better than the approved product standard in overall appearance 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 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 product examination and performance testing in accordance with E-5,A of this document and A-A-59489.

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

A. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table II 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 II. Shipping container defects

Category		Defect
<u>Major</u>	<u>Minor</u>	
101		National stock number, item description, contract number, name and address of producer, or date of pack missing, incorrect, or illegible.
102		Container not closed properly.
	201	Other required markings missing, incorrect, or illegible.
	202	More than 40 pounds of product.

**SECTION J REFERENCE DOCUMENTS**

DPSC FORM

DPSC FORM 3556 - Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1974 - Standard Practice for Methods of Closing, Sealing, and Reinforcing  
Fiberboard Shipping Containers

D 3951 - Standard Practice for Commercial Packaging

D 5118 - Standard Practice for Fabrication of Fiberboard Shipping Boxes