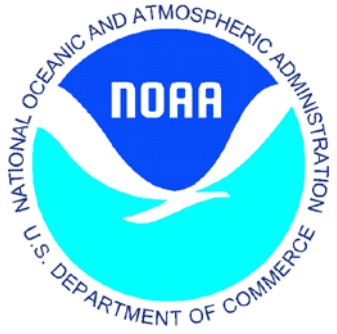

INSTRUCTIONS TO COMMERCIAL VENDORS

FOR

MARKING AND BAR CODING SUPPLIES

FOR SHIPMENT TO

THE NATIONAL LOGISTICS SUPPORT CENTER

FOR

All CONTRACTS

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Basic Requirements

Products which are procured for delivery to the National Logistics Support Center (NLSC) are required to be individually packaged and labeled in accordance with this document.

Product and contract/purchase order information markings shall be placed on containers for items delivered to the National Logistics Support Center (NLSC). These markings shall contain information and be placed in accordance with requirements of MIL-STD-129M, Marking for Shipment and Storage, and MIL-STD-1189B, Standard Department of Defense Bar Code Symbology, with exceptions allowed as described below, or as contained in the contract or ordering document. The cited MIL-STD standards are available from the following source:

Defense Printing Service Detachment Office
Department of the Navy
700 Robbins Avenue
Philadelphia, PA 19111-5094

Telephone orders for these documents may be placed at 215-697-2179. The information provided below is a synopsis of those MIL-STD requirements deemed important to logistics management requirements at the National Logistics Support Center. Note that bar code requirements are applicable unless they are specifically identified as excluded in the contract or purchase order.

A. General Description of Requirements

The MIL-STDs contain requirements for content and placement of markings on containers of items delivered under contract or purchase order. These requirements include text markings of product, contract and vendor information, as well as select bar coded information.

Each deliverable item shall be individually packaged in a unit shipping container labeled in accordance with this document. Unit shipping containers shall be of sufficient strength and offer adequate protection against damage from handling by a commercial carrier (i.e., Federal Express, United States Post

Office, etc.) These unit shipping containers shall be packaged into exterior shipping packages in accordance with this document.

Preservation and packaging shall afford protection against corrosion, deterioration and physical damage during shipment, handling, indeterminate storage and worldwide redistribution.

Marking requirements differ for exterior containers and other levels of packing--unit packs, intermediate containers. An exterior container is defined as a container designed to protect unit packs and intermediate containers and their contents during shipment and storage. It can be a unit pack or an intermediate container, or contain a combination of unit packs and intermediate containers. An exterior container may or may not be used as a shipping container. An intermediate container is defined as a wrap, box, or bundle containing unit packs of identical items. A container which meets the definition as an intermediate container, but which is used as a shipping container, shall be marked as an exterior container. Any container which includes two or more NSN's shall be marked as an exterior container.

Different purchase orders or contracts shall not be consolidated in a single container or pallet.

B. Text Information

Text information shall include product identification and contractor information. These two types of information are described separately below, for each of the possible types of containers.

B.1. Identification markings on unit packs, intermediate containers, and unpacked items

In the order listed below, the following information is required unless specifically exempted in the procurement contract or order, or shown as optional.

- NSN(National Stock Number), to include spaces or dashes and any prefix or suffix shown in the contract or requisition.

! CAGE code and part number (PN). The letters "CAGE" and either "PN" or "P/N" shall be used to identify this information. The PN specified in the contract (if any) shall be used; if none is specified, the PN of the actual manufacturer or the PN assigned by the company awarded the contract. No PN is required if none is assigned to the item.

! Item description or nomenclature. A short description of the product identified by the NSN. If specified in the contract or procurement document, the Agency Stock Number shall be shown on the next line(s), for example:
ASN: K220-3A3

! Quantity (QTY) and Unit of Issue (UI). The quantity is the number of units of issue in the marked unit pack or intermediate container. The unit of issue is the standard or basic quantity indicated in the procurement contract or order as the minimum quantity issued, e.g., quart, liter, dozen, foot, meter, each, gross, etc. A nondefinitive UI shall be accompanied by a quantitative expression, such as
"1 ROLL (100 FT)."

! Contract number or Purchase Order number, and line item number.

! When shelf-life markings are specified in the contract, purchase order, purchase description, specifications, material standards, and other procurement documents, they shall include the shelf life expiration date, and be shown below the product description information on unit packs, intermediate containers, and unpacked items.

! Hazardous Material Identification information shall be included in accordance with MIL-STD 129-M, and standards referenced therein. A Material Safety Data Sheet (MSDS) shall be included with each shipment.

- An item assigned a serial number shall have that number applied to the unit pack and to the intermediate container preceded by the abbreviation "SER NO". The serial number data shall be shown directly below the product identification markings. When unit packs bearing consecutive serial numbers are packed in an intermediate container, only the first and last numbers in the series shall be shown. When not in sequence, each number shall be listed on the container. When there is inadequate space on the container for the marking of multiple serial numbers, a list of serial numbers shall be included. One copy of the serial number list shall be placed inside the container and one copy shall be placed in the packing list envelope. The identification-marked side of the container shall be marked "SERIAL NUMBER LIST INSIDE".

Figure 1 illustrates the content and placement of product identification markings on unit pack and intermediate containers.

B.2 Identification and contract markings on exterior containers

When necessary, due to a number of varying NSN's being shipped on the same contract at the same time, an exterior container may be required to consolidate several different unit packs and/or intermediate containers. In addition, an intermediate container may be utilized as a shipping container, and shall be marked as an exterior container. The following identification and contract information shall be marked on exterior containers in the order listed.

B.2.1 Exterior Containers Containing a Quantity of a Single NSN

If the exterior container contains one or more unit packs or one or more intermediate packs of the same NSN, the exterior container shall be marked with the following product description and contract information:

Identification Information

- National Stock Number(NSN) , in the manner described in B.1 above.

! CAGE code and PN, in the manner described in B.1 above.

! Item description or nomenclature. If specified in the contract or procurement document, the Agency Stock Number shall be shown on the next line, for example: ASN: K220-3A3

! Quantity and UI, as described in B.1. The quantity should reflect the total number of units of issue packed in the exterior container.

! Gross weight and cube. The capital letters "WT" and CU" shall precede the gross weight and cube numerals. If no units of measure of weight or cube are shown, it will be assumed that the values are expressed in pounds and cubic feet. The gross weight shall be expressed in pounds, rounded up to the nearest pound. The cube shall be calculated from the overall length, width, and height dimensions of the exterior shipping container. Irregular, cylindrical, or round items shall be considered to be rectangular solids. The cube shall be expressed in cubic feet, expressed in decimals rounded up to the nearest tenth of a cubic foot. If metric units are used to show weight or cube, the units must be included after the value, for example, WT 5.2 KG CU 3.4 LITER.

! When shelf-life markings are specified in the contract, purchase order, purchase description, specifications, material standards, and other procurement documents, they shall include the shelf life expiration date, and be shown below the product description information on exterior containers. NOTE: Any inspection/test date and other shelf-life markings, when required, shall be applied below the identification markings and as specified in MIL-STD-129M.

! All required hazardous material markings shall be shown on the exterior container. For information on the additional marking and labeling requirements for hazardous materials, see MIL-STD-129M and other standards referenced therein.

- Items assigned a serial number shall have that number applied, either in text format or bar coded, to the exterior container, preceded by the abbreviation "SER NO". The numbers shall be shown directly below the above product identification markings. When unit packs bearing consecutive serial numbers are packed in an exterior container, only the first and last numbers in the series shall be shown. When not in sequence, each number shall be listed on the container. When there is inadequate space on the container for the marking of multiple serial numbers, a list of serial numbers shall be included with the shipment. One copy of the serial number list shall be placed inside the container and one copy shall be placed in the packing list envelope. The identification-marked side of the container shall be marked "SERIAL NUMBER LIST INSIDE".

Contract Information

- Contract or purchase order number, and line item number. Where applicable, also include delivery order number, modification number, or lot number.

- Name and address of the contractor (including nine-digit zip code). The street address is optional. When supplies are shipped from a subcontractor, only the name and address of the company awarded the contract shall be used.

Figure 2 illustrates the content and placement of identification and contract markings on exterior containers which contain a quantity of a single NSN.

B.2.2 Exterior Containers of multiple NSN's.

When containers of items include more than a single NSN, the container shall be marked with the following information, in the order listed, as shown on the next page:

Identification Information

- Include on the first line the word "MULTIPACK". If the contained items are in support of a system identified in the order or contract, the system shall be

identified on this line, e.g., "MULTIPACK FOR NEXRAD SYSTEM"

! the gross weight and cube

! In addition to any shelf-life markings, the words "CONTAINS SHELF-LIFE ITEMS" shall be placed on the next line(s).

! Warranty information. The words "WARRANTED ITEMS INSIDE" shall be placed on the next line if contained items are covered by a warranty.

! Hazardous Material Identification markings, as specified in MIL-STD-129M and references contained therein, shall be placed on multi-pack containers.

! Other special markings. Caution markings shall be applied as required (e.g., FRAGILE, arrows, hazardous warning labels, electrostatic discharge sensitive devices, etc.).

! Items assigned a serial number shall have that number applied to the exterior container, preceded by the abbreviation "SER NO". The numbers shall be shown directly below the product identification markings listed in the previous paragraphs. When unit packs bearing consecutive serial numbers are packed in an exterior container, only the first and last numbers in the series shall be shown. When not in sequence, each number shall be listed on the container. When there is inadequate space on the container for the marking of multiple serial numbers, a list of serial numbers shall be included with the shipment. One copy of the serial number list shall be placed inside the container and one copy shall be placed in the packing list envelope. The identification-marked side of the container shall be marked "SERIAL NUMBER LIST INSIDE".

Contract Information

! Contract or purchase order number, and line item number. Where applicable, also include delivery order number, modification number, or lot number.

- Name and address of the contractor (including nine-digit zip code). The street address is optional. When supplies are shipped from a subcontractor, only the name and address of the company awarded the contract shall be used.

C. Shipping label markings

Shipping address markings or shipping labels shall be in accordance with accepted carrier practices and DOT regulations, or as otherwise prescribed in the contract or order. Address marking requirements of MIL-STD 129M are NOT included as part of requirements for shipment to NLSC, except that the Standard shall serve as guidance for placement of shipping labels on containers.

When multiple shipping containers are included in a shipment, the markings on each container shall include the serialized container number and the total number of containers in the shipment, e.g., 1 of 5.

All shipments to the National Logistics Support Center shall be made to the following address:

Department of Commerce
National Logistics Support Center
14200 Merritt Road
Grandview, MO 64030

D. Bar code markings

Unless otherwise specified in the contract or order, bar code markings are required on all containers and loose or unpacked items. Bar codes are to be of Code 3 of 9 symbology, generally of medium density (3.0 to 9.4 Characters Per Inch). The extended 3 of 9 character set is NOT to be utilized. All bar codes and the human readable interpretation (HRI) shall meet the specifications contained in MIL-STD 1189B, Standard Department of Defense Bar Code Symbology. The HRI shall be an exact interpretation of the bar code data and shall not contain spaces or dashes or start/stop characters. The preferred location for

the HRI is below the bar code markings, while the optional location is above the bar code markings.

D.1 Unit Packs and Intermediate Containers

Unit packs and intermediate containers shall contain a bar code of the National Stock Number (NSN). This bar code shall consist of the basic 13 data characters. Prefixes and suffixes to the stock number, as well as spaces and dashes, shall not be bar coded. The HRI shall include only the 13 basic data characters. Dashes, spaces or start/stop characters shall not be shown in the HRI.

When a requirement for bar coded serial numbers is specified in the procurement contract or order, an item assigned a serial number shall have the bar coded serial number applied to the unit pack and to the intermediate container. The bar codes shall be located directly below the product identification markings preceded by the abbreviation "SER NO". The letters "SER NO" shall not be bar coded. When more than five serial-numbered items are in an intermediate container, two serial number lists shall be provided. One list, which is to be placed inside the container, shall contain a bar code for each serialized item. The second list shall be placed in the packing list envelope; bar coding of the second serial number list is optional. The words "SERIAL NUMBER LIST INSIDE" shall be marked on the product identification-marked side of the container.

Figure 3 illustrates the marking placement and bar code requirements for unit packs and intermediate containers.

D.2 External Containers

Information to be bar coded on exterior containers which contain a single NSN shall include:

(1) National Stock Number(NSN). The NSN shall be bar coded as specified in D.1.

(2) Contract/Delivery Order or Purchase Order number. The bar coded contract/delivery order or order number shall consist of up to 15 characters, as prescribed in the contract or order.

(3) Commercial and Government Entity (CAGE) code of the company awarded the contract. The CAGE code shall consist of 5 characters.

(4) Contract Line Item Number (CLIN) when used. The CLIN shall consist of 6 characters, including zero fillers placed to the left of the number (e.g., 0001AB).

NOTE: For exterior containers containing more than a single NSN, such as multipacks, bar code markings on the exterior container shall be limited to the contract or order number. However, unit packs and intermediate containers which are included in the exterior container shall be bar coded as described in D.1.

HRI information shall be preferably shown under the bar code, and shall include only the bar coded data characters; start/stop characters shall not be shown.

In addition, when a requirement for bar coded serial numbers is specified in the procurement contract or order, all items assigned a serial number shall have the bar coded serial number applied to the exterior container. The bar codes shall be located directly below the product identification markings and be preceded by the abbreviation "SER NO"; the letters "SER NO" shall not be bar coded. When more than five serial-numbered items are contained in an exterior container, two serial number lists shall be provided. The first list, which is to be placed inside the container, shall contain a bar code for each serialized item. The second list shall be placed in the packing list envelope; bar coding of the second serial number list is optional. The words "SERIAL NUMBER LIST INSIDE" shall marked on the product identification-marked side of the container.

Figure 4 illustrates the placement of markings and bar code requirements for external containers.

Figure 5 illustrates the layout format acceptable for bar code markings on exterior containers.

E. Markings and Marking Materials

Markings shall be by stenciling, stamping, machine printing, or labeling (using preprinted labels). In addition, hand printing

may be used on packs and containers for marking any of the following: serial numbers, quantity per pack, date of pack, total pieces, and weight and cube. Hand printing must be clear and legible. Abbreviations associated with these markings, such as "SER NO", "WT", and CU", may also be hand printed.

The lettering for all markings on all sizes of containers shall be in capital letters of equal height, shall be clearly legible, and shall be proportionate to the available marking space on the container. When marking space permits, stenciled or pre-printed markings shall be not less than one-fourth of an inch nor more than 1 inch in height. Unless otherwise specified in the procurement or contract document, identification, contract data, and address markings shall be not less than .095 inch (approximately three thirty-seconds of an inch).

If labels for exterior containers are not inherently waterproof, they shall be waterproofed by coating the entire outer surface of the label with a transparent, waterproofing material, such as spar varnish, acrylic coating compound, or other protective coating. Transparent tape may also be applied over markings to provide waterproof protection; however, readability of bar codes must be assured for this type of waterproof protection.

Paper labels shall be made of sized white paper stock having a smooth finish and a minimum basis weight of 20 pounds. Labels shall be of a water-resistant grade of paper, film, fabric, or plastic and shall be coated on the unprinted side with a water-insoluble, homogeneous, pressure-sensitive, permanent type adhesive. The adhesive shall adhere to metal, plastic, or fiberboard surfaces under high and low temperatures associated with expected shipping and warehousing conditions. Labels shall have a finish capable of withstanding normal handling during shipment and storage and shall be suitable for printing and writing on with ink without feathering or spreading. The applied label must remain securely in position under anticipated conditions of handling, shipment and storage.

F. Packing Slip Documentation

Each stand alone container (defined as the outermost container of a shipment) shall be individually marked with a packing slip. Additionally, all stand alone packages shall contain an internal packing slip to insure proper documentation in the event of loss

of the external packing slip. Each packing slip shall be marked within the following information:

1. National Stock Number
2. CAGE code and PN
3. Item Description or Nomenclature
4. Agency Stock Number, if identified in the contract or order
5. Quantity in the container and Unit of Issue
6. Contract or Purchase Order Number and Line Item Number. (Where applicable, include delivery order number.)
7. Shelf-Life Expiration Date
8. Hazardous Material Identification
9. Serial Number(s), if warranty tracking or specialized control of stock is required.
10. Container number and total number of containers included in the shipment (e.g., 1 of 5)

If desired, the contract or purchase order number and CAGE code may be marked in the heading of the packing slip in order to avoid repetition.

The packing slip shall be securely attached to the end or side of the container, and sealed in a waterproof container conforming to MIL PPP-E540, Class 1. They shall be secured to the exterior of the palletized load or containers in the most protected location with tape, or pressure sensitive adhesive backing applied to containers other than wood. On wood containers, tacks or staples shall be used.

G. Pallet Requirements

Shipments shall be palletized to the maximum extent practical. When a shipment is palletized, the pallet size must be 44 inches by 44 inches. The maximum stacking height shall not exceed 48 inches. The shipment shall be palletized in numerical container order, shrink-wrapped and double strapped with metal or nylon - straps across both directions.

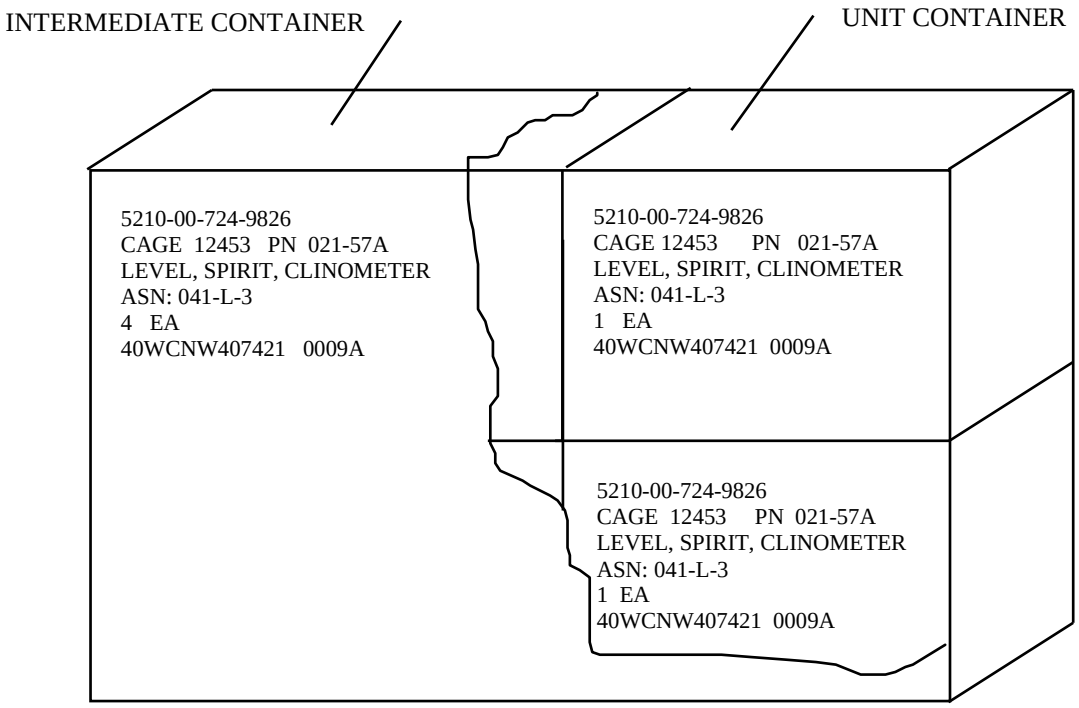

Figure 1. Identification and Contract Markings for Unit Pack and Intermediate Containers.

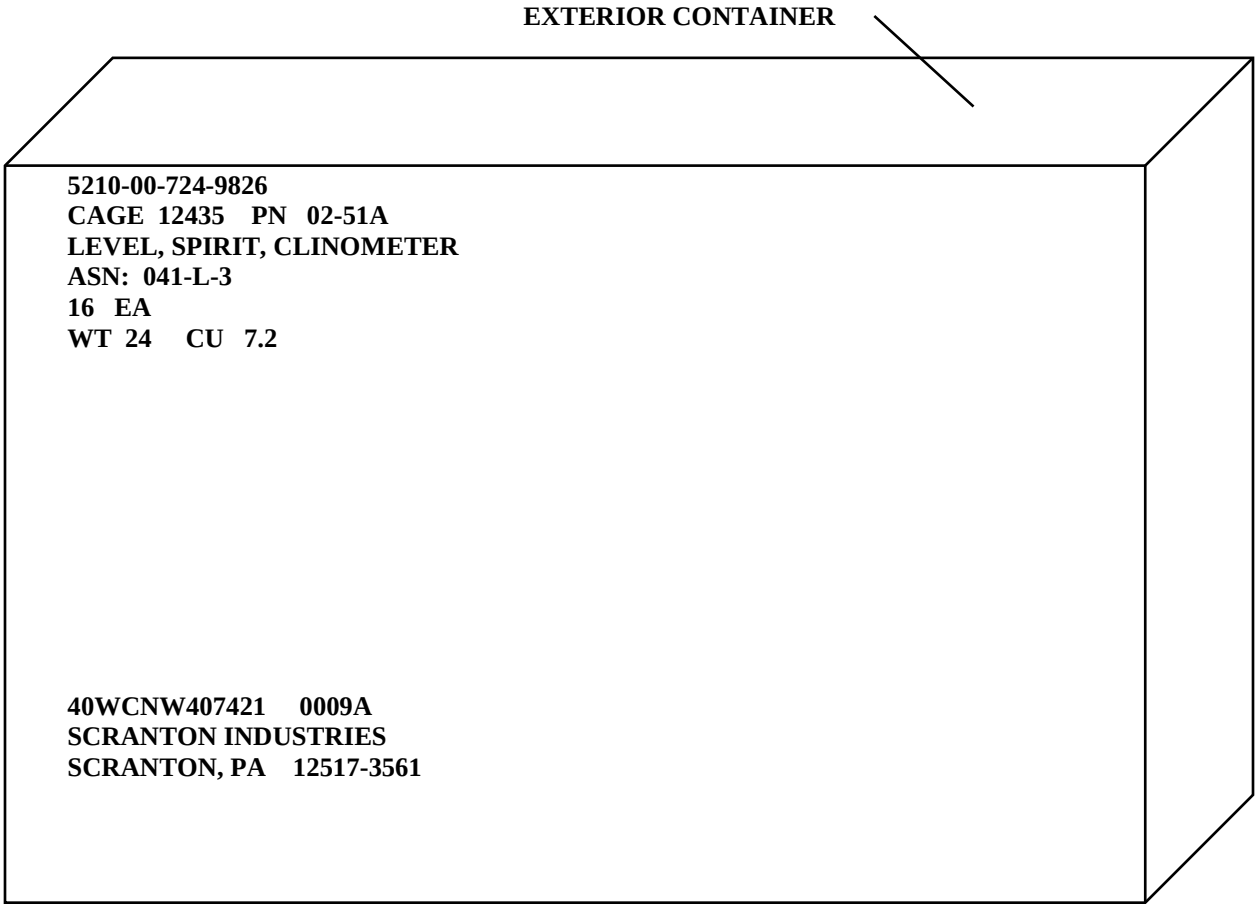

Figure 2 . **Typical exterior container text markings.**

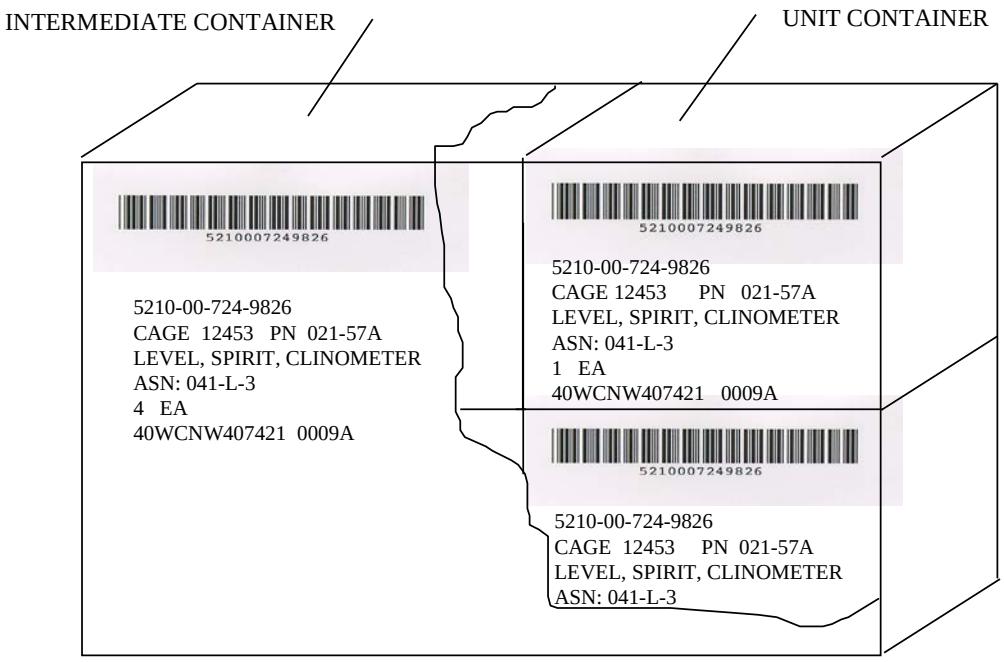

Figure 3. Barcode markings on unit packs and intermediate containers.

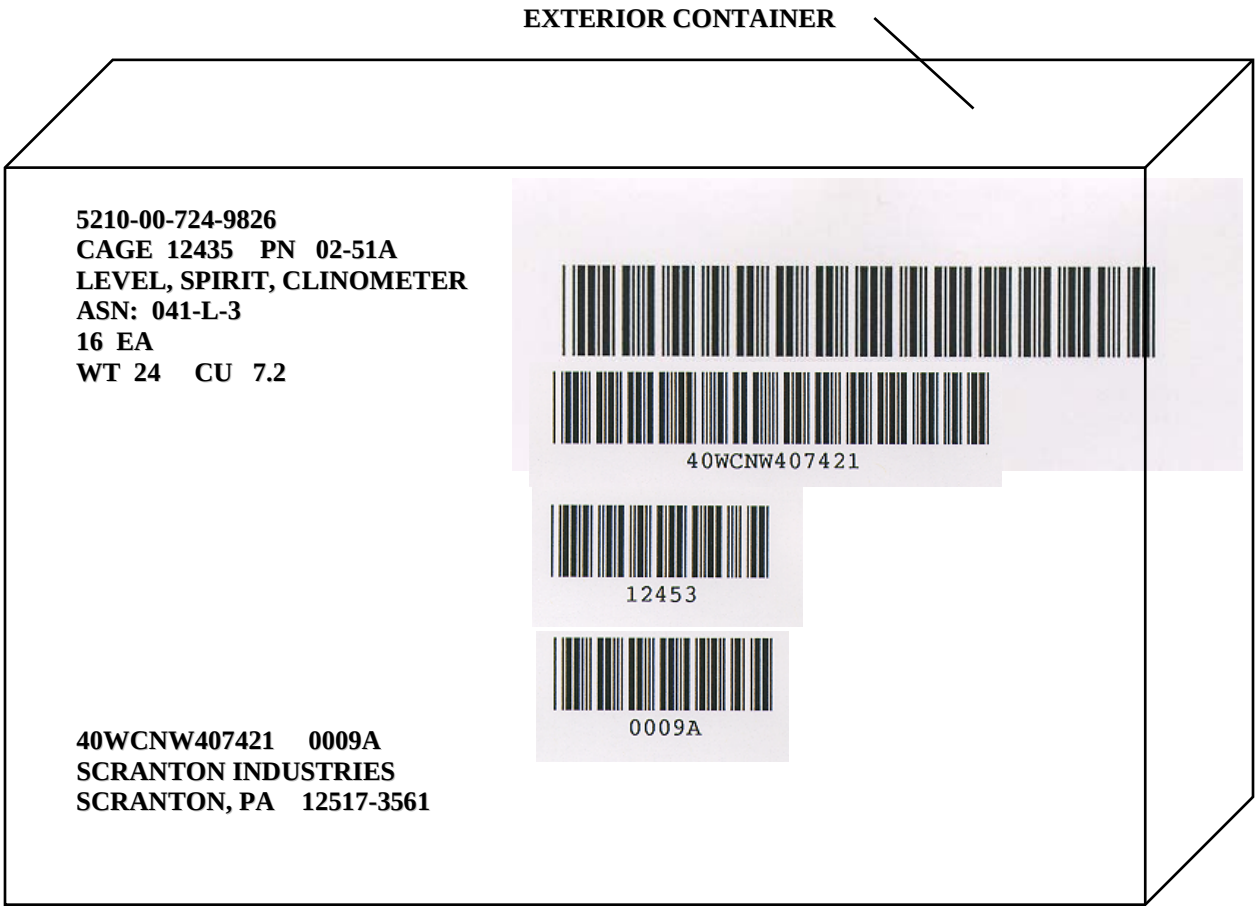

Figure 4 . **Typical exterior container text and bar code markings.**

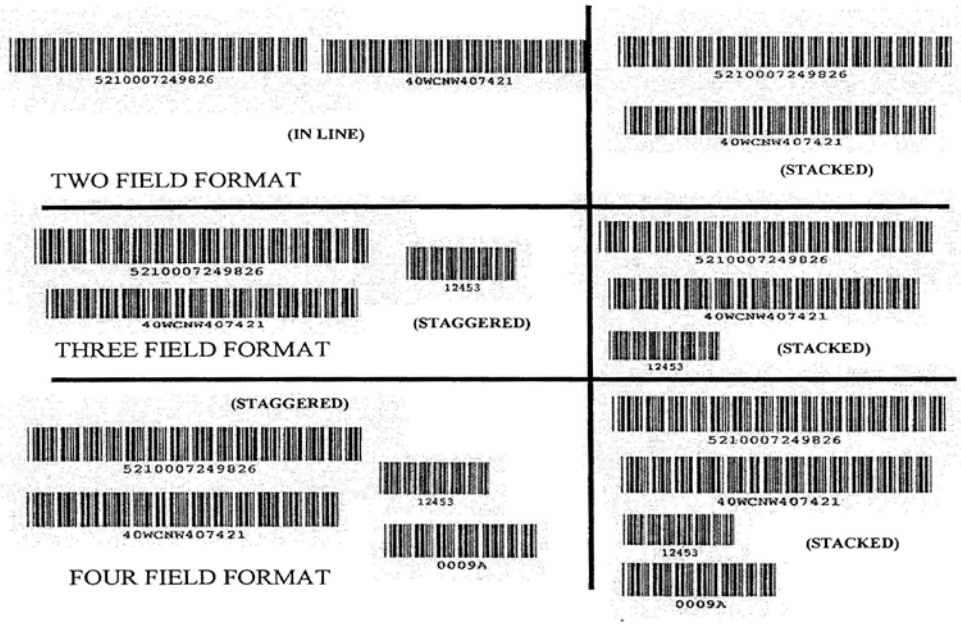

Figure 5. Acceptable bar code layout formats for exterior containers.