

DEFENSE CONTRACT MANAGEMENT AGENCY



ACQUISITION INSIGHT  GLOBAL ENGAGEMENT

Miscellaneous Packaging Topics

Presented By:
DCMAO-LSP

Revision 4, 23 February 2012

Scope:

This session presents an overview of three specialized packaging methods that include: Electrostatic Discharge Sensitive (ESDS) Protective Packaging Program, the Shelf-Life Program and Hazardous Material Packaging. There is also an introduction to several websites which are valuable tools to use in learning about military packaging.

Purpose:

To provide information, definitions, references and guidance in providing preservation, packaging, packing and marking for items requiring ESD protection, Shelf-Life designations and Hazardous Material designation.

AGENDA

- **Electrostatic Discharge Sensitive (ESDS) Packaging**
- **DOD Shelf-Life Program**
- **Hazardous Materials**
- **Packaging Web Sites**



Electrostatic Discharge Sensitive (ESDS) Packaging



- **ESD Sensitive Items**
- **ESD Control Program**
- **ESD Protective Packaging**

Electrostatic discharge sensitive items – Electronic items which are susceptible to damage or degradation as a result of an electrostatic discharge (ESD) event.

- **Created by the motion, separation, flow of solids liquids or gases**
- **Sources include**
 - Personnel
 - Plastics
 - Processing equipment and machinery



Electrostatic charges are generated by the relative motion, physical separation of materials or flow of solids, liquids or gases. Common sources of ESD are:

Personnel

Items made of plastics

Processing equipment and machinery

- **Typical ESD sensitive items include:**
 - **Printed circuit cards**
 - **Microcircuits**
 - **Oscillators**
 - **Electronic modules**
 - **Thick and thin Film Resistors**
 - **Microelectronic discrete and integrated Semiconductor devices**
 - **Chips and Hybrid Devices**
 - **Piezoelectric Crystals**
 - **Subassemblies, assemblies, and equipment containing these parts**

- **MIL-STD-1686 Electrostatic Discharge Control Program**
 - ESD Control Program Plan
 - Classification of ESD Parts
 - ESD Protected Areas
 - ESD Handling Procedures
 - ESD Protective Packaging



The contractor shall prepare an ESD Control Program Plan that:

- Defines the scope of the ESD Control Program
- Describes the tasks, activities and procedures
- Identifies responsible organizations
- Lists key directives and guidance documents
- Lists specific tools, materials and equipment
- **May be contractually required data**

- **ESD Control Program Plan**
 - **Principal document for designing, implementing and auditing**
 - **Describes the activities necessary to protect ESD sensitive items**
 - **Lists specific tools, materials and equipment**
 - **May be a contractually required document**



The contractor shall prepare an ESD Control Program Plan that:

- Defines the scope of the ESD Control Program
- Describes the tasks, activities and procedures
- Identifies responsible organizations
- Lists key directives and guidance documents
- Lists specific tools, materials and equipment
- **May be contractually required data (DI-RELI-80669)**

- **Classification of ESD Parts**
 - The principal source of ESD damage is the human body
 - The sensitivity of parts is often established using Human Body Model (HBM) Testing
- **Items susceptible to damage from ESD voltages**
 - Class 1 – under 2,000 volts
 - Class 2 – 2,000 to 3,999 volts
 - Class 3 – 4,000 to 15,999 volts



The sequence of parts ESD sensitivity classification in accordance with MIL-STD-1686 is predicated upon the requirement to eliminate duplicative non-cost effective testing where feasible.

Typical Electrostatic Voltages

Means of Static Generation	Electrostatic Voltages	
	10 to 20 Percent Relative Humidity	65 to 90 Percent Relative Humidity
Walking Across Carpet	35,000	1,500
Walking Over Vinyl Floor	12,000	250
Worker At Bench	6,000	100
Vinyl Envelopes for Work Instructions	7,000	600
Common Poly Back Picked Up From Bench	20,000	1,200
Work Chair Padded with Polyurethane Foam	18,000	1,500



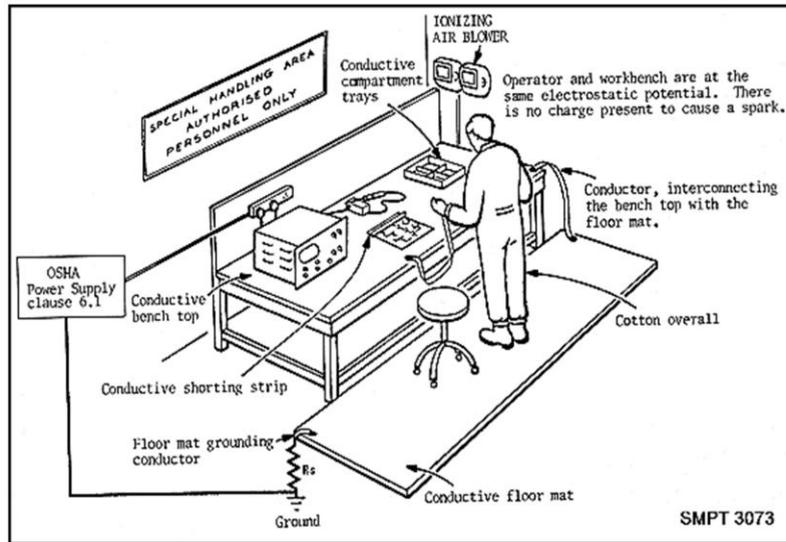
Caution should be exercised when attempting to correlate the above, or actual measured voltages with the potential to damage ESDS items. See 30.1 through 30.2.2 of MIL-HDBK-263.

- **ESD Protected areas (workstations)**
 - **Materials, equipment and procedures required to control or minimize electrostatic charges**
 - **Limit static voltage levels below the damage threshold**
 - **ESD protected areas are required when handling ESDS parts, assemblies, and equipment outside of their protective covering or packaging. Detailed ESD protective handling procedure are required.**



Consists of materials, equipment and procedures required to control or minimize electrostatic charges.

Concept is to limit static voltage levels below the damage threshold of the most sensitive ESDS parts, assemblies and equipment handled within ESD protected areas or workstations. They are required when handling ESDS parts outside their protective covering or packaging.



Complement the protected area requirements.

Must address the entire range of situations and locations where items may be handled – fully protected and unprotected.

Detail increases as level of protection provided by the protected areas decreases.

May be contractually required data (DI-RELI-80671).

- **ESD Handling Procedures**
 - **Complement the protected area requirements**
 - **Comprehensive and address the situations and locations where ESDS items will be handled**
 - **Address the concept of handling in both fully protected areas and unprotected areas**
 - **May be a contractually required document**



ESD Precautions and Proper Handling Procedures:

- Avoid carpets in cool, dry areas. Leave PC cards and memory modules in their anti-static packaging until ready to be installed.
- Dissipate static electricity before handling any system components (PC cards, memory modules) by touching a grounded metal object, such as the system unit unpainted metal chassis.
- If possible, use antistatic devices, such as wrist straps and floor mats.
- Always hold a PC card or memory module by its edges. Avoid touching the contacts and components on the memory module.
- Take care when connecting or disconnecting cables. A damaged cable can cause a short in the electrical circuit.
- Prevent damage to the connectors by aligning connector pins before you connect the cable. Misaligned connector pins can cause damage to system components at power-on.
- When disconnecting a cable, always pull on the cable connector or strain-relief loop, not on the cable itself.

- **Electrostatic Discharge Control Handbook**
 - Provides guidance for the developing, implementing, and monitoring an ESD control program in accordance with MIL-STD-1686
 - Includes an ESD Damage Prevention checklist in Appendix K

MIL-HDBK-263 – Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies and Equipment - Provides additional guidance on the implementation of an ESD control program

- **MIL-STD-2073-1E specifies that ESDS items shall be preserved in accordance with Table J.I.a, Specialized Preservation Method, Code “GX”**

- **Code “GX” specifies Method 41, Watervaporproof bag sealed**
 - The item shall be initially wrapped in MIL-PRF-81705, Type III, or bags conforming to Mil-DTL-117, Type II, Class H, Style 2, or cushioned in material conforming to A-A-3129, or PPP-C-795, Class 2, or PPP-C-1797, Type II
 - Reclosable cushioned pouches conforming to **MIL-DTL-81997**, Type I or II, may be used in lieu of initial wrap or cushioning



Please note the areas written in red because they provide direction that is not currently available in MIL-STD-2073-1D due to changes in MIL-DTL-117. Additionally, MIL-DTL-117 table does not contain this table.

- **MIL-STD-2073-1E Code “GX” (continued)**
 - **Lead or terminal configurations shall be maintained as manufactured without causing loads or stresses capable of causing damage to the item**
 - **The wrapped and/or cushioned item shall be heat sealed into a bag conforming to MIL-B-117, Type II, Class H, Style 2 (MIL-PRF-81705 Type III)**
 - **ESD sensitive caution labels shall be applied IAW MIL-STD-129**



Contract requirements for ESD sensitive items may also reference a Special Packaging Instruction, Packaging Procedural Specification or Commodity Specification.

MIL-B-117G//MIL-DTL-117H Cross Reference

27 March 1

MIL-B-117G			Previous Barrier Material Classification			New MIL-DTL-117H			New Barrier Material Classification			
Type	Class	Style	Document	Type	Grade	Class	Type	Class	Style	Document	Type	Class
I	A	2	MIL-B-31705	II	-	1 or 2				MIL-PRF-31705	II	1 or 2
I	B	1	MIL-B-121	I	A	1	II	C	1	MIL-PRF-121	I	-
II	B	1	MIL-B-121	II	A	1	III	C	1	MIL-PRF-121	II	-
III	B	1	MIL-B-121	III	A	1	III	C	1	MIL-PRF-121	III	-
I	B	2	MIL-B-22191 or L-378	II	-	-	III	B	2	MIL-PRF-22191 or A-A-3174	III	1 or 2
I	B	2	MIL-B-22191 or L-378	I or II	A	1					I or II	1
I	B	3	MIL-B-121 and MIL-S-22191	II	-	-				DELETED		
I	C	1	MIL-B-121	I	A	1	II	C	1	MIL-PRF-121	I	-
II	C	1	MIL-B-121	II	A	1	III	C	1	MIL-PRF-121	II	-
I	C	2	MIL-S-22191	II	-	-	II	C	2	MIL-PRF-22191	II	1 or 2
I	C	3	MIL-S-121 and MIL-S-22191	I	A	1	II	C	3	MIL-PRF-121 and MIL-PRF-22191	I	-
I	E	1	MIL-B-131	I	-	1	I	E	1	MIL-PRF-131	-	1
I	E	2	MIL-S-22191	I	-	-	I	E	2	MIL-PRF-22191	I	1 or 2
II	E	1	MIL-B-131	I	-	3				DELETED		
III	E	1	MIL-B-131	I	-	2	II	E	1	MIL-PRF-131	-	2
I	E	3	MIL-S-131 and MIL-S-22191	I	-	1	I	E	3	MIL-PRF-131 and MIL-PRF-22191	-	1
II	E	3	MIL-S-131 and MIL-S-22191	I	-	3				DELETED		
I	F	1	MIL-S-31705	I	-	1 or 2	I	F	1	MIL-PRF-31705	I	1 or 2
I	G	1	MIL-B-131	II	-	-				DELETED		
I	H	2	MIL-S-31705	III	-	1 or 2	II	H	2	MIL-PRF-31705	III	1 or 2



This cross reference indicating the new MIL-DTL-117 bag material designations is in MIL-STD-2073-1E, page 30. The material changes can be located on this document.

- MIL-STD-129 specifies the following label for unit packs



ESD labels will be IAW ASTM D5445. One label will be affixed to the identification side of the unit pack.

- **MIL-STD-129 specifies the following label for intermediate and exterior containers**



One label should be placed on the identification marked surface for intermediate containers, and 2 labels for exterior containers. One on the identification marked surface and one label on the opposite side.

DOD Shelf-Life Program

- **DOD 4140.27-M Shelf-Life Item Management Manual**
 - Establishes policy and procedures for the supply chain (life-cycle) management of standard and hazardous shelf-life items contained in the Federal Supply System

DOD Shelf-Life Program, para 1-2.B.

- **Definitions of key terms**

- **Shelf-Life** – period of time that an item may remain in storage and still be suitable for issue
- **Shelf-Life Item** - an item having deteriorative or unstable characteristics to the degree that a storage time period must be assigned
- **Service Life** – the average or standard life expectancy of an item or equipment while in use



Each item that meets the Shelf-Life criteria is assigned a specific Shelf-Life code. The code identifies the length of the shelf-life period expressed in months.

- **Typical items included in the Shelf-Life Program:**
 - **Food**
 - **Medicines**
 - **Paint/Sealants/Adhesives**
 - **Film**
 - **Tires**
 - **Petroleum Products**
 - **Hoses/Belts**
 - **O-rings**

- **Items that meet the shelf-life criteria are assigned a shelf-life code**
- **There are two types of shelf-life codes**
 - Type I – alphabetic code, non-extendible
 - Type II – numeric code, extendible
- **Official code definitions are in Appendix A**



- Type I is an alphabetic code and represents a non-extendable period. Once the Shelf-Life has passed the expiration date the item is unfit for use.
- Type II is a numeric code and represents an extendible period. Prior to the expiration of the Shelf-Life period, the item is inspected, tested or restorative action is taken to extend the items Shelf-Life.
- Items that are considered non-deteriorative are identified by Shelf-Life code 0 (zero)
- **The official definitions of the Shelf-Life codes are contained in Appendix F of DOD 4140.27-M and they are also listed in Table II of MIL-STD-129**

- **The committee's purpose is to develop, monitor, evaluate, and enhance a program of shelf-life control for DoD, GSA, FAA, AND USCG materiel.**
- **Subcommittees focus on specific commodities**
 - **Include representatives from GSA, FAA, US Coast Guard if applicable**
 - **Draw upon resources from ICP's, Depots, Customers, Industry or Specification Preparing Activities**



Current DOD Practice (DOD Shelf-Life Committee)

Subcommittees are standardizing the application of the Shelf-Life program for specific commodities.

Include representatives from GSA, FAA, US Coast Guard if applicable.

Draw upon resources from Inventory Control Points, Storage Activities, Customers, Industry or Specification Preparing Activities.

Some of the committee's efforts have already been incorporated into the management of numerous items.

- **The results of the subcommittee's efforts include:**
 - **O-rings** – 15 year non-extendible
 - **Tires** – 5 year non-extendible
 - **Hoses** – 12 year non-extendible
 - **Batteries** – Automotive – Wet 3 – 6 months extendible, Dry 60 months extendible
 - **Petroleum products** - 24 – 26 month extendible

- <https://www.shelflife.hq.dla.mil/>
 - Links to applicable regulations
 - Minutes of committee meetings
 - Points of contact

The DOD Shelf-Life Committee has a web site with additional information including links to applicable regulations, minutes of committee meetings and points of contact for the various Services and Agencies involved with the program.

- **Contracts may specify the Shelf-Life time period two ways:**
 - **Directly stating the number of months**
 - **Type II shelf-life 24 months**
 - **Referencing the assigned shelf-life code**
 - **Shelf-Life code 6**

- **The MIL-STD-2073-1E, Special Marking Codes, also indicate a shelf-life item**
 - **Code 32 is for Type I**
 - **Code 33 is for Type II**

PKGING DATA - MIL-STD-2073-1C, 1 OCT 1996
QUP = 001: PRES MTHD = HM: CLNG/DRY = X: PRESV MAT = XX:
WRAP MAT = XX: CUSH/DUNN MAT = XX: CUSH/DUNN THKNSS = X:
UNIT CONT = ZZ: OPI = O:
INTRMDTE CONT = XX: INTRMDTE CONT QTY = AAA:
PACK CODE = U:
MARKING SHALL BE IN ACCORDANCE WITH MIL-STD-129.
SPECIAL MARKING CODE: 33 - TYPE II, SHELF LIFE.
PALLETIZATION SHALL BE IN ACCORDANCE WITH D001450000 REV B
DATED 97212



- **MIL-STD-129 requires applicable markings on unit, intermediate and exterior pack**
 - **Markings are placed below the item identification data**
 - **Consist of :**
 - **The manufactured, cured, assembled or packed date**
 - **Expiration date (Type I)**
 - **Inspect/Test date (Type II)**



- Contract requirements may specify the Shelf-Life time period by expressing it in the number of months or by referencing the assigned shelf life code. This information is usually part of the item description (NSN, Part Number and Nomenclature) in the contract schedule.
- Another indication of a Shelf-Life requirement is the presence of special marking code “32” (Type I) or “33” (Type II) in the MIL-STD-2073-1E coded packaging data.
- Shelf-Life Items must be identified by appropriate markings on unit, intermediate and exterior containers in accordance with MIL-STD-129.
 - Shelf-Life markings are typically place below the item identification data.
 - Shelf-Life markings include the manufactured, cured, assembled or packed date and the expiration date (Type I) or inspect/test date (Type II).
 - Examples of the markings, using a 24-month timeframe, are shown below.
- The Type I is shelf-life code “M”, Type II is shelf-life code “6”

EXAMPLE 1 (TYPE I)

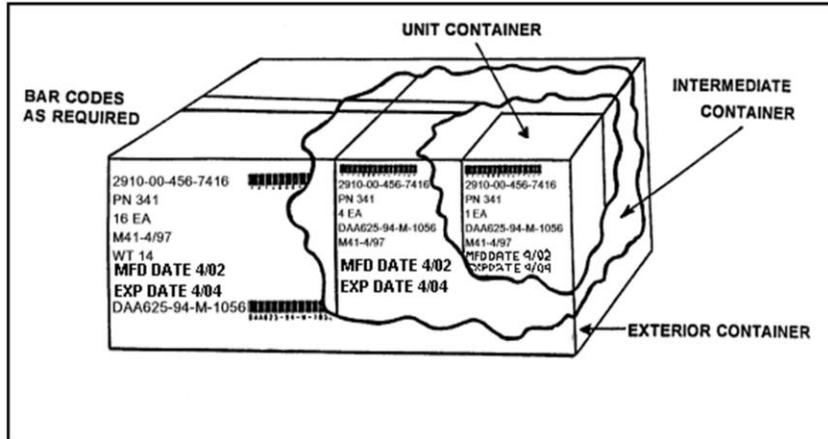
EXAMPLE 3 (TYPE II)

MFD DATE 4/02
 CURED DATE 2Q02
 EXP DATE 4/04
 INSP/TEST DATE 2Q04

EXAMPLE 2 (TYPE II)

ASSEMBLED DATE 4/02
 INSP/TEST DATE 4/04

Shelf-Life Markings



See example on Page 21, MIL-STD-129P and paragraph 5.2.1.

Hazardous Materials



It is important to note here that the following information is given as an overview of HAZMAT and is not intended to be considered as acceptable training for either general awareness or function specific training required for DCMA personnel.

- **The various modes of transportation all have regulations governing the transport of hazardous materials**

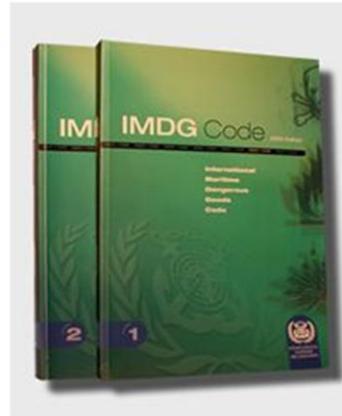
- **Code of Federal Regulation Title 49**
- **Applies to all modes of transportation**
 - rail car, aircraft, motor vehicle, vessel
- **Interstate**
- **Intrastate**
- **Foreign commerce**



- **International Civil Aviation Organization (ICAO) Technical Instructions**
- **International Air Transport Association (IATA) Dangerous Goods Regulations**



- **International Maritime Organization Dangerous Goods Code (IMDG)**



*BY ORDER OF THE SECRETARIES OF THE
AIR FORCE, THE ARMY, THE NAVY,
THE MARINE CORPS, THE DEFENSE
LOGISTICS AGENCY, AND THE DEFENSE
CONTRACT MANAGEMENT AGENCY*



*AIR FORCE INTERSERVICE
MANUAL 24-204(I)
TM 38-250
NAVSUP PUB 505
MCO P4030.19I
DLAI 4145.3
DCMAD1, CH3.4 (HM24)
15 APRIL 2007
Incorporating Change 1, 4 May 2007*

Transportation

*PREPARING HAZARDOUS MATERIALS FOR
MILITARY AIR SHIPMENTS*

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: This publication is available for downloading from the e-Publishing website at www.e-publishing.af.mil/

RELEASABILITY: There are no releasability restrictions on this publication.



The 24-204 can be obtained at the website high-lighted in this slide – www.e-publishing.af.mil/.

- There are nine classes of Hazardous Materials

- Class 1 – Explosives



- Class 2 – Gases



- Class 3 – Flammable Liquids



Refer to 49 CFR, Part 172.

- **Nine Classes** (continued)

- **Class 4 – Flammable Solids, Spontaneously Combustible, Dangerous When Wet**



- **Class 5 – Oxidizers, Organic Peroxides**



- **Class 6 – Poisonous Materials, Infectious Substances**



Refer to 49 CFR, Part 172.

- **Nine Classes** (continued)

- **Class 7 – Radioactive**



- **Class 8 – Corrosive Materials**



- **Class 9 - Miscellaneous Hazardous Materials**



Refer to 49 CFR. Part 172.

- **Materials regulated by CFR 49 that do not fall within the previous descriptions are identified as Other Regulated Materials (ORM)**



In CFR 49, there are also Other Regulated Materials – (ORM-D) such as a consumer commodity, which present a limited hazard during transportation due to its form, quantity and packaging.

- **Shipping Papers**
 - **Proper Shipping Name**
 - **Hazard Class**
 - **Identification Number**
 - **Packing Group**
 - **Quantity of Material**

XYZ Chemical Company
 2004 Main Street
 Wolfsburg, WY 82009

Delivery Address:
 Heidenroder Chempark
 54 Tarrytown Rd.
 Anytown USA

Billing Address:

HM	No. of Units	Shipping Description	Total Quantity
X	4 Drums	Flammable Liquids, nos. 3, UN 1993, PGI (Furan & Acetone)	200 gal
	25 Boxes	Newspaper Supplements	300 lg
X	16 Boxes	Butyric Acid, 8, UN 2826, PG-III	205 Kg



Shipping papers must include Proper Shipping Name, Hazard Class, Identification Number, Packing Group and quantity of material.

- **Package Markings**
 - Proper Shipping Name
 - Identification Number



Package markings must include the Proper Shipping Name and Identification Number.

- Prescribed Labels
 - Placed near the markings



Prescribed Labels must be placed on the package near the markings.

- **Placards must be displayed on**
 - **Freight Containers**
 - **Transport Vehicles**
 - **Rail Cars**



Placards must be displayed on freight containers, transport vehicles and rail cars when required. The application of hazard placards are determined by the HAZMAT regulations based on the type and quantity of hazardous material being shipped in each vehicle. They must be visible from all views, front, back and sides.

- **Degree of danger is indicated by the Packing Group**
 - **Packing group I** – Great Danger
 - **Packing Group II** – Medium Danger
 - **Packing Group III** – Minor Danger



Hazardous materials must be packaged as specified in the applicable regulations. The package design must pass the United Nations (UN) performance standards. The degree of danger of a hazardous material is indicated by the packing group.

- **Testing criteria is progressively more stringent –**
For example the height of the drop test is:
 - **0.8 meters (2.6 feet) for Group III**
 - **1.2 meters (3.9 feet) for Group II**
 - **1.8 Meters (5.9 feet) for Group I**

Refer to 49 CFR, Sub-part M, 178.603(e)(1)(i)(ii)(iii).

- **Drop Test** - Applies to all containers
- **Stacking Test** – Applies to all containers except for bags
- **Leak-proof Test** – Applies to all containers intended to contain liquids
- **Hydrostatic Pressure Test** – Applies to all metal, plastic and composite packaging intended to contain liquids
- **Cooperage Test** – Applies to bung type wooden barrels



Refer to 49 CFR Sub-part M, 178.603, 178.604, 178.605, 178.606, and 178.607.

- **CFR 49 also specifies**
 - **Vibration Testing for all containers**
 - **Testing for Infectious Substances Packaging**

The vibration test is required by the CFR Title 49 and not in the air shipment documents, and is designed to protect our highways from of the many shipments going by truck within the US. 49 CFR Sub-part M, 178.608 and 178.609.

- Packages that meet the UN Performance Specifications must be marked to indicate the following:
- UN Indication –
- Packaging Identification code – Type of packaging, material of construction and category (if applicable)
- Performance Standard Code – X, Y, Z
- Relative Density (Specific Gravity) or Gross Mass
- “S” for solids or Hydrostatic Pressure Test Rating (kPa)
- Year of Manufacture – last two digits
- Country authorizing the mark and the symbol of the responsible party



4G/Y10.4/S/94
USA/+AX1259



Please take note of the UN symbol indicated on the bottom of this slide. This is the format you will see on UN tested and approved containers. Refer to 49 CFR Sub-Part L, 178.503-178.523.

- **Marking indicates the package conforms to the UN requirements**



UN - Meets 49 CFR

1A1 - Closed head steel drum

X - Tested to PGI

1.8 Specific gravity

300 - Test pressure in Kilopascals (kPa)

97 - Year of Mfg.

USA - Mfg. in USA to 49 CFR specs.

VL6 - Mfg. registered symbol

Refer to 49 CFR Sub-part L, 178.503-523.

- **All of the Hazardous Materials Regulations require training**
- **Training includes**
 - **General Awareness/Familiarization**
 - **Function Specific**
 - **Safety Training**
 - **Security Awareness Training**

Refer to 49 CFR, Sub-Part H, 172.700.



DEFENSE CONTRACT MANAGEMENT AGENCY

Training Requirements (DCMA)

- **DCMA Hazardous Materials Training requirements are established based upon assigned position and functions performed**

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Refer to 49 CFR, Sub-part H. 172.700.

- **Persons providing oversight of HAZMAT**

Contracts

- **Must complete HAZMAT Awareness Training**
- CBT, Correspondence Course, District Training HMA-2D
- **Complete training at least every two years**
- Property/Plant Clearance, Industrial Specialists, Quality Assurance with occasional oversight (less than 3 times/month)



This information corresponds to DCMA Information Memorandum 02-123.

*****NOTE: This training that you are reviewing now does not meet the requirements for a Hazardous Materials Awareness session.**

Packaging Related Web Sites



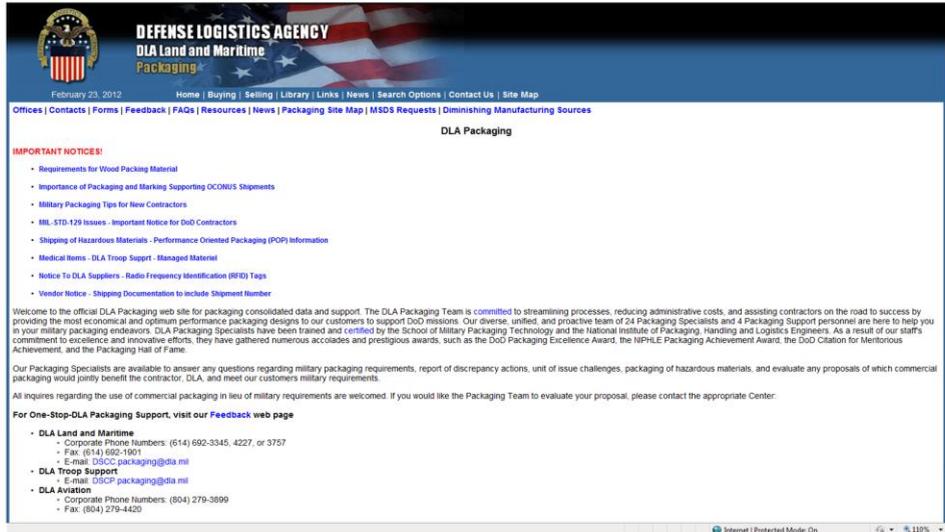
The screenshot shows the DCMA Packaging Portal interface. At the top, there is a navigation bar with links: DCMA HOME, ABOUT US, CUSTOMERS, EMPLOYEES, eBUSINESS, NEWS ROOM, ELTS, eTOOLS, ATAAPS, INSTRUCTIONS, MEMOS, WIKI, and Packaging Management | Home Page. Below the navigation bar is a banner with the DCMA PORTAL logo and the title "Packaging Management" in a red, cursive font. The main content area features a photograph of a warehouse interior with a wooden crate in the foreground and a pallet jack to the right. Below the photo is a yellow banner with the text: "Sharing the knowledge to properly preserve, package, pack and mark DoD Shipments". At the bottom of the page, there are sections for "Community Announcements" and "Community Projects". The footer contains the text "ACQUISITION INSIGHT GLOBAL ENGAGEMENT" and a small circular logo on the right.

Join the Packaging Management Community of Practice to have access to the most current information and links for packaging and marking.

- **Located at DLA Land and Maritime**
(formerly Defense Supply Center Columbus – DSCC)
<http://www.dsccl.dla.mil/Offices/packaging/>
- **Military Packaging Tips for New Contractors**
- **Points of Contact for Packaging all Branches of Service, DLA and DCMA**
- **Important Notices**
- **Frequently Asked Questions**
- **Resources for packaging standards and specifications**



Great website for a variety of packaging related topics.



The screenshot shows the DLA Military Packaging website. At the top left is the DCMA logo. The main header features the Defense Logistics Agency (DLA) logo and the text "DLA Land and Maritime Packaging". Below this is a navigation menu with links for Home, Buying, Selling, Library, Links, News, Search Options, Contact Us, and Site Map. A secondary menu includes Offices, Contacts, Forms, Feedback, FAQs, Resources, News, Packaging Site Map, MSDS Requests, and Diminishing Manufacturing Sources. The main content area is titled "DLA Packaging" and contains a section for "IMPORTANT NOTICES!" with a bulleted list of links. Below this is a welcome message and contact information for DLA Land and Maritime, DLA Troop Support, and DLA Aviation.

February 23, 2012 Home | Buying | Selling | Library | Links | News | Search Options | Contact Us | Site Map

Offices | Contacts | Forms | Feedback | FAQs | Resources | News | Packaging Site Map | MSDS Requests | Diminishing Manufacturing Sources

DLA Packaging

IMPORTANT NOTICES!

- Requirements for Wood Packing Material
- Importance of Packaging and Marking Supporting OCONUS Shipments
- Military Packaging Tips for New Contractors
- MIL-STD-129 Issues - Important Notice for DoD Contractors
- Shipping of Hazardous Materials - Performance Oriented Packaging (POP) Information
- Medical Items - DLA Troop Support - Managed Material
- Notice To DLA Suppliers - Radio Frequency Identification (RFID) Tags
- Vendor Notice - Shipping Documentation to Include Shipment Number

Welcome to the official DLA Packaging web site for packaging consolidated data and support. The DLA Packaging Team is committed to streamlining processes, reducing administrative costs, and assisting contractors on the road to success by providing the most economical and optimum performance packaging designs to our customers to support DoD missions. Our diverse, unified, and proactive team of 24 Packaging Specialists and 4 Packaging Support personnel are here to help you in your military packaging endeavors. DLA Packaging Specialists have been trained and certified by the School of Military Packaging Technology and the National Institute of Packaging, Handling and Logistics Engineers. As a result of our staff's commitment to excellence and innovative efforts, they have gathered numerous accolades and prestigious awards, such as the DoD Packaging Excellence Award, the NIPHE Packaging Achievement Award, the DoD Citation for Meritorious Achievement, and the Packaging Hall of Fame.

Our Packaging Specialists are available to answer any questions regarding military packaging requirements, report of discrepancy actions, unit of issue challenges, packaging of hazardous materials, and evaluate any proposals of which commercial packaging would jointly benefit the contractor, DLA, and meet our customer's military requirements.

All inquiries regarding the use of commercial packaging in lieu of military requirements are welcomed. If you would like the Packaging Team to evaluate your proposal, please contact the appropriate Center:

For One-Stop-DLA Packaging Support, visit our Feedback web page

- **DLA Land and Maritime**
 - Corporate Phone Numbers: (614) 692-3345, 4227, or 3757
 - Fax: (614) 692-1901
 - E-mail: DSCC.packaging@dma.mil
- **DLA Troop Support**
 - E-mail: DSCP.packaging@dma.mil
- **DLA Aviation**
 - Corporate Phone Numbers: (804) 279-3899
 - Fax: (804) 279-4420



- **Army TACOM**

<https://www.ilsc.army.mil/tdps/index.asp>

- **Access to SPI's via part number or NSN**
- **Packaging publications**
- **Packaging coded data**

Requires CAC (Common Access Card) or login ID for access to this site.

DCMA
DEFENSE CONTRACT MANAGEMENT AGENCY

Special Packaging Instructions

TACOM-WARREN PACKAGING **ILSC**

PACKAGING DATABASE QUERY

Enter NSN or NIIN: Part Number:

Query **Reset**

THE PACKAGING DATA DISPLAYED IN THIS WEB SITE IS FOR INFORMATION PURPOSES ONLY AND WILL NOT BE UTILIZED AS A SUBSTITUTE FOR CONTRACTUAL OR OTHER PACKAGING REQUIREMENTS SPECIFIED BY TACOM-WARREN OR ANY OTHER GOVERNMENT AGENCY FOR ACQUISITION PURPOSES. THE PACKAGING REQUIREMENTS SHALL BE AS SPECIFIED IN THE CONTRACT OR ORDER. WHEN PACKAGING OF MATERIAL IS TO BE PERFORMED BY DOD PERSONNEL, THESE PERSONNEL NEED TO CONTACT THE RESPONSIBLE PACKAGING ENGINEERING SUPPORT ACTIVITY TO ASCERTAIN REQUIRED PACKAGING REQUIREMENTS. IF YOU'D LIKE TO CONTACT THE TACOM-WARREN PACKAGING TEAM, YOU CAN EMAIL PACKAGING AT 330001@DCMA.MIL.

ACQUISITION INSIGHT GLOBAL ENGAGEMENT

***NOTE: To access Special Packaging Instructions (SPI) from this site: drop the two letters from the front of the SPI number and add a 0 to the beginning of the string of numbers; enter this into the “Enter NSN or NIIN:” spot on the screen; then hit “Query”. (e.g. for SPI No. AK14136958, enter in 014136958)

- The DLA Procurement Gateway retired on September 15, 2010. Current awards (beginning with "SPM" or "SPE") are on the DLA Internet Bid Board System (DIBBS) site at <https://www.dibbs.bsm.dla.mil/> for the three DLA Supply Centers - DLA Aviation, DLA Land and Maritime, and DLA Troop Support.



- View/Download Contracts and Solicitations.
- Records can be retrieved by CAGE, NSN, Keywords and Supply Class.
- Set up for contractor access and inquiry.

- **For archive awards (beginning with SP0) please contact the Freedom of Information Act (FOIA) office of the agency who issued the award.**
 - DLA Aviation (Awards beginning with "SP04") - <http://www.aviation.dla.mil/foia/foia.htm>
 - DLA Land and Maritime (Awards beginning with "SP07, SP09") - <http://www.dsccl.dla.mil/programs/foia/>
 - DLA Troop Support (Awards beginning with "SP01, SP02, SP03, SP05") - <http://www.troopsupport.dla.mil/contract/foia.asp>



- View/Download Contracts and Solicitations
- Records can be retrieved by CAGE, NSN, Keywords and Supply Class
- Set up for contractor access and inquiry

- **DOD Single Stock Point**

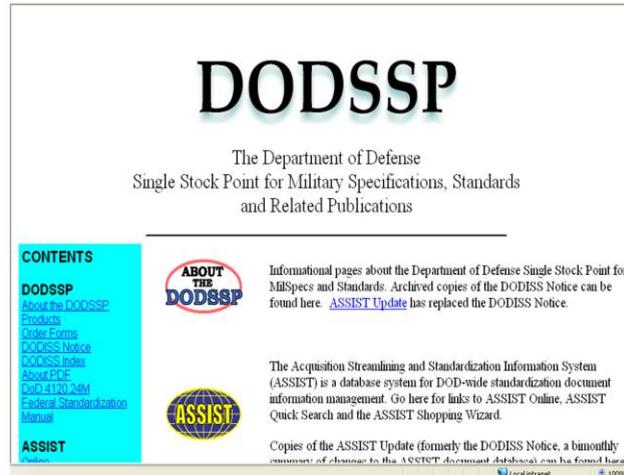
<http://dodssp.daps.dla.mil/dodssp.htm>

- **ASSIST Quick Search** allows document viewing without login ID or Password

<https://assist.daps.dla.mil/quicksearch/>

- **Military Standards and Specifications**
- **Federal Standards and Specifications**
- **Commercial Item Descriptions (CIDs)**
- **Data Item Descriptions (DIDs)**

- **DOD Single Stock Point**



DODSSP

The Department of Defense
Single Stock Point for Military Specifications, Standards
and Related Publications

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ASSIST
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ABOUT THE DODSSP
Informational pages about the Department of Defense Single Stock Point for MilSpecs and Standards. Archived copies of the DODISS Notice can be found here. [ASSIST Update](#) has replaced the DODISS Notice.

ASSIST
The Acquisition Streamlining and Standardization Information System (ASSIST) is a database system for DOD-wide standardization document information management. Go here for links to ASSIST Online, ASSIST Quick Search and the ASSIST Shopping Wizard.

Copies of the ASSIST Update (formerly the DODISS Notice, a bimonthly summary of changes to the ASSIST document database) can be found here.

Local intranet 100%



- **Defense Ammunition Center (DAC)**

<http://ammo.okstate.edu>

- **Description of available courses**
- **Schedule of classes**
- **Enrollment information**
- **Other services available**



Defense Ammunition Center is located in McAlester, OK and is now performing on-site and online packaging training.

- **U.S. Department of Transportation**

<http://phmsa.dot.gov/hazmat>

- Links to current CFR 49
- Training information and materials
- Letters of Interpretation
- Ask a Question



PHMSA – Pipeline and Hazardous Materials Safety Administration – Hazardous Materials Safety site.

- **U.S. Department of Transportation**



The screenshot shows the PHMSA website interface. At the top, it displays the PHMSA logo and the U.S. Department of Transportation. Below the logo, there are navigation tabs for PHMSA Home, Pipeline Safety, and Hazardous Materials Safety. The main content area features a large graphic with the text "PHMSA's 2013 Budget Request Focuses on Increased Safety & Accountability" and "Chart 14 is now available in Spanish". To the right, there is a "Hazardous Materials Safety" section with a list of news items, including "PHMSA's 2013 Budget Request Focuses on Increased Safety & Accountability", "New Notice No. 12-2: Special Permit and General Application Fees Determination: Public Meeting", "Hazardous Materials Safety Enhancement Plans", "Safety Advisory Notice: Return of Radioactively Contaminated Tissue Binoculars Purchased From Best Bath and Beyond", and "Safety Alert - Unauthorized Marking of Compressed Gas Cylinders". Below the news items, there are sections for "Find PHMSA Offices" (with a map of the United States and a dropdown menu for "Regional Offices"), "PHMSA Resources" (with sub-sections for "Regulations", "Data & Reports", "Permits & Approvals", and "Inspection & Enforcement"), and "Promoting Safety".



- **National Institute of Packaging, Handling and Logistics Engineers (NIPHLE)**

<http://www.niphle.com/>

- **Membership information**
- **Symposium details**



Membership dues required in order to be a registered member.

- **NIPHLE**



The screenshot shows the NIPHLE website homepage. At the top, the NIPHLE logo is displayed above the tagline "Amplifying the Success of Packaging and Logistics Professionals." Below this is a navigation menu with links for "Home", "About Niphle", "Membership", "P4L Bulletin", "Site Admin", "Jobs", and "Register NOW!". A search bar is also present.

The main content area features a "Welcome to the NIPHLE Website" message. It includes the NIPHLE logo and a paragraph describing the organization: "The National Institute of Packaging, Handling, & Logistics Engineers (NIPHLE) is an assemblage of professionals whose interests in the complex and diverse practice of distribution and logistics is a common bond. The Institute was constituted on August 8, 1956 in Washington, D.C. with the objective of improving communication between practitioners in these related areas of endeavor. The degree to which success has been achieved is measured in the growth and diversity of membership which has resulted." A "Read more..." link is provided.

Below the welcome message, there is a news item titled "Mr. Paul D. Peters Receives Assistant Secretary of Defense for Supply Chain Integration Awards Ceremony March 27th, 2012". The text describes Paul Peters' role as the Deputy Assistant Secretary of Defense for Supply Chain Integration within the Office of the Assistant Secretary of Defense for Logistics and Materiel Readiness. It states he is responsible for advancing the integration of the DoD supply chain through policy development and facilitating DoD Component implementation of supply chain management practices, coordinating the Services, Agency, and Combatant Commander's logistics strategies to provide a unified approach to support the Department's logistics missions, goals and objectives; examining logistics management concepts and assessing their applicability to the DoD; and strengthening the professional development of logisticians. A photograph of Mr. Paul D. Peters is included.

On the right side of the page, there are several sections: "NIPHLE BE LAWS" with links for "2010 BE LAWS" and "2011 BE LAWS" and "Vote Results"; "2012 Golf Tournament" with a photo of participants; and "2013 Conference" with a poster for the "2012 NIPHLE TRAINING CONFERENCE" held from March 27-29, 2012.

At the bottom of the page, there is a "Member Area" section with fields for "Username" and "Password". The footer contains the text "ACQUISITION INSIGHT GLOBAL ENGAGEMENT" and a small circular logo on the right.



- **Science Applications International Corporation (SAIC) has developed a website for the MIL-STD-2073 Packaging Code Lookup. <http://www.palm.saic.com/>**
- **Use this tool for your packaging code requirements. If you have further questions or recommendations for improvement, please contact SAIC via the webmaster.**

This site is for Navy managed items/NSNs, however it is widely used for looking up any Packaging Requirement Codes (PRCs).



The screenshot shows the DCMA website interface for the Packaging Code Lookup tool. At the top, there are navigation links for "Home" and "Site Map". Below this, the SAIC logo ("From Science to Solutions") and the PALM logo ("PROGRAM AND LOGISTICS MANAGEMENT") are displayed. A central banner features a globe and the text "Global lifecycle logistics support from the frontline to the bottom line...". Below the banner, there are several images and logos: a warehouse scene with "RFAS" (RFID for Asset System) text, a person working with a laptop and a circular logo for "TARP" (Technical Assistance for Repairables Processing) with "NAVICP" below it, and a screenshot of the "CODE LOOKUP" tool interface. At the bottom of the page, there is a footer with the text "ACQUISITION INSIGHT GLOBAL ENGAGEMENT" and a small circular seal on the right.

No password or registration necessary to use the Packaging Code Lookup. Click on “Code Lookup” to access the Packaging Code Lookup tool. Enter the codes from the contract/solicitation into the respective blocks and click on “Get Packaging Data”.



DEFENSE CONTRACT MANAGEMENT AGENCY

Misc. Packaging Topics Summary

Topics Discussed

- Electrostatic Discharge (ESD) Protection
- Shelf Life Program
- Hazardous Materials (HAZ MAT)
- Packaging Related Websites



1. The concept of an ESD protected area is to limit static voltage levels below the _____ of the most sensitive ESD parts.
 - a. wrist strap
 - b. grounding wire
 - c. damage threshold
 - d. weight limit



The answer is "C" - damage threshold (reference slide #11)

- 2. MIL-STD-2073-1 requires ESD sensitive items be preserved in accordance with _____.**
- a. Table JIa code BZ**
 - b. Table JI code 10**
 - c. Table JI code 52**
 - d. Table JIa code GX**



The answer is "D" - Table JIa, code GX (reference slide #15)

3. Type I is an alphabetic shelf-life code and represents a _____ period.

- a. 2 year**
- b. endless**
- c. 6 month**
- d. Non-extendable**

The answer is "D" – Non-extendable (reference slide #25)

- 4. What type of UN performance test applies to all containers?**
- a. drop test**
 - b. weight test**
 - c. dimension test**
 - d. marking test**



The answer is "A" - Drop Test (reference slide #49)

5. Hazard communication involves what elements?

- a. Shipping papers**
- b. Package Markings**
- c. Labeling and placarding**
- d. All of the above**

The answer is "D" - All of the above (reference slides #43-46)

- 6. Persons providing oversight of HAZMAT Contracts**
 - a. Must complete HAZMAT Awareness Training**
 - b. Must complete training at least every two years**
 - c. Must complete training every 3 years**
 - d. Both A & B**



The answer is "D" – Both A & B (reference slide #55)