

DLAR 4155.37
AR 702-18
NAVSUPINST 4410.56
AFJAM 22-233
MCO 4410.56
MATERIEL QUALITY CONTROL
STORAGE STANDARDS

FOREWORD

(Supplementation is permitted by the ICP)

This publication prescribes policies, responsibilities and procedures for the development, preparation, publication and maintenance of storage standards for Department of Defense (DoD), General Services Administration (GSA), and Coast Guard (CG) managed items. It is also designed to provide specific guidance and instructions to the Military Services and Inventory Control Points (ICPs) regarding the policy, development, content and format applicable to the development of Appendices to this regulation. This manual development, shall be read in its entirety.

Storage standards are developed by each Military Service and/or ICP and are published and maintained by the ICPs. Storage standards provide mandatory instructions for the inspection, testing and/or restoration of items in storage; encompassing storage criteria, preservation, packaging, packing and marking requirements, and time-phasing for inspection during the storage cycle to determine the materiel serviceability and the degree of degradation that has occurred. These standards are used by DoD, GSA and CG Storage Activities (SAs) to ensure that such materiel is maintained in a ready-for-issue status.

Users are encouraged to submit recommended changes and comments to improve this document through appropriate Service/Agency responsible officers, to the DoD Shelf-Life Program Administrator, HQ DLA, ATTN: DLSC-I, (703) 767-1585 or AV 427-1585. Changes to specific Appendices shall be forwarded to the ICP responsible for that Appendix.

Staff Director, Administration

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MATERIEL QUALITY CONTROL STORAGE STANDARDS REGULATION

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REFERENCES

- (a). JCS Publication 1, Department of Defense Dictionary of Military and Associated Terms, authorized by DoD Directive 5000.9.
- (b). DoD Directive 4140.2, Management of War Reserves.
- (c). DoD Directive 4140.26, Integrated Materiel Management of Consumable Items.
- (d). DoD Directive 4155.1, Quality Program.
- (e). DoD Directive 5030.37, National Supply System.
- (f). DoD Directive 5105.22, Defense Logistics Agency.
- (g). DoD Instruction 4100.14, Packaging of Materiel.
- (h). DoD Instruction 4140.27, Identification, Control, and Utilization of Shelf-Life Materiel.
- (i). DoD Instruction 4145.19, Storage and Warehousing Facilities and Services.
- (j). DoD 4140.26-M, Defense Integrated Materiel Management Manual for Consumable Items.
- (k). DoD 4140.27-M, Shelf-Life Item Management Manual.
- (l). DoD 4145.19-R-1, Storage and Materials Handling.
- (m). DoD 5025.1M, Directives System Procedures.
- (n). Joint Regulation AR 700-15/NAVSUPINST 4030.28/AFR 71-6/MCO 4030.33/DLAR 4145.7, Packaging of Materiel.
- (o). Joint Regulation DLAR 3200.1/AR 715-13/NAVMATINST 4120.94/AFR 400-40/MCO 4000.18, Engineering Support for Items Supplied by Defense Logistics Agency and General Services Administration.
- (p). MIL-STD-101B, Color Code for Pipelines and Compressed Gas

Cylinders.

- (q). MIL-STD-109, Quality Assurance Terms and Definitions.
- (r). MIL-STD-129, Marking for Shipment and Storage.
- (s). MIL-P-116, Methods of Preservation.
- (t). ANSI/ASQC Z1.4, Sampling Procedures and Tables for Inspection by Attributes.

ABBREVIATIONS:

AQL	Acceptable Quality Level
ARC	Additional Requirements Code
ARS	Agricultural Research Service
ASD(P&L)	Assistant Secretary of Defense (Production and Logistics)
CG	Coast Guard
DLA	Defense Logistics Agency
DLAM	Defense Logistics Agency Manual
DoD	Department of Defense
FDA	Food and Drug Administration
GSA	General Services Administration
HCC	Hazardous Characteristics Code
HM	Hazardous Materials
HMIS	Hazardous Materiel Information System
ICP	Inventory Control Point
JCS	Joint Chiefs of Staff
MCO	Marine Corps Order
NATO	North Atlantic Treaty Organization
NAVSEA	Naval Supply Systems Command
NIIN	National/NATO Item Identification Number
NSN	National/NATO Stock Number
PSC	Primary Segregation Code

SA	Storage Activity
SSP	Storage Standard Program
SRC	Special Requirements Code
SL	Shelf-life
SOS	Source of Supply
TM	Technical Manual
TO	Technical Order
TPR	Technical Publication Reference
TRC	Test Requirements Code

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CHAPTER 1

GENERAL

1-1. AUTHORITY. Department of Defense Directive 4155.1, Quality Program, Department of Defense Instruction 4140.27, Identification, Control, and Utilization of Shelf-Life Items and Department of Defense Instruction 4145.19, Storage and Warehousing Facilities and Services.

1-2. PURPOSE. This manual prescribes uniform policies, responsibilities, guidance, and procedures for the development, preparation, publication, and maintenance of storage standards for DoD, GSA, and CG managed materiel. These standards are utilized by activities in performing storage surveillance for materiel procured, managed, and stored. The guidelines contained herein provide the principles for quality assurance techniques to be used in determining the condition of materiel upon receipt (Service/Agency option), in storage, and upon shipment, and the test or restorative actions required to maintain and return stocks to a ready-for-issue status. Storage standards are required to be prepared on type II (extendible) shelf-life items. They may also be prepared on other items at the option of the managing ICP, e.g. type I (nonextendible) shelf-life items, critical application, principal, regulated, sensitive, or hazardous items.

1-3. APPLICABILITY. The provisions of this manual are applicable to the Military Departments and the Defense Logistics Agency (DLA) (hereinafter referred to collectively as DoD components), GSA and CG. This manual has been coordinated with and concurred in by the Military Services. The term Military Services as used herein refers to the Army, Navy, Air Force, and Marine Corps. Ammunition (Class V), perishable subsistence, industrial plant equipment, and bulk petroleum commodities are excluded from the provisions of this manual and will continue to be managed in accordance with existing regulations.

1-4. OBJECTIVE. To assure compatibility of policies and procedures used in the development, preparation, publication, and maintenance of storage standards in both wholesale and retail inventory.

1-5. RESPONSIBILITIES.

a. The Assistant Secretary of Defense Production and Logistics (ASD(P&L)) shall:

(1) Establish policy and provide guidance for the storage standards and ensure implementation of these policies in a uniform manner throughout the Department of Defense.

(2) Monitor the overall effectiveness of the Storage Standard Program (SSP) and make policy or program changes.

b. The Director, DLA shall:

(1) Administer the SSP in accordance with the responsibilities assigned in DoD Directive 5105.22, Defense Logistics Agency.

(2) Develop and maintain this manual in a current status to reflect the provisions of DoD Directive 4155.1 and DoDI 4140.27 and other policy and procedural guidance prescribed by ASD (P&L). These actions will be taken in coordination with the other DoD components, GSA, and the CG.

(3) Maintain liaison with other DoD components GSA and CG to assist in resolving problems related to the SSP.

(4) Ensure compliance with the provisions of this manual within DLA.

(5) Monitor and evaluate the effectiveness of the SSP.

(6) Develop storage standards for items identified by the Military Services as type II (extendible) shelf-life items for which DLA has source of supply responsibility when storage standards had not been previously developed; and assure the publication, maintenance and implementation of storage standards for all type II (extendible) shelf-life items for which DLA has source of supply responsibility.

c. Secretaries of the Military Departments shall:

(1) Assist the Director, DLA in the maintenance of this manual in a current status.

(2) Maintain a liaison with the Director, DLA, with other Military

Services, with GSA, and with CG in resolving problems related to the SSP

(3) Ensure compliance with the provisions of this manual within their respective Services.

(4) Monitor and evaluate the effectiveness of the SSP within their respective Services.

(5) Develop storage standards during item development stages; provide storage standards to the managing ICP upon item transition; provide previously developed storage standards to the managing ICP after item transition; classify items as type I (nonextendible) or type II (extendible) for all items under their engineering cognizance; and assure the publication, maintenance, and implementation of storage standards for all type II (extendible) shelf-life items for which the respective Military Service has source of supply responsibility.

d. The Administrator GSA, Federal Supply Services, shall:

(1) Assist the Director, DLA in the maintenance of this manual.

(2) Maintain a liaison with the Director, DLA, with the Military Services, and with the CG in resolving problems related to the SSP.

(3) Ensure compliance with the provisions of this manual within GSA.

(4) Monitor and evaluate the effectiveness of the SSP within GSA.

(5) Develop storage standards for items identified by the Military Services as type II (extendible) shelf-life items for which GSA has source of supply responsibility when storage standards had not been previously developed; and assure the publication, maintenance, and implementation of storage standards for all type II (extendible) shelf-life items for which GSA has source of supply responsibility.

e. Commandant, Coast Guard shall:

(1) Assist the Director, DLA in the maintenance of this manual.

(2) Maintain a liaison with the Director, DLA and the Military Services in resolving problems related to the SSP.

(3) Ensure compliance with the provisions of this manual within CG.

(4) Monitor and evaluate the effectiveness of the SSP within the CG.

(5) Develop storage standards for items identified by the Military Services as type II (extendible) shelf-life items for which CG has source of supply responsibility when storage standards had not been previously developed; and assure the publication, maintenance, and implementation of storage standards for all type II (extendible) shelf-life items for which CG has source

of supply responsibility.

1-6. MANUAL MAINTENANCE.

a. Maintenance of the Manual. The manual is developed by DLA in cooperation with other DoD components, GSA and CG and is required to be distributed to personnel in those activities concerned with the SSP. It is maintained by DoD Shelf-Life Program Administrator whose office is maintained at HQ DLA, ATTN: DLSC-I, 8725 John J. Kingman Road, Ft. Belvoir, VA 22060-6221.

b. Submitting Proposed Changes. All recommendations for additions, deletions, and corrections to this regulation or to specific ICP Appendices will be submitted to the appropriate Service and Agency storage standard focal points in Appendix A. After review and approval by the Service and Agency focal points, the recommended change will be forwarded to the DoD Shelf-Life Program Administrator for staffing.

c. Coordination Control. DLA will coordinate changes or revisions to this manual within DLA and with the Military Services, GSA and CG.

d. Publication of Revisions. Revisions and changes shall be formatted and published in accordance with DoD 5025.1-M.

1-7. DEFINITIONS. Definitions for the storage standard data elements may be found in the contents section of this manual. Other definitions may be included by the ICP. Those definitions not found in the contents include:

a. Critical Application Item. An item which is essential to the preservation of life in emergencies (e.g., parachutes, marine life preservers) or essential to end item or system performance, the failure of which would adversely affect the accomplishment of a military operation.

b. Date Assembled. The date items or parts are assembled into either components, assemblies, sets, kits or outfits (CASKOs) or the date various CASKOs are assembled into a unit.

c. Date Cured. The date the item or materiel was altered industrially, as to vulcanize (rubber) or to treat (synthetic elastomers) with heat or chemicals to make infusible. The cure date is indicated by the calendar quarter and year; e.g. 4Q86 = 4th quarter, 1986. The day on which an item is cured shall be the last day of the quarter.

d. Date Manufactured. The date an item, materiel, or commodity was fabricated, processed, produced, or formed for use. For drugs, chemicals and biologicals, the date of manufacture for products submitted to the Food and Drug Administration (FDA) for certification prior to release is the date of the

official certification notice. For products manufactured under license of the Agricultural Research Service (ARS), the date of manufacture conforms to the definitions established by ARS. The date of manufacture need not be shown for medical items having expiration dates.

e. Date Packed. For all items required to be marked with the date of pack, the date of pack shall be the date on which the product was packaged in the unit container, regardless of dates of packing, shipping, or additional processing.

f. Expiration Date. The date by which nonextendible items (Type I Shelf-Life) should be discarded as no longer suitable for issue or use.

g. Expiration Dating Period (Potency Period). For drugs, chemicals, and biologicals, the expiration date period (potency period) represents the period beyond which the product cannot be expected to yield its specific results or to retain its required potency.

h. Individual Repair Parts Ordering Data (IRPOD). Items in this category are managed by DLA for the Naval Sea Systems Command (NAVSEA). These items have special application which may require a shelf-life period in excess of 60 months.

i. Inspection or Test Date. The date by which extendible items (Type II Shelf-Life) should be subjected to inspection, test, or restoration.

j. Inventory Control Point (ICP). An organizational unit or activity within a DoD supply system which is assigned the primary responsibility for the materiel management of a group of items either for a particular Service/Agency or for the DoD as a whole.

k. Shelf-Life. The total period of time beginning with the date of manufacture, cure, assembly, or pack that an item may remain in the combined wholesale (including manufacture) and retail storage system and still remain suitable for issue or use by the end user. Shelf-life is not to be confused with service-life, which is a measurement of anticipated average or mean life of an item.

l. Shelf-Life Code. A code assigned to a shelf-life item to identify the period of time beginning with the date of manufacture, cure, assembly, pack, and terminated by the date by which an item must be used or subjected to inspection, test, restoration, or disposal action.

m. Shelf-Life Item. An item of supply possessing deteriorative or unstable characteristics to the degree that a storage time period must be assigned to ensure that it will perform satisfactorily in service.

n. Storage standard. Mandatory instructions for the inspection, testing, and/or restoration of items in storage, encompassing storage criteria, preservation, packaging, packing and marking requirements, and time-phasing for inspection during the storage cycle to determine the materiel serviceability and the degree of degradation that has occurred. In the case of shelf-life items, they are required to be prepared by the managing wholesale ICP or other responsible organization for Type II shelf-life items only. They

are used at the wholesale and retail level to determine if Type II shelf-life items have retained sufficient quantities of their original characteristics and are of a quality level which warrants extension of the assigned time period; and the length of the time period extensions.

o. Storage Quality Level (SQL). The SQL of any given quantity of supplies is the maximum percent of deviation from an established quality level.

p. Type I Shelf-Life Item. An individual item of supply which is determined through an evaluation of technical test data and/or actual experience to be an item with a definite nonextendible period of shelf-life.

q. Type II Shelf-Life Items. An individual item of supply having an assigned shelf-life time period that may be extended after completion of inspection, test, or restorative action.

CHAPTER 2

STORAGE STANDARDS PROCEDURES

2-1. GENERAL. Storage standards provide instructions for the inspection, testing, and restoration of items in storage. These instructions encompass storage, packaging, marking, and inspection or testing requirements. The purpose of using the storage standards is to determine the materiel's serviceability or the degree of degradation that has occurred to that materiel and to prescribe maintenance and packaging required for restoration.

2-2. PURPOSE. This chapter prescribes the procedures and contents to be used by the ICPs in the development, maintenance, and publication of their respective storage standards appendices. It also provides the SAs with the inspection or test criteria needed to properly receive (Service/Agency option), store, ship, maintain, or return stocks to a ready-for-issue status.

2-3. PROCEDURES. General procedures for the Military Services, ICP's and SA's follow:

Military Service Procedures:

a. The Military Service activity responsible for item development will identify the shelf-life type of classification, i.e., Type I (nonextendible) and Type II (extendible) for all items within the Military Service's engineering responsibility. New items will be type classified upon development and will be provided to the managing ICP upon item transition; previously developed items will be type classified upon request from the managing ICP in accordance with Joint Regulation with DLAR 3200.1/AR 715-13/NAVSUPINST 4120.30/AFR 400-40/MCO 4000.18C.

b. The Military Service activity responsible for item development will

develop storage standards for all items within the Military Service's item development responsibility. Storage Standards will be provided to the managing ICP upon item transition.

c. The Military Service Engineering Support Activity will provide assistance in developing storage standards upon request of the managing ICP in accordance with Joint Regulation DLAR 3200.1/AR 715-13/NAVSUPINST 4120.30/AFR 400-40/MCO 4000.18C.

ICP Procedures:

a. The managing ICP will receive storage standards from the Military Services upon assumption of management responsibilities. For items already managed by the ICP that do not have storage standards, the ICP will request the Military Services to provide previously developed storage standards. If there are no previously developed storage standards available, the ICP will develop storage standards obtaining assistance as needed from the Military Services.

b. The managing ICP, identified by the Source of Supply (SOS), will publish and maintain storage standards for all Type II shelf-life items or at it's option for other items requiring periodic inspection or test, e.g., Type I (nonextendible) shelf-life items, critical application, principal, regulated, sensitive, or hazardous items. Type II shelf-life items are identified by a numeric shelf-life code in Segment H of the Defense Logistics Information Systems Total Item Record.

c. Managing ICP's shall prepare storage standards by obtaining information from the:

(1) specification preparing activity (2) technical publications and references (3) cataloging system (4) technical data of the item (5) characteristics of the item (6) manufacturers of the item (7) specifications and drawings (8) technical expertise from within or outside of the ICP (9) quality history of the item i.e. in storage or from contracting (10) any other source deemed appropriate by the ICP.

d. Standards will be prepared and published for National Stock Number (NSNs) in separate manuals as designated in Appendices B through X of this regulation. The format for the standards is contained in Table 2-1. In preparing standards it may be possible to group family items together and prepare a generic standard that may be applied to that family grouping.

e. Supplementation by the managing ICP to Appendices B through X may be necessary to satisfy peculiar characteristics of an item, e.g., special inspection or testing requirements, Medical monographs, or meals ready to eat. Supplementation does not preclude the requirement for a complete storage standard coding structure for each individual NSN.

SA Procedures:

a. The storage standards will be used by the wholesale and retail SA in order to perform their inspections or tests for specific NSNs.

b. The storage standards as specified in this manual shall be used only if the materiel is stored in the proper facility characteristics (Type of Storage) as specified in this standard. If materiel is stored in other than the facility characteristics or type of storage specified in this manual, the inspection frequency will be increased accordingly.

2-4. BENEFITS. The benefits of establishing storage standards include:

a. Precluding unnecessary disposal of extendible shelf-life items at the storage activities. This occurs when criteria for the testing, inspection, or temperature/humidity requirements are generally not available for these items except through storage standards.

b. Precluding adverse mission impact or unnecessary disposal of extendible shelf-life items on the part of requisitioning activities. This may occur by not having storage standards which prescribe the type of storage (e.g., temperature or humidity controls) or the specifications required for testing, which may result in this materiel being erroneously issued to requisitioners.

c. Providing consistency among the Services/Agencies on how items should be tested or inspected.

d. Providing immediate access, update, addition, and deletion of storage standard criteria.

e. Ensuring that for items that are logistically transferred to other Service or Agency managers, the gaining item manager has visibility with regard to whether the transferred materiel requires inspection, testing, controlled environment or other requirements.

2-5. STORAGE STANDARDS CONTENTS. The storage standards shall be contained in Appendices B through X of this manual. Storage standard content will be in the format of Table 2-1. The standard for an NSN will constitute one line in each ICP's appendix.

a. National Stock Number (NSN). The 13 digit NSN consisting of the 4 digit Federal Supply Classification Code and the 9 digit National Item Identification Number (NIIN). The NIIN consists of a 2 digit National Codification Bureau Code designating the cataloging office of the NATO or other friendly country which assigned the number, and a 7 digit (XXX-XXXX)

nonsignificant number. The NSNs shall be listed in consecutive numerical sequence.

b. Approved Item Name. The first 26 positions of the item name. The basic name shall be separated from modifiers by a comma. A space shall separate the words in a basic noun phrase. Hyphens shall be reflected by the use of a dash. The approved item name will be shown in upper case letters.

c. Source of Supply (SOS). A 3 digit alphanumeric routing identifier code which identifies the ICP responsible for the preparation, maintenance, and update of the specific storage standard. SOS Codes for the Services and Agencies follow:

CODE	ARMY SOURCE OF SUPPLY
AKZ	U.S. Army Tank Automotive Command, Warren, MI 48090
B14	U.S. Army Armament, Munition and Chemical Command, Rock Island, IL 61299
B16	U.S. Army Communications and Electronics Command Fort Monmouth, NJ 07703
B17	U.S. Army Aviation Troop Command 4300 Goodfellow Blvd. St . Louis, MO 63120
A12	U.S. Army Troop Support Command 4300 Goodfellow Blvd. St. Louis, MO 63120
B46	US Army Electronic Materiel Readiness Activity Warrenton, VA
B56	US Army Communications Security Logistics Agency Ft. Huachuca, AZ 55613
B64	U.S. Army Missile Command Redstone Arsenal, AL 35809

CODE AIR FORCE SOURCE OF SUPPLY

FFZ Sacramento Air Logistics Center
McClellan AFB, CA 95652

FG5 Ogden Air Logistics Center
FGZ Hill AFB, UT 84056

FHZ Oklahoma City Air Logistics Center
Tinker AFB, OK 73145

FLZ Warner-Robins Air Logistics Center
Robins AFB, GA 31093

F01
F2U
F27

FMS Air Force Logistics Command International Logistics Center/MI
Wright Patterson AFB, OH 45433

FM1 Air Force Logistics Command International Logistics
Center/MI-FX Wright Patterson AFB, OH 45433

FM2 USAF Cryptologic Depot
Kelly AFB, TX 78243

FPD Air Force Cryptologic Support Center (ESC) San Antonio, TX
78243

FPH San Antonio Air Logistics Center
FPK 101ly AFB, TX 78241
FPV
FPZ

CODE GSA SOURCE OF SUPPLY

GSA General Services Administration FSS
Do not use for MILSTRIP mail/TWX
Washington, DC 20406

CODE MARINE CORPS SOURCE OF SUPPLY

MAU Commanding General
MPB Marine Corps Logistics Base Albany, GA 31704-5000

CODE NAVY SOURCE OF SUPPLY

N21 Naval Air Systems Command, Washington, DC 28368
N22 Naval Supply Systems Command, Washington, DC 20376
N23 Naval Sea Systems Command, Washington, DC 20362
N24
N32 Aviation Supply Office, Philadelphia, PA 19111
N35 Navy Ships Parts Control Center, Mechanicsburg, PA 17055
N43 Navy Food Service Systems Office, Washington Navy Yard,
Washington, DC 20374
N77 Naval Electronic Systems Command, Washington, DC 28368

CODE	DLA SOURCE OF SUPPLY
S9C	Defense Construction Supply Center Columbus, OH 43215
S9E	Defense Electronics Supply Center 1507 Wilmington Pike Dayton, OH 45444
S9G	Defense General Supply Center Richmond, VA 23297
S9I	Defense Industrial Supply Center 700 Robbins Avenue Philadelphia, PA 19111
S9M	Defense Personnel Support Center Directorate of Medical Materiel 2800 South 20th Street Philadelphia, PA 19101-8419
S9S	Defense Personnel Support Center Directorate of Subsistence 2800 South 20th Street Philadelphia, PA 19101-8419
S9T	Defense Personnel Support Center Directorate of Clothing and Textiles 2800 South 20th Street Philadelphia, PA 19101-8419

CODE	COAST GUARD SOURCE OF SUPPLY
ZIC	US Coast Supply Center, Curtis Bay, Baltimore, MD 21226-1792
ZNC	US Coast Guard Supply Center, Brooklyn, NY 11232-1596
ZQC	US Coast Guard Aircraft Repair & Supply Center

d. Quality Defect Code. (Inspection code for DLA). A two or four digit code used to alert inspection personnel to potential defects that require special attention and to establish the elements to be inspected. Use of these defect codes does not preclude inspection personnel from performing other normal inspection, test or surveillance practices. There is a limit of 15 defect codes which may be indicated. The codes listed below are comprised of three parts. DLA storage standards may utilize the last two digits of the quality defect code:

(1) Severity of Defect Code (First Digit):

a. Critical Defect. A critical defect, which is identified by a 0, is a defect that judgement and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending upon the product; or a defect that judgement and experience indicate is likely to prevent performance of the tactical function of a major end item such as an aircraft, communication system, land vehicle, tank, missile, ship or space vehicle, surveillance system or major part thereof. A critical defective is a unit of product that contains one or more critical defects and may also contain major and or minor defects.

b. Major Defect. A major defect, which is identified by a 1, is a defect that is other than critical and is likely to result in failure or to reduce materially the usability of the unit of product for its intended purpose. A major defective is a unit of product that contains one or more major defects and may also contain minor defects, but contains no critical defects.

c. Minor Defect. A minor defect which is identified by a 2, is a defect that is not likely to reduce materially the usability of the unit of product for its intended purposes, or is a departure from established standards having little bearing on the effective use or operation of the unit. A minor defective is a unit of product that contains one or more minor defects but contains no critical or major defects.

(2) General Groups of Defects (Second Digit). The second digit of the defect code is numeric and identifies the general groups of defects (category of defects). The general groups of defects include:

GENERAL GROUPS OF DEFECTS (Second Digit)

Quality defect code	Explanation
0	Cleaning, preservation, painting, plating, or other processing.
1	Packaging.
2	Packing and loading.
3	Marking and labeling.
4	Materiel deficiencies.
5	Materiel deficiencies (continued).
6	Functional certification or performance test.
7	Document recording, or routing deficiencies.
8	Storage deficiencies.
9	Miscellaneous.

(3) Specific Defects. (Third and fourth digits). Specific defects are denoted by the third and fourth digits and are used in conjunction with the general groups of defect codes (second digit). For DLA, only the last two digits are used. These combined codes include the following:

NOTE: Example of a defect code is 21H8 where:

- 2 - A minor defect (First)
- 1 - In packaging (Second)
- H8 - Thread protectors missing (Third and Fourth)

GENERAL GROUPS AND DEFECTS (SECOND, THIRD, AND FOURTH DIGITS)
 GROUP "0" (CLEANING, PRESERVATION, PAINTING, PLATING OR OTHER PROCESSING)

Quality defect code (digits 2, 3, and 4)	Explanation
000	Appearance (paint runs, overspray, not uniform, not up to standard).
010	Cleaning improper or inadequate.
0K3	Spots, Stains, Dirt.
020	Preservation improper or inadequate.
030	Wrapping improper or inadequate.
040	Protection afforded not compatible with mode of shipment, type of storage, destination, or other environment.
050	Inadequate coverage or improper thickness.
0M8	Plating Missing or Poorly Applied.
0Q3	Coating Missing.
060	Improper and inadequate preparation.
070	Wrong type, method, and color.
080	Drying improper or inadequate.
0Q2	Tackiness (Excessive).

GROUP 1 (PACKAGING)

Quality defect code (digits 2, 3, and 4)	Explanation
100	No packaging applied.
1M2	Preservation and Packaging for Protection Mandatory.
110	Sealing defective (bags or containers)
1B8	Product Intermingling. Grease transfer.
1J4	Defective Cover to Tube Seal (hose).
1J8	Heat Seal Failure.
1J9	Closure Failure. Staples, stitching, glue, or tape failure to make proper closure.
1M5	Sterile Package Broken.
1J5	Seals Broken (security/safety).
1M3	Seals or Caps Required. (For cable under pressure, thread protection, dust protection).
120	Failed pressure retention, leak, or other test.
1L1	Vacuum Loss.
1G5	Detinning or Flaking of Enamel of Can Lining.
1H1	Dent, Lined, or Internal Coated Container (any dent in surface which would affect internal lining or coating is a major dent).

1H2	Dent, Metal Container. Liquid (dent on chine or seam is a major defect).
130	Container damaged or deteriorated.
140	Protection not compatible with mode of shipment, type of shipment, destination, or other environment.
1A1	Electrostatic/Electromagnetic Packaging Protection.
1H8	Threads (protectors missing).
150	Not assigned.
160	Containers or other packaging materiels do not meet specifications (size, type, class, style, etc.)

GROUP 2 (PACKING AND LOADING)

Quality defect code (digits 2, 3, and 4)	Explanation
200	Improper loading, blocking, bracing, tie-down, etc.
2W3	Blocking and/or bracing inadequate.
2T4	Bottle not Suspended in Center of Chamber.
210	Stapling, nailing, strapping, and/or banding improper or inadequate.
220	Excessive weight or cube for containers.
230	Containers, boxes, crates, or pallets damaged or deteriorated.
240	Exterior container protection not compatible with mode of shipment, type of storage, destination, or other environment
2W1	Reinforcement failure. Metal straps, wire, tape.
2W2	Skids, runners, or materiels handling aids damaged inadequate, or deterioriated.
250	Not assigned.
260	Containers, boxes, crates, or pallets do not meet specifications.
270	Wrong quantity per intermediate or exterior container. (Chargeable as one defect per container. Major if shortage, minor if overage).

GROUP 3 (MARKING AND LABELING)

Quality defect code (digits 2, 3, and 4)	Explanation
300	Packaging and packing (P/P) level markings omitted, illegible or incorrect.
310	Labels omitted, illegible, or incorrect.
320	Special markings omitted, illegible, or incorrect.
32A	LOGMARS markings omitted, illegible, or incorrect.
3M1	Technical Data/Color Code. Marking missing; incomplete or illegible. (See identification marking code as indicated).
330	Description or identification marking omitted, illegible or incorrect (National Stock Number, quantity, unit of issue, contract data, condition code, etc.)

33A Unauthorized or suspected counterfeit marking on item or container.
 340 Address marking omitted, illegible, or incorrect.
 350 Marking improperly located or wrong method of marking used.

GROUP 4 (MATERIEL DEFICIENCIES)

Quality defect code (digits 2, 3, and 4)

Explanation

400 Parts, components, and/or controls (loose, improperly installed or assembled, out of adjustment, fit, or failed function properly.
 4C8 Moving Parts do not Move Freely or as Required.
 4M4 Data Plate Missing
 4M9 Defective Seals, Gaskets, "O" rings.
 410 Damaged or defective item or parts (bent, broken, scratched, chipped, marred, cracked, warped, torn, stripped, crimped, burned, twisted, burn out, perforated, pitted).
 4C3 Cuts/Abrasions/Scratches/Fraying/Deformed/Warping. Excessive wear, dents or bends.
 4C5 Kinked, Tangled, Twisted or Otherwise Deformed (as applied wire, rope, string, thread, tape).
 4C6 Burrs, Splinters.

4G3 Peeling/Flaking/Chipping. Loss of exterior coatings due to failure to properly adhere.
 4G4 Etching/Crazing/Checking. Presence of a network of fine lines (other than design) or flaws, disrupting the continuity of an exposed surface. This usually applies to materiel such as rubber, plastic, and glass.
 4H3 Damaged Parts.
 4H4 Breakage. Glass or Ceramic.
 4H6 Insulation (cracked, broken or crazed, missing or damaged).
 4H7 Threads Damaged.
 4H8 Threads, Protectors Missing
 4H9 Gauge(s) Pressure, panel or dial, discolored, incomplete or illegible.
 4K2 Water Damage.
 4P1 Cloth Deterioration (Thin or Bare Spots).
 4P2 Rips, Holes, Tears (Fabrics).
 4Q1 Coated Cloth Blistered.
 4Q4 Wrinkles (Embedded).
 4Q5 Cracks or Cracking (leather).
 4S1 Stiffness/Dryness (Leather).

4U1 Wormholes (Wood).
 4U2 Checks/Splits (Wood).
 420 Does not meet specified tolerances or requirements (Dimensional, finish, strength, torque, output, volume, color, stretch, size,

illumination, weight).

42A Wrong Material Content (e.g., plastic in lieu of metal or wood).

4A1 Brittleness. Easily broken, snapped or torn.

4A2 Friability. Easily pulverized.

4A3 Crumbling/cracking. Broken into small pieces or the development of a fissured surface condition (food, drugs, and chemicals).

4A4 Hardening. To be firm, indurated, inflexible, or not easily penetrated, as opposed to soft. An increase in the durometer reading above the allowable scale.

4A5 Caking. Congealed or compacted into a solid cake or mass, or the inability to reconstitute suspension. Drugs or chemicals reported will be restricted to those instances where the contents cannot readily removed from the container with the aid of a spatula, the material cannot be readily pulverized, or where there is deviation from the normal stability or suspendibility of the material.

4A6 Coagulation/Solidification. To become solid, viscous, jellylike, or the change of a liquid to a thickened curdlike state.

4A7 Loss of crispness, e.g., crackers.

4C4 Worn or Used. (Must be new).

4C7 Connecting or Mating Surfaces. Must be free of flaws. Critical or close tolerance items.

4L2 Charge. Loss 10 percent or more.

4L3 Charge. Loss 10 ounces or more.

4T6 Holes, Mounting, blocked, out of alignment, off size, not drilled, incorrect quantity.

430 Parts or components missing.

4C9 Missing Components.

4J6 Locking (pin/device) Damaged or Missing.

4J7 Suspension Link Missing.

440 Wrong part or component (found installed on end item or other assembly, or used to make up set or kit).

450 Leak (liquid), gasoline, diesel, oil, water, etc.

4D3 Evaporation/Leakage. The loss of fluid or critical oil.

4D9 Leakers. Due to pinholes, improper closure.

460 Leak (vapor), air or gas (nitrogen, oxygen, hydrogen, etc.).

470 Modification work order incomplete, improperly applied.

480 Soldering, welding, brazing, metallizing, or bonding defect.

4J2 Soldering. Insufficient or excessive solder. Poor connection.

4J3 Defective Metal to Glass Seal.

4J1 Welding. Incomplete. Improperly cleaned. Poor fusion.

4L5 Adhesion (loss of).

490 Not Assigned.

GROUP 5 (MATERIEL DEFICIENCIES)

Quality defect code (digits 2, 3, and 4)	Explanation
500	Contamination (contains dirt, sludge, moisture, or other foreign matter).
5B3	Mildew/Mold/Dry Rot. Any discoloration, growth or decay caused by fungi.
5E3	Contamination, Appearance of matter which is foreign to or deleterious to a product or substance in which it is contained.
5E5	Foreign Objects. Such as loose material, dirt chips, insulation (excess) wax, lacquer.
5T3	Blocked Orifice.
510	Excessive moisture, fungus, mildew, rot, infestation, weather cracks.
5B1	Bacterial Reaction. Evidence of fermentation/yeast bacteria which have survived the canning process or have gained access to the container through damage or manufacturing imperfections (Includes flippers, springers and swellers.)
5B5	Decay/Rot
5D4	Moisture Entrapment. Critical on electronic tubes.
5E5	Contamination. Appearance of matter which is foreign to or deleterious to the product or substance in which it is contained.
5K1	Insect or Rodent Infestation.
520	Item improperly classified.
530	Test/research required to determine true condition classification (assign C Condition Code J or Condition Code K, as applicable).
540	Materiel marking missing or incorrect (serial number, data plate, piece mark, cure date, etc.).
5M6	Inspection Tag Missing.
5M7	Special Instructions/Warning Plate Missing, Incomplete, or Illegible.
550	Shelf-Life date exceeded.
560	Wrong item received or selected for shipment.
570	Lubrication (improper, incomplete).
5L4	Lubrication Insufficient.
580	Improper identification.

590	Other.
5B2	Chemical Change. Changes due to oxidation/rancidity or acid reaction/hydrogen swells.
5B4	Odor Change. Change in the normal odor of the chemical. The term odorless as applied to drugs other than tablets, refers to examination, after exposure to the air for 15 minutes, of a free freshly opened package whose net contents are not more than 25 grams. For larger packages, a portion of about 25 grams of the is to be quickly removed from its package to an open evaporating dish of about 100 milliliter capacity for 15 minutes before checking for odor.
5B6	Flavor Change. Flavor not normal for product.
5B7	Physical Change. Interferes with dehydration or solubility. Product texture soft, mushy.
5D1	Liquefaction. Passing from dry, solid or semi-solid to a liquid state.
5D2	Sublimation/Freezer Burn/Dehydration. Passing from the solid to the gaseous state without apparently liquefying which results in loss of contents of the material.
5D5	Separation, Liquid. Solution separates into layers.
5D6	Decomposition. Evidenced by strong odor or evolution of gas.
5E1	Particulation/precipitation/Flocculation/Sedimentation/Crystallization. The appearance of undissolved material in solutions.
5E2	Turbidity. Cloudiness or haziness of solutions as opposed to clearness (clarity).
5E4	Discoloration. Change to a color that is not normal for the material.
5F1	Freezing Damage. Evidence of freezing, chilled (perishable) and canned (nonperishable) products (presence of ice crystals).
5F2	Defrosting. Evidence of defrosting and refreezing.
5G1	Fusion. Melting or joining of material.
5G2	Separation. (Solids).
5H5	Telescoping (of roller material).
5H6	Functional certification or performance test.

GROUP 6 (FUNCTIONAL, CERTIFICATION, OR PERFORMANCE TEST)

Quality
defect code Explanation
(digits 2, 3,
and 4)

600	Required test not accomplished.
6T2	Operational Test not Performed.
610	Failed test requirements (hydraulic).
620	Failed test requirements (electrical or electronic).
6T1	Continuity Failure (electrical).
6T5	Continuity Broken (Single Piece).
630	Failed test requirements (environmental).

640 Failed test requirements (mechanical).
 650 Failed test requirements (pressure).
 660 Failed certification or laboratory test.
 670 Excessive heat, and/or noise during operational test.
 680 Parts or components damaged (due to functional failure) during end item or component test.

GROUP 7 (DOCUMENT, RECORDING, OR ROUTING DEFICIENCIES)

Quality
 defect code
 (digits 2, 3,
 and 4)

Quality defect code (digits 2, 3, and 4)	Explanation
700	Wrong count (shortage). (Chargeable as one major defect per line item if value of quantity short is \$200 or more; minor defect if less than \$200).
710	Wrong count (overage). (Chargeable as one major defect per line item if value of quantity over is \$200 or more; minor defect if less than \$200).
720	Improper routing or process planning. (Chargeable as one minor defect per line item.)
730	Mixed materiel (two or more NSNs recorded under the same NSN). (Chargeable as one minor defect per line item.)
740	Historical records (including The Army Maintenance Management System (TAMMS)) missing, incorrect, or incomplete.
750	Contract, specifications, receiving reports, or other required documents incorrect, incomplete, not available, or changes not with contract. (Chargeable as one minor defect per line item.)
760	Contract specifications or other required documents inadequate for inspection or acceptance purposes. (Chargeable as one minor defect per line item.)
770	Materiel not segregated (serviceable and unserviceable items intermingled). (Chargeable as one major defect per line item.)
780	Stock selection deficiency (First-In/First-Out (FIFO)). (Chargeable as one minor defect per line item.)

GROUP 8 (STORAGE DEFICIENCIES)

Quality

defect code (digits 2, 3, and 4)	Explanation
800	Improper or inadequate stacking or storing. (Chargeable as one minor defect per line item.)
810	Facility deficiencies: roof leaking, grid markings incorrect, equipment deficiencies, etc. (Chargeable as one minor defect per line item.)
820	Improper pallet count or quantities in location, inventory defect (Chargeable as one minor defect per line item.)
830	Improper marking or placarding or stock bins. (Chargeable as one minor defect per line item.)
840	Material mislocated. (Chargeable as one major defect per line item.)
850	Handling deficiencies (storage). (Chargeable as one minor defect per line item.)
860	Improper storage space (chargeable as one major defect line item.)

GROUP 9 (MISCELLANEOUS)

Quality defect code (digits 2, 3, and 4)	Explanation
900	Stage I corrosion. Discoloration, staining. No direct visual evidence of pitting, etching, or other surface damage. (Severity code for these must be determined on an item-by-item basis).
9C1	Corrosion/Rust/Oxidation/Verdigris. Eroding or chemical deterioration of metals. Includes galvanic corrosion (dissimila metals).
910	Stage II corrosion. Loose rust, black or white corrosion accompanied by minor etching and pitting of surface. No scale or tight rust.
920	Stage III corrosion. Rust, black or white corrosion accompanied by singly or in combination with etching, pitting, or more extensive surface damage. Loose or granular condition.
9C2	Pitting/Porosity. Containing surface depression, hollows, or pores (as opposed to smooth).
930	Stage IV corrosion. Rust, black or white corrosion progressed to the point where fit, wear, function or life of the item has been affected. Powdered or scaly condition, with pits or irregular areas of material removed from surface of the item.
9R1	Metal Scales.
940	Not assigned.
94A	Stage I deterioration of polymeric plastics such as celluloid, brakelite lucites, vinyl, rubbers, etc.; fungus damage color change or distortion.
94B	Stage II deterioration of polymeric plastics such as celluloid, brakelite, lucites, vinyl, rubbers, etc.; sticky surface craze

cracks, dissolved paint, or small cracks.

- 94C Stage III deterioration of polymeric plastics such as celluloid, bakelite, lucites, vinyl, rubbers, etc.; liquified material, large cracks, crumbled (brittle) or fractured (broken) to the extent where fit, function, or life has been affected.
- 950 Not Assigned.
- 95A Stage I deterioration of polymeric non-plastics such as cloth, leather, hair, fur, felt, paper, cork cardboard, wood, etc.; mold, fungus damage or color change.
- 95B Stage II deterioration of polymeric non-plastics such as cloth, leather, hair, fur, felt, paper, cork cardboard, wood, etc.; shredding, warping, shrinkage, distortion, embrittlement, small separations or slight swelling.
- 95C Stage III deterioration of polymeric non-plastics such as cloth, leather, hair, fur, felt, paper, cork cardboard, wood, etc.; gross swelling, soggy, large cracks, rot, insect infestation, brittle disintegration or complete separations to the extent where fit, function, or life has been affected.
- 96A Stage I deterioration of inorganic vitreous items such as glass, ceramic, solid carbon, etc.; small cracks or crazed surface.
- 96B Stage II deterioration of inorganic vitreous items such as glass, ceramic, solid carbon, etc.; spalling (chipped) or fractured to the extent where fit, function, or life has been affected.

e. Inspection Level. The inspection level is three digit code selected from MIL-STD-105, that determines the relationship between the lot or batch size and the sample size. The inspection level to be used for any peculiar requirements will be prescribed by the responsible authority. Three inspection levels: I, II, and III, are given for general use. Unless otherwise specified, inspection level II will be used. However, Inspection Level I may be specified when less discrimination is needed, or Level III may be specified for greater discrimination. Four additional special levels: S-1, S-2, S-3, and S-4, are given in the same table and may be used where relatively small sample sizes are necessary and large sampling risks can or must be tolerated. In the designation of inspection levels S-1 to S-4, care must be exercised to avoid Storage Quality Levels (SQLs) inconsistent with these inspection levels.

f. Storage Quality Level (SQL). The maximum percent defective (or maximum number of defects per hundred units) that, for purpose of sampling inspection can be considered satisfactory as a process average. For a more detailed description of the SQL and its use, refer to MIL-STD-105. Separate SQLs of up to 4 digits will be provided for major and minor defects.

(1) An SQL major is the SQL to be used in determining if a lot is serviceable based on the number of items with major defects identified

by the severity of defect code 1, i.e., the first position of the defect code.

(2) An SQL minor is the SQL to be used in determining if a lot is serviceable based on the number of items with minor defects identified by the severity of defect code 2, i.e., the first position of the defect code.

(3) If a major SQL and minor SQL differentiation is not made by individual Service/Agency, the minor SQL shall be used.

g. Shelf-Life Months. The total period of time in months (2 digits) beginning with the date of manufacture, cure, assembly, or pack and terminated by the date by which an item must be used (expiration date) or subjected to inspection, test, restoration, or disposal action.

h. Shelf-Life Type Code. A one digit code to identify shelf-life type. This code may be left blank for DLA managed items.

Code 1. Type I Shelf-Life Item. An item of supply which is determined through an evaluation of technical test data and/or actual experience to be an item with a definite nonextendible period of shelf-life.

Code 2. Type II Shelf-Life Item. An item of supply having an assigned shelf-life time period that may be extended after completion of inspection, test, or restoration action.

The following shelf-life months and corresponding codes apply:

Shelf-Life Period	Type I	Type II
Nondeteriorative	O	O
1 Month	A	N/A
2 Months	B	N/A
3 Months	C	1
4 Months	D	N/A
5 Months	E	N/A
6 Months	F	2

9 Months	G	3
12 Months	H	4
15 Months	J	N/A
18 Months	K	5
21 Months	L	N/A
24 Months	M	6
27 Months	N	N/A
30 Months	P	N/A
36 Months	Q	7
48 Months	R	8
60 Months	S	9
72 Months	I	—
84 Months	T	—
96 Months	U	—
108 Months	V	—
120 Months	W	—
144 Months	Y	—
240 Months	Z	—
Medical items, personnel parachutes, and IRPOD items with a shelf-life period of greater than 60 months.		X

i. First Inspection Month. A two digit number used to identify the time in months when the first inspection is due as governed by item criticality and storage environment. It will be computed from the date of manufacture, date of cure, date of assembly, or date of pack (apply one as appropriate). If the date of manufacture, date of cure, date of assembly, or date of pack is not known, the first inspection will be performed immediately.

j. Reinspection Month. A two digit number used to identify the time in months when an item is scheduled for reinspection if still in storage as governed by item criticality and storage environment. It will be computed from the date of last inspection.

k. Reinspection Limit. A single digit to depict the number of reinspections permitted as governed by item criticality and storage environment, e.g., the number "1" indicates one reinspection, "0" indicates no reinspections, and a dash "-" indicates unlimited reinspections.

l. Type of Storage Code. A one or two digit alpha/numeric code which identifies the minimum level of storage environment required for the level of protection and inspection frequency. The storage code will be used to set the inspection frequency. An NSN can have up to three different storage codes based on the level of protection (i.e., level A, B, and C) used. The level of protection will be a single level when the unit container is also the shipping container; or it will be two levels when there are multiple unit containers packed in a shipping container. When the latter situation occurs, use the first letter when the item is stored in the unit container only (e.g. binnable items) and the second letter when the item is stored in both the unit and shipping containers. If an NSN is stored in any environment other than described herein, the inspection frequency will be adjusted accordingly.

The following storage codes apply:

CODE	TYPE OF STORAGE
A	Heated, General Purpose
B	Unheated, General Purpose
C	Controlled Humidity
E	Chill
F	Freeze
G	Shed
H	Hazardous
Q	Open Space, Improved
R	Open Space, Unimproved
S	Security
T	Temperature Controlled
V	Vault

The following codes may be used until the above codes become standardized in DoD:

CODE	TYPE OF FACILITY	code	FACILITY CHARACTERISTICS
A	Warehouse, Heated, Ground Level	1	General Purpose
B	Warehouse, Heated, Dock Level	2	Controlled Humidity
C	Warehouse, Unheated, Ground Level	3	Hazardous
D	Warehouse, Unheated, Dock Level	4	Security
E	Shed	5	Chill
F	Magazine, Igloo	6	Freeze
G	Magazine, Above Ground	7	Heavy Duty
H	Open, Improved	8	Acid
I	Open, Unimproved	9	Compressed Gas
J	Other		

EXAMPLES: A1 = Warehouse, heated ground level, general purpose.
 D3 = Warehouse, Unheated, dock level, hazardous.

NOTE: Standards will provide a mandatory/preferred storage code. Alternate storage codes/conditions may be provided because of the nonavailability of preferred storage space. Storage activities should make every effort to use the preferred storage condition designated by the ICP.

m. Hazardous Characteristic Code (HCC). A two digit (alpha/numeric) code that is used to provide a means of categorizing hazardous materials (HM). HCCs are assigned by trained scientific or engineering personnel, thereby uniformly identifying HM that is managed by all Government activities. HCCs assist personnel with limited chemical backgrounds to properly receive, handle, store and process HM. In addition, HCCs can be used to provide remedial action, spill response, and cleanup information; to provide data for packaging recoupment operations; and to assist in the identification of potential hazardous wastes. The HCC serves as an identifier for the different hazard characteristics to which personnel may be exposed; as a means of automating the processing of HM transactions; and as a tool for HM storage space management. The following codes are assigned:

Code	Hazard Group	Abbreviated Definition
A1	Radioactive, Licensable	RAM LICENSABLE

A2	Radioactive, Licensable, Low Risk	RAM LICENSABLE LOW RISK
A3	Radioactive, License Exempt	RADIOACTIVE EXEMPT
A4	Radioactive, License Exempt, Authorized	RADIOACTIVE EXEMPT AUTH
C1	Corrosive, DOT, Acid	CORROSIVE DOT ACID
C2	Corrosive, DOT, Alkali	CORROSIVE DOT ALKALI
C3	Acid, Low Risk	ACID LOW RISK
C4	Alkali, Low Risk	ALKALI LOW RISK
D1	Oxidizer	OXIDIZER
D2	Oxidizer, Low Risk	OXIDIZER LOW RISK
D3	Oxidizer and Poison	OXIDIZER POISON
D4	Oxidizer and Corrosive	OXIDIZER CORR
E1	Explosive, Military	EXPLOSIVE MILITARY
E2	Explosive, Low Risk	EXPLOSIVE LOW RISK
F1	Flammable, Aerosol	FLAM AEROSOL
F2	Flammable, IMDG 3.1	FLAM IMDG 3.1
F3	Flammable, IMDG 3.2	FLAM IMDG 3.2
F4	Flammable, IMDG 3.3	FLAM IMDG 3.3
F5	Flammable and Poison	FLAM POISON
F6	Flammable and Corrosive	FLAM CORROS
F7	Flammable Solid	FLAM SOLID
F8	Combustible, Liquid	COMBUST LIQUID
G1	Gas, (non Flammable) Poison	GAS POISON
G2	Gas, Flammable, Non Toxic	GAS, FLAM, NON TOX
G3	Gas, Non Flammable, Non Toxic	GAS, NON FLAM, NON TOX
G4	Gas, Non Flammable, Oxidizer	GAS, NON FLAM, OXIDIZ
G5	Gas, Non Flammable, Corrosive	GAS, NON FLAM, CORROS
G6	Gas, (Non Flammable), Poison, Corrosive	GAS, NF, POISON, CORROS
G7	Gas, (Non Flammable), Poison, Oxidizer	GAS, NF, POISON, OXIDIZ
G8	Gas, Flammable, Poison	GAS, POISON, FLAM
G9	Gas, (Non Flammable), Poison, Corrosive Oxidizer	GAS, NONFLAM, P, C, O
J1	Miscellaneous Flammable Liquids	MISC FLAM LIQUID
J2	Miscellaneous Flammable Solids	MISC FLAM SOLID
J3	Miscellaneous Oxidizers	MISC OXIDIZER
J4	Miscellaneous Organic Peroxides	MISC ORG PEROXIDE
J5	Miscellaneous Poisons	MISC POISON
J6	Miscellaneous Corrosive	MISC CORROSIVE
J7	Miscellaneous UN Class 9	UN CLASS 9
J8	Miscellaneous ORM-E	MISC ORM-E
K1	Infectious Substance	INFECTIOUS SUB
K2	Cytotoxic Drugs	CYTOTOXIC DRUG
M1	Magnetized Material	MAGNETIZED MATERIAL
N1	Nonhazardous	NON HAZARDOUS
P1	Peroxide, Organic, Regulated	PEROXIDE ORG US DOT
P2	Peroxide, Organic, Low Risk	PEROXIDE ORG LOW RISK
R1	Reactive Chemical, Flammable	REACTIVE CHEM FLAM
R2	Water Reactive Chemical	WATER REACTIVE CHEM
T1	DOT Poison-Inhalation Hazard	DOT POISON INHALE
T2	UN Poison, Packing Group I	UN POISON GROUP I
T3	UN Poison, Packing Group II	UN POISON GROUP II

T4	Poison, Food Contaminant	POISON FOOD CONTAM
T5	Pesticide Low Risk	PESTICIDE LOW RISK
T6	Health Hazard	HEALTH HAZARD
T7	Carcinogen	CARCINOGEN
W1	Marine Pollutant	MARINE POLLUTE
IX	Multiple Hazards	MULTIPLE HAZARDS

n. Packaging/Preservation Method Code. A two digit alpha/numeric code used to identify the characteristics necessary to determine packaging/preservation methods requirements. The packaging/preservation methods/submethods prescribed by MIL-P-116 shall be used to the maximum extent possible to indicate the requirements for storage. ICP appendices may utilize other Military/Federal specifications, standards, or other Directives, e.g. packaging sheets, however the use of same shall be minimized. The following packaging/preservation method codes apply:

CODE	METHOD/SUBMETHOD
11	I = Preservative coating (with greaseproof wrap as required.)
3Y	IA = Watervaporproof enclosure (with preservative as required.)
3V	IA-5 = Rigid metal container, sealed.
3W	IA-6 = Rigid container (items immersed in preservative, oil type) sealed.
3G	IA-8 = Watervaporproof bag sealed, cushioning inside.
3T	IA-13 = Rigid container other than all metal, sealed.
3Q	IA-14 = Container, bag sealed, container.
3P	IA-15 = Container, bag, sealed.
3H	IA-16 = Floating bag, sealed.

1Y	IB = Strippable compound coating (hot or cold dip).
1Z	IB-1 = Direct application of strippable compound.
1B	IB-2 = Aluminum foil wrap, strippable compound.
2Y	IC = Waterproof or waterproof greaseproof enclosure (with preservative as required).
2E	IC-1 = Greaseproof, waterproof, bag, sealed.
2M	IC-2 = Container, bag, sealed.
2D	IC-3 = Waterproof bag, sealed.
2S	IC-4 = Rigid container other than all metal, sealed.
2A	IC-7 = Blister pack - single or multiple compartment, individually sealed.
2B	IC-9 = Skin pack, greaseproof, waterproof, vacuum formed.
2F	IC-10 = Skin pack, waterproof, vacuum formed.
4Y	II = Watervaporproof enclosure with desiccant (with preservative as required).
4H	IIa = Floating bag, sealed.
4Q	IIb = Container, bag, sealed, container.
4G	IIc = Watervaporproof bag sealed.
4V	IIId = Rigid metal container, sealed.
4P	IIe = Container, bag, sealed.
4T	IIIf = Rigid container, other than all metal, sealed.
10	III = Physical and mechanical protection only.
ZZ	Special Requirements

o. Level of Protection Code. A one-digit code (A, B, or C) which represents the minimum level of packaging protection is recommended for the storage condition described by the storage code. The level of protection contained in each storage standard is required to set the inspection

frequency. The level of protection will be a single level when the unit container is also the shipping container; or it will be two levels when there are multiple unit containers packed in a shipping container. When the latter situation occurs, use the first letter when the item is stored in the unit container only (e.g. binnable items) and the second letter when the item is stored in both the unit and shipping containers. Each level of protection for a NSN could require different codes. If materiel is packaged at levels other than that identified by the code, the inspection frequency will be adjusted accordingly. The levels of protection are defined in AR700-15/ NAVSUPINST 4030.28/AFR 71-6/MCO 4030.33/ DLAR 4145.7.

p. Identification Markings Code. A two digit alpha/numeric code which describes any special identification marking required. They are used primarily for compressed gas cylinders and are prescribed in MIL-STD-101B. The following codes are alphabetically listed below by both name and codes:

(1) Identification marking code alphabetical listing by name:

CODE	EXPLANATION
E1	Acetylene Yellow, Yellow, Yellow, Yellow.
E2	Acrolein Yellow, Brown, Black, Brown.
E3	Aersol Insecticide Buff, Buff, Buff, Buff.
E4	Air (Oil Pumped) Black, Green, Green, Black.
E5	Air (Water Pumped) Black, Green, Black, Black.
D3	Alkyl D-Carborane Yellow, Brown, Brown, Yellow.
D4	Alkyl Pentaborane Yellow, Brown, Brown, Yellow.
E6	Ammonia Brown, Yellow, Orange, Orange.
C4	Army Navy or Military Standard Number.

D5 Argon, Oil Pumped Gray, White, White, Gray.

E7 Argon-Oxygen Gray, Green, White, Gray.

E8 Argon (Water Pumped) Gray, White, Gray, Gray.

C1 Assembly Date, Cure Date, Manufacturer Date, Pack Date, Expiration Date (Type I Shelf-Life Items), Inspection or Test Date (Type II Shelf-Life Items).

A3 Bands Color.

A8 Black Markings.

A7 Blue Markings.

E9 Boron Trichloride Gray, Brown, Gray, Brown.

F1 Boron Trifluoride Gray, Brown, Brown, Brown.

F2 Bromoacetone Brown, Black, Black, Brown.

F3 Bromochloromethane Buff, Gray, Buff, Buff.

F4 Bromochloromethane Red, Gray, Red, Red (Fire Extinguisher).

F5 Bromotrifluoromethane Orange, White, Gray, Orange.

F6 Bromotrifluoromethane Red, White, Gray, Red (Fire Extinguisher)

F7 Butadiene Yellow, White, Buff, Buff.

F8 Carbon Dioxide Gray, Gray, Gray, Gray.

F9 Carbon Dioxide Red, Red, Red, Red (Fire Extinguisher).

G1 Carbon Monoxide Yellow, Brown, Brown, Brown.

B5 Caution Stencil.

C6 Capacity/Technical Requirements
Markings/Size/Thickness/Length/Heat Number/Lot-Batch
Number/Weight/OperatingLimits/Material Code.

G3 Chlorine Brown, Brown, Brown, Brown.

G4 Chlorine Trifluoride Brown, Green, Brown, Brown.

G2 Chloroacetone Black, Brown, Black, Brown.

S3 Chlorofluoromethane, F13 Orange, Orange, Orange, Orange.

S5 Chlorofluoromethane, F22 Orange, Orange, Orange, Orange.

S8 Chlorofluoromethane, F124A Orange, Orange, Orange, Orange.

G5 Chloropeirin Brown, Orange, Orange, Brown.

C8 Class/Noun/Type/Grade/Trade Name/ Commodity Identification.

A3 Color Bands.

A2 Color Dots.

A1 Color Stripe.

D1 Colored Components.

D2 Colored End Item.

C8 Commodity Identification/Noun/Type/Class/Grade/Trade Name.

D1 Components Colored.

C9 Contract or Order Number.

C1 Cure Date, Manufacturer Date, Pack Date, Assembly Date, Expiration Date (Type I Shelf-Life Items), Inspection or Test Date (Type II Shelf-Life Items).

G6 Cyanogen Yellow, Orange, Yellow, Yellow.

C9 Cyclopropane Orange, Chromium Plate.

G8 Cyclopropane Orange, Yellow, Blue, Blue (Medical).

G7 Diborane Yellow, Brown, Brown, Yellow.

H1 Dibromodifluoromethane Buff, White, Buff, Buff.

H2 Dibromodifluoromethane Red, White, Red, Red (Fire Only).

S2 Dichlorofluoromethane, F-12 Orange, Orange, Orange, Orange.

S4 Dichlorofluoromethane, F-21 Orange, Orange, Orange, Orange.

S7 Dichlorofluoromethane, F-114 Orange, Orange, Orange, Orange.

H5 Dichlorotetrafluoroethane Orange, Gray, Yellow, Yellow.

D6 Difluorochloroethane Gray, Yellow, Yellow, Orange.

H6 Difluoroethane Gray, Yellow, Orange, Orange.

D7 Dihydrotetraborane Yellow, Brown, Brown, Yellow.

H7 Dimethylamine Yellow, Blue, White, Buff (Anhydrous).

H8 Dimethylether Yellow, Brown, Buff, Buff.

H9 Dispersant, Dichlorodifluoromethane Buff, Gray, Gray, Buff.

A2 Dots Color.

B7 Electronic Sensitive Device Markings.

D2 End Item Colored.

J1 Ethane Yellow, Blue, Yellow, Yellow.

J4 Ethylamine (Anhydrous) Yellow, Blue, Blue, Buff.

J2 Ethyl Chloride Buff, Blue, Yellow, Buff.

J5 Ethylene (Industrial) Blue, Yellow, Buff, Buff.

J6 Ethylene (Medical) Yellow, Blue, Blue, Blue.

J3 Ethyl Nitrite Yellow, Buff, Buff, Buff.

J7 Ethylene Oxide Yellow, Blue, Buff, Buff.

C1 Expiration Date (Type I Shelf-Life Items), Inspection or Test Date (Type II Shelf-Life Items), Assembly Date, Cure Date, Manufacturer Date, Pack Date.

C5 National Stock Number/Part Number.

S9 Fluorine Brown, Green, Gray, Brown.

J8 Fumigant, Carbon Buff, Blue, Buff, Buff.

C8 Grade/Noun/Type/Class/Trade Name/Commodity Identification.

B1 Handling or Operating Instructions Plate or Stencil.

C6 Heat Number/Technical Requirements

Markings/Size/Thickness/Length/Lot-Batch Number/Weight/
Capacity/Operating Limits/Material Code.

K1 Helium (Oil Free or Medical) Buff, Gray, Gray, Gray.

K2 Helium (Oil Pumped) Gray, Orange, Gray, Gray.

K3 Helium Oxygen Buff, White, Green, Green.

K4 Hydrogen Yellow, Black, Yellow, Yellow.

K5 Hydrogen Bromide Black, Brown, Brown, Brown.

K6 Hydrogen Chloride Brown, White, Brown, Brown (Anhydrous).

K7 Hydrogen Cyanide Yellow, Brown, White, Brown (Anhydrous).

K8 Hydrogen Fluoride Green, Brown, Brown, Brown (Anhydrous).

K9 Hydrogen Sulfide Brown, Yellow, Brown, Brown.

B3 Identification Plate.

B4 Identification Tag.

C1 Inspection or Test Date (Type II Shelf-Life Items),
Expiration Date (Type I Shelf-Life Items), Assembly Date,
Cure Date, Manufacturer Date, Pack Date.

L1 Krypton (Oil Pumped) Gray, Buff, Buff, Gray.

L2 Krypton (Water Pumped) Gray, Buff, Gray, Gray.

B6 Label Underwriters' Laboratories, Inc.

C6 Length/Technical Requirements
Markings/Size/Thickness/Heat Number/Lot-Batch Number/Weight/
Capacity/Operating Limits/Material Code.

B2 Maintenance Instruction Plate.

C1 Manufacture Date, Cure Date, Assembly Date, Pack Date,
Expiration Date (Type I Shelf-Life Items), Inspection or
Test Date (Type II Shelf-Life Items).

L3 Manufactured Gases Brown, Yellow, Yellow, Yellow
(Specify-Coal, Oil,Water, Producer).

C7 Manufacturer's Name or Trademark.

A8 Markings will be Black.

A7 Markings will be Blue.

A5 Markings will be Red.

A6 Markings will be White.

A4 Markings will be Yellow.

C6 Material Code/Technical Requirements
Markings/Size/Thickness/ Length/ Heat Number/Lot-Batch Number/
Weight/Capacity/Operating Limits.

L4 Methane Yellow, White, Yellow, Yellow.

L5 Methylamine Yellow, Brown, Yellow, Buff.

M2 Methylene Chloride Gray, Blue, Orange, Orange.

L6 Methyl Bromide Brown, Black, Brown, Brown.

L7 Methyl Bromide (Fire Extinguisher) Red, Brown, Red, Red.

L8 Methyl Chloride Yellow, Brown, Orange, Orange.

L9 Methyl Mercaptan Brown, Yellow, Yellow, Brown.

M1 Methyl Sulfide Yellow, Brown, Buff, Brown.

C4 Military Standards or Army Navy Number.

M3 Monochlorotetrafluoroethane Refrigerant No. 22 Orange,
Orange, Orange, Orange.

C7 Name of Manufacturer or Trademark.

M6 Natural Gas Yellow, Brown, Yellow, Yellow.

M7 Neon (Oil Pumped) White, Buff, Gray, Gray.

M8 Neon (Water Pumped) White, Buff, Buff, Gray.

M9 Nickel Carbonyl Yellow, White, Yellow, Brown.

N1 Nitric Oxide Brown, Buff, Brown, Brown.

N5 Nitrogen Dioxide Brown, Buff, Buff, Brown.

N2 Nitrogen Gray, Black, Orange, Gray.

N3 Nitrogen (Oil Pumped) Gray, Black, Gray, Gray.

N6 Nitrogen Oxygen Black, White, Green, Green.

N4 Nitrogen (Water Pumped) Gray, Black, Black, Gray.

N7 Nitrosyl Chloride Brown, White, White, Brown.

N8 Nitrous Oxide Blue, Blue, Blue, Blue.

C8 Noun/Type/Class/Grade/Trademark/Commodity Identification.

C6 Operating Limits/Technical Requirements
Markings/Size/Thickness/Length/Heat Number/Lot-Batch Number/
Weight Capacity/ Material Code.

B1 Operating or Handling Instructions Plate or Stencil.

C9 Order or Contract Number.

N9 Oxygen (Aviator's) Green, White, Green, Green.

P4 Oxygen Carbon Dioxide Gray, White, Green, Green.

P1 Oxygen (Electrolytic) Green, White, White, Green.

D8 Oxygen Fluoride Green, Brown, Green, Brown.

P2 Oxygen (Industrial) Green, Green, Green, Green.

P3 Oxygen (Medical) White, Green, Green, Green.

D9 Ozone Brown, Green, Green, Green.

C1 Pack Date, Cure Date, Manufacture Date, Assembly Date,
Expiration Date (Type I Shelf-Life Items), Inspection or
Test Date (Type II Shelf-Life Items).

C5 Part Number/National Stock Number.

H3 Pentaborne Yellow, Brown, Brown, Yellow.

P5 Petroleum (Liquified) Yellow, Orange, Yellow, Yellow.

P6 Phenylcarbylamine Chloride Brown, Gray, Gray, Brown.

P7 Phosgene Brown, Orange, Brown, Brown.

B1 Plate Operating or Handling Instruction.

B2 Plate Maintenance Instruction.
B3 Plate Identification.

P8 Propylene Yellow, Gray, Buff, Buff.
H4 Propyne Gray, Yellow, Yellow, Yellow.

C6 Size/Technical Requirements
Markings/Thickness/Length/HeatNumber/Lot-Batch Number/Weight/
Capacity/Operating Limits/Material Code.

C3 Specification Number.

B5 Stencil Caution.

A1 Stripe Color.

P9 Sulfur Dioxide, Brown, Gray, Brown, Brown.

Q1 Sulfur Hexofluoride Gray, White, Black, Gray.

C6 Technical Requirements
Markings/Size/Thickness/Length/Heat Number/Lot-Batch Number/
Weight/Capacity/Operating Limits/MaterialCode/American Society
for Testing Materials (ASTM) or American Standards Association
(ASA) Designation.

Q2 Tetrafluoroethylene (Inhibited) Buff, White, White, Buff.

C6 Thickness/Size/Length/Lot-Batch Number/Weight/Capacity/
Operating Limits/Material Code/ASTM or ASA Designation.

C7 Trademark or Manufacturers Name.

C8 Tradename/Noun/Type/Class/Grade Commodity Identification.

S1 Trichlorofluoromethane Orange, Orange, Orange, Orange
(Refrigerant No.11).

S6 Trichlorofluoromethane Orange, Orange, Orange, Orange
(Refrigerant No. 113).

Q5 Trimethylamine Yellow, Blue, Orange, Buff.

C8 Type/Noun/Class/Grade/Tradename.

B6 Underwriters Laboratories, Inc., Label.

C2	U. S. Marking.
Q6	Binyl Bromide Buff, Blue, Blue, Buff.
Q7	Vinyl Chloride Yellow, Orange, Buff, Buff.
Q8	Vinyl Methyl Ether (Inhibited) Yellow, Black, Buff, Buff.
C6	Weight/Size/Thickness/Length/Heat Number/Lot-Batch Number/ Capacity/Operating Limits/Material Code/ASTM or ASA Designation.
A6	White Markings.
Q9	Xeonon (Oil Pumped) White, Black, Black, Gray.

p. Identification Markings Code. A two digit alpha/numeric code which describes any special identification marking required. They are used primarily for compressed gas cylinders and are prescribed in MIL-STD-101B. The following codes are alphabetically listed below by both name and codes:

(2) Identification marking code alphabetical listing by code:

Code Listing

Code	Explanation
A1	Color Stripe.
A2	Color Dots.
A3	Color Bands.
A4	Markings will be yellow.

A5 Markings will be red.

A6 Markings will be white.

A7 Markings will be blue.

A8 Markings will be black.

B1 Operating or Handling Instruction Plate or Stencil.

B2 Maintenance Instruction Plate.

B3 Identification Plate.

B4 Identification Tag.

B5 Caution Stencil.

B6 Underwriters' Laboratories, Inc. Label.

B7 Electronic Sensitive Device Markings.

C1 Manufacture Date, Cure Date, Assembly Date, Expiration Date (Type I Shelf-Life Items), Inspection or Test Date (Type II Shelf-Life Items) and Pack Date.

C2 U. S. Marking.

C3 Specification Number.

C4 Military Standard or Army Navy Number.

C5 Part Number/National Stock Number.

C6 Technical Requirements
Markings/Size/Thickness/Length/Heat Number/Lot-Batch Number/
Weight/Capacity/Operating Limits/Material Code.

C7 Manufacturer's Name or Trademark.

C8 Commodity Identification Noun/Type/Class/Grade/Trade Name.

C9 Contract or Order Number.

D1 Components Colored.

D2 End Item Colored.

D3 ALKYL D-Carborane Yellow, Brown, Brown, Yellow.

D4 ALKYL Pentaborane Yellow, Brown, Brown, Yellow.

D5 Argon, Oil Pumped Gray, White, White, Gray.

D6 Difluorochloroethane Gray, Yellow, Yellow, Orange.

D7 Dihydrotetraborane Yellow, Brown, Brown, Yellow.

D8 Oxygen Fluoride Green, Brown, Green, Brown.

D9 Ozone Brown, Green, Green, Green.

E1 Acetylene Yellow, Yellow, Yellow, Yellow.

E2 Acrolein Yellow, Brown, Black, Brown.

E3 Aerosol Insecticide Buff, Buff, Buff, Buff.

E4 Air (Oil Pumped) Black, Green, Green, Black.

E5 Air (Water Pumped) Black, Green, Black, Black.

E6 Ammonia Brown, Yellow, Orange, Orange.

E7 Argon-Oxygen Gray, Green, White, Gray.

E8 Argon (Water Pumped) Gray, White, Gray, Gray.

E9 Boron Trichloride Gray, Brown, Gray, Brown.

F1 Boron Trifluoride Gray, Brown, Brown, Brown.

F2 Bromoacetone Brown, Black, Black, Brown.

F3 Bromochloromethane Buff, Gray, Buff, Buff.

F4 Bromochloromethane Red, Gray, Red, Red (Fire Extinguisher).

F5 Bromotrifluoromethane Orange, White, Gray, Orange.

F6 Bromotrifluoromethane Red, White, Gray, Red (Fire Extinguisher).

F7 Butadiene Yellow, White, Buff, Buff.

F8 Carbon Dioxide Gray, Gray, Gray, Gray.

F9 Carbon Dioxide Red, Red, Red, Red (Fire Extinguisher).

G1 Carbon Monoxide Yellow, Brown, Brown, Brown.

G2 Chloroacetone Black, Brown, Black, Brown.

G3 Chlorine Brown, Brown, Brown, Brown.

G4 Chlorine Trifluoride Brown, Green, Brown, Brown.

G5 Chloropicrin Brown, Orange, Orange, Brown.

G6 Cyanogen Yellow, Brown, Yellow, Brown.

G7 Diborane Yellow, Brown, Brown, Yellow (Industrial).

G8 Cyclopropane Orange, Yellow, Blue, Blue (Medical).

G9 Cyclopropane Orange, Chromium Plated.

H1 Dibromodifluoromethane Buff, White, Buff, Buff.

H2 Dibromodifluoromethane Red, White, Red, Red (Fire Only).

H3 Pentaborane Yellow, Brown, Brown, Yellow.

H4 Propyne Gray, Yellow, Yellow, Yellow.

H5 Dichlorotetrafluoroethane Orange, Gray, Yellow, Yellow.

H6 Difluoroethane Gray, Yellow, Orange, Orange.

H7 Dimethylamine Yellow, Blue, White, Buff (Anhydrous).

H8 Dimethylether Yellow, Brown, Buff, Buff.

H9 Despersant, Dichlorodifluoromethane Buff, Gray, Gray, Buff.

J1 Ethane Yellow, Blue, Yellow, Yellow.

J2 Ethyl Chloride Buff, Blue, Yellow, Buff.

J3 Ethyl Nitrite Yellow, Buff, Buff, Buff.

J4 Ethylamine (Anhydrous) Yellow, Blue, Blue, Buff.

J5 Ethylene (Industrial) Blue, Yellow, Buff, Buff.

J6 Ethylene (Medical) Yellow, Blue, Blue, Blue.

J7 Ethylene Oxide Yellow, Blue, Buff, Buff.

J8 Fumigant, Carbon Dioxide, Ethylene, Oxide Buff, Blue, Buff, Buff.

K1 Helium (Oil Free or Medical) Buff, Gray, Gray, Gray.

K2 Helium (Oil Pumped) Gray, Orange, Gray, Gray.

K3 Helium Oxygen Buff, White, Green, Green.

K4 Hydrogen Yellow, Black, Yellow, Yellow.

K5 Hydrogen Bromide Black, Brown, Brown, Brown.

K6 Hydrogen Chloride Brown, White, Brown, Brown (Anhydrous).

K7 Hydrogen Cyanide Yellow, Brown, White, Brown (Anhydrous).
K8 Hydrogen Fluoride Green, Brown, Brown, Brown (Anhydrous).
K9 Hydrogen Sulfide Brown, Yellow, Brown, Brown.
L1 Krypton (Oil Pumped) Gray, Buff, Buff, Gray.
L2 Krypton (Water Pumped) Gray, Buff, Gray, Gray.
L3 Manufactured Gases Brown, Yellow, Yellow, Yellow
(Specify-Coal, Oil, Water, Producer).
L4 Methane Yellow, White, Yellow, Yellow.
L5 Methylamine Yellow, Brown, Yellow, Buff.
L6 Methyl Bromide Brown, Black, Brown, Brown.

L7 Methyl Bromide (Fire Extinguisher) Red, Brown, Red, Red.
L8 Methyl Chloride Yellow, Brown, Orange, Orange.
L9 Methyl Mercaptan Brown, Yellow, Yellow, Brown.
M1 Methyl Sulfide Yellow, Brown, Buff, Brown.
M2 Methylene Chloride Gray, Blue, Orange, Orange.
M3 Monochlorotetrafluoroethane Refrigerant No. 22 Orange, Orange,
Orange, Orange.
M6 Natural Gas Yellow, Brown, Yellow, Yellow.
M7 Neon (Oil Pumped) White, Buff, Gray, Gray.
M8 Neon (Water Pumped) White, Buff, Buff, Gray.
M9 Nickel Carbonyl Yellow, White, Yellow, Brown.

N1 Nitric Oxide Brown, Buff, Brown, Brown.
N2 Nitrogen Gray, Black, Orange, Gray.
N3 Nitrogen (Oil Pumped) Gray, Black, Gray, Gray.
N4 Nitrogen (Water Pumped) Gray, Black, Black, Gray.
N5 Nitrogen Dioxide Brown, Buff, Buff, Brown.
N6 Nitrogen Oxygen Black, White, Green, Green.

N7 Nitrosyl Chloride Brown, White, White, Brown.

N8 Nitrous Oxide Blue, Blue, Blue, Blue.

N9 Oxygen (Aviator's) Green, White, Green, Green.

P1 Oxygen (Electrolytic) Green, White, White, Green.

P2 Oxygen (Industrial) Green, Green, Green, Green.

P3 Oxygen (Medical) White, Green, Green, Green.

P4 Oxygen Carbon Dioxide Gray, White, Green, Green.

P5 Petroleum (Liquified) Yellow, Orange, Yellow, Yellow.

P6 Phenylcarbylamine Chloride Brown, Gray, Gray, Brown.

P7 Phosgene Brown, Orange, Brown, Brown.

P8 Propylene Yellow, Gray, Buff, Buff.

P9 Sulfur Dioxide Brown, Gray, Brown, Brown.

Q1 Sulfur Hexafluoride Gray, White, Black, Gray.

Q2 Tetrafluoroethylene (Inhibited) Buff, White, White, Buff.

Q5 Trimethylamine Yellow, Blue, Orange, Buff.

Q6 Vinyl Bromide Buff, Blue, Blue, Buff.

Q7 Vinyl Chloride Yellow, Orange, Buff, Buff.

Q8 Vinyl Mehtyl Ether (Inhibited) Yellow, Black, Buff, Buff.

Q9 Xeonon (Oil Pumped) White, Black, Black, Gray.

R1 Xeonon (Water Pumped) White, Black, Gray, Gray.

S1 Trichlorofluoromethane, F-11 Orange, Orange, Orange, Orange.

S2 Dichlorofluoromenthane, F-12 Orange, Orange, Orange, Orange.

S3 Chlorofluoromethane, F-13 Orange, Orange, Orange, Orange.

S4 Dichlorofluoromethane, F-21 Orange, Orange, Orange, Orange.

S5 Chlorofluoromethane, F-22 Orange, Orange, Orange, Orange.

S6 Trichlorofluoromethane, F-113 Orange, Orange, Orange, Orange.

S7 Dichlorofluoromethane, F-114 Orange, Orange, Orange, Orange.

- S8 Chlorofluoromethane, F-124A Orange, Orange, Orange, Orange.
- S9 Fluorine Brown, Green, Green, Brown.

q. Test Requirements Code (TRC). A maximum three digit code to describe any special testing required as specified in each ICP's storage standard.

r. SPECIAL REQUIREMENTS CODE (SRC). A two digit alpha or numeric codes which indicates special characteristics of an item to be applied during receiving, storage, and shipping operations. There is no limit to the number of SRC codes which may be applied to an item: The following definitions and codes apply:

CODE	DEFINITION	CODE	DEFINITION
A	Radioactive.	V	Inspect before shipment.
B	No-Go Parcel Post.	W	Consumable alcoholic items.
C	Glycerin.	X	Unassigned.
D	Unassigned.	Y	Unassigned.
E	Sensitive Electronics.	Z	No code applicable.
F	Unassigned.	O	Narcotics.
G	Green Label.	1	DOT label not required.
H	Subject to damage from heat over 40 degrees C (104 degrees F).	2	Fragile label.

I	Unassigned.	3	Refrigeration, 2 to 8 degrees C (36 degrees to 46 degrees F). May be out of refrigeration for specified periods of time during shipment.
J	Characteristics require freight movement		
K	55 gallon drums.	4	Refrigerated/flammable.
L	Compressed gas cylinders	5	Constant refrigerated - 2 degrees to 8 degrees C, (36 degrees to 46 degrees F) water ice required during shipment.
M	Precious metals.		shipment.
N	Magnetic.		
O	Unassigned.	6	Freeze - below 0 degrees C (32 degrees F).
P	Unassigned.		
Q	Keep from freezing.	7	Temperature controlled at 50 degrees to 70 degrees F.
R	Unassigned.	8	Unassigned.
S	Security cage.	9	Temperature controlled (50 degrees to 86 degrees F), storage only.
T	Glass.		

s. Additional Requirements Code (ARC). A maximum three digit alpha/numeric code to provide any additional information required by the storage activity as specified in each ICP's storage standards.

t. Technical Publications Reference (TPR). A twenty five digit space which outlines any additional procedures not identified in the storage standard coding structure. This column will identify the appropriate publication which contains these additional procedures, i.e., Technical Order (TO) for Air Force (AF), Army Regulation (AR) or Technical Manual (TM) for Army, DLA Manual (DLAM) or DLA Regulation (DLAR) for DLA, TM for Navy, and Marine Corps Order (MCO) or TM for the Marine Corps, Coast Guard.

u. Primary Segregation Codes (PSC). The PSCs listed below will be used to indicate the requirements for segregation of hazardous materiel in storage. The hazardous storage segregation matrix, Table 2-2, provides a technique to assure that hazardous materiels are afforded correct storage using the PSC.

The primary Segregation Codes are:

- A Radioactive
- C Corrosive
- D Oxidizer
- E Explosive
- F Flammable
- G Gas, Compressed
- L Low, Hazard
- P Peroxide, Organic
- R Reactive
- T Poison

STORAGE STANDARD FORMAT

<p>A NSNs 13 Digit numeric</p>	<p>B APPROVED ITEM NAME 46 Digit alpha</p>	<p>C SOURCE OF SUPPLY 3 digit alpha/numeric</p>	<p>D DEFECT CODES 4 digits per code 1-severity of defect code 2-Category of defect alpha 3-4-Specific defect</p>	<p>E INSPECTION LEVEL 3 digit alpha/numeric ANSI/ASQC Z1.4</p>
<p>F SQL Major Minor Maximum 3 digits alpha/numeric</p>	<p>G SL Months 3 digits numeric</p>	<p>H SL Type 1 digit alpha/numeric</p>	<p>I 1st Inspection Month 3 digit numeric</p>	<p>J Reinspection Month 3 digit numeric</p>
<p>K Reinspection Limit 3 digit numeric</p>	<p>L Type of Storage Code 2 digit alpha/numeric</p>	<p>M Hazardous Characteristic Code (HCC) 2 digit alpha/numeric</p>	<p>N Packaging/Preservation Method Code 2 digit alpha/numeric</p>	
<p>O</p>	<p>P</p>	<p>Q</p>	<p>R</p>	

Level of Protection	Identification Marking Code	Test Requirements Code (TRC)	Special Requirements Code (SRC)
1 digit	2 digit	3 digit	2 digit
alpha	alpha/numeric	alpha/numeric	alpha/numeric

S	T	U
Additional Requirements Code (ARC)	Technical PUB Reference (TPR)	Primary Segregation Code (PSC)
3 digit	25 digit	1 digit
alpha/numeric	alpha/numeric	alpha

TABLE 2-1 STORAGE STANDARD FORMAT

A1	Radioactive, Licensable	*								Security
A2	Radioactive, Licensable (Low Risk)						*			Security
A3	Radioactive, License Exempt						*			None
A4	Radioactive, Exempt Authorized						*			None
C1	Corrosive, Acid (DOT)		*							Acid
C2	Corrosive, Alkali (DOT)		*							Alkaline
C3	Acid, (Low Risk)						*			None
C4	Alkali, (Low Risk)						*			None
D1	Oxidizer			*						None
D2	Oxidizer, (Low Risk)			*						None
D3	Oxidizer and Poison								*	Away From Flammable (F5)
D4	Oxidizer and Corrosive		*							Acid
E1	Explosive (Military)			*						Magazine
E2	Explosives (Low Risk)						*			Security
F1	Flammable Aerosol				*					Flammable Liquid
F2	Flammable (IMDG 3.1)				*					Flammable Liquid
F3	Flammable (IMDG 3.2)				*					Flammable Liquid
F4	Flammable (IMDG 3.3)				*					Flammable Liquid
F5	Flammable and Poison								*	Away from Oxidizers (D3)
F6	Flammable and Corrosive				*					Flammable Liquid, Corrosive
F7	Flammable Solid				*					Flammable Solid
F8	Combustible Liquid						*			None
G1	Gas, Nonflammable (Poison)				*					Poison Gas
G2	Gas, Flammable (Nontoxic)				*					Flammable Gas
G3	Gas, Nonflammable (Nontoxic)				*					Nonflammable Gas
G4	Gas, Nonflammable (Oxidizer)				*					Nonflammable Gas, Oxidizer
G5	Gas, Nonflammable (Corrosive)				*					Nonflammable Gas, Corrosive
G6	Gas, Nonflammable (Poison and Corrosive)				*					Poison Gas Corrosive
G7	Gas, Nonflammable (Poison and Oxidizer)				*					Poison Gas Oxidizer
G8	Gas, Flammable (Poison)				*					Poison Gas Flammable
G9	Gas, Nonflammable (Poison, Corrosive, and Oxidizer)				*					Poison Gas Oxidizer &

+ Secondary segregation applies only to storage within assigned primary areas.

J1	Miscellaneous Flammable Liquids																		None
J2	Miscellaneous Flammable Solids																		None
J3	Miscellaneous Oxidizers																		None
J4	Miscellaneous Organic Peroxides																		None
J5	Miscellaneous Poisons																		None
J6	Miscellaneous Corrosives																		None
J7	Miscellaneous UN Class 9																		None
J8	Miscellaneous ORM-E																		None
K1	Infectious Substance																		Biomedical
K2	Cytotoxic Drugs																		Medical
																			Security
M1	Magnetized Material																		None
N1	Nonhazardous																		None
P1	Peroxide, Organic (Regulated)																		None
P2	Peroxide, Organic (Low Risk)																		None
R1	Reactive Chemical, Flammable																		Spontaneously
																			Combustible

R2	Water Reactive Chemical																		Dangerous
																			when Wet
T1	DOT Poison-Inhalation Hazard																		None
T2	UN Poison, Packing Group I																		None
T3	UN Poison, Packing Group II																		None
T4	Poison, Food Contaminant																		Away from
																			foodstuffs
T5	Pesticide, (Low Risk)																		None
T6	Health Hazard																		None
T7	Carcinogen																		Classify to
																			primary
																			hazard for
																			segregation
W1	Marine Pollutant																		None

+ Secondary segregation applies only to storage within assigned primary areas.
 1 Store in primary area is space permits.

PRIMARY SEGREGATION CODE

- | | | | |
|---|-------------|---|-------------------|
| A | Radioactive | G | Gas, Compressed |
| C | Corrosive | L | Low Hazard |
| D | Oxidizer | P | Peroxide, Organic |
| E | Explosive | R | Reactive |

F F Flammable

T Poison

TABLE 2-2
STORAGE SEGREGATION MATRIX
HCCs to Storage Segregation 2-40

APPENDIX A

STORAGE STANDARD FOCAL POINTS

DoD

DoD Shelf-Life Program Administrator
ATTN: DLA-DLSC-I
8725 John J. Kingman Road
Ft. Belvoir, VA.
DSN: 427-1585
COMM: (703) 767-1585

ARMY

DESCOM Quality Systems and Engineering Center
ATTN: AMSDS-QA-EQ
DSN: 745-4217
COMM: (606) 293-4217

ICPs

U.S. Army Armament, Munitions and Chemical Command
ATTN: AMSMC-MMC-C
DSN: 793-5288
COMM: (309) 782-5288

U.S. Army Aviation Systems Command
ATTN: AMSAV-Q
DSN: 693-1762
COMM: (314) 263-1762

U.S. Army Communications and Electronics Command
ATTN: AMSEL-PA-EE-E
DSN: 992-4452
COMM: (201) 532-4452

U.S. Army Missile Command
ATTN: AMSMI-SNP-C

DSN: 746-8629
COMM: (205) 876-8629

U.S. Army Tank-Automotive Command
ATTN: AMSTA-QKL
DSN: 786-7459
COMM: (313) 574-6444

SAs

U.S. Army Depot System Command
ATTN: AMSDS-QA-S
DSN: 570-9946
COMM: (717) 267-9946

A-1
NAVY

Department of the Navy
Naval Supply Systems Command
Code: 0323
DSN: 225-6820
COMM: (703) 695-6820

ICPs

Navy Aviation Supply Office
ATTN: 0512.33
DSN: 442-2715
COMM: (215) 697-2715

Navy Ships Parts Control Center
ATTN: Code 0541
DSN: 430-3504
COMM: (717) 790-3504

AIR FORCE

Department of the Air Force
Air Force Logistics Command
Code: AFLC-MMILC
DSN: 787-7982
COMM: (513) 257-7982

ICPs

Ogden ALC
ATTN: MMMMR
DSN: 458-7874
COMM: (801) 777-7874

Oklahoma City ALC

ATTN: MMMMB
DSN: 336-3649
COMM: (405) 736-3649

San Antonio ALC
ATTN: MMMMP
DSN: 945-7071
COMM: (512) 925-7071

Sacramento ALC
ATTN: MMMMS
DSN: 633-1640
COMM: (916) 633-1640

Warner Robins ALC
ATTN: MMMMA
DSN: 648-3810
COMM: (912) 926-3810

A-2
SAs

Department of the Air Force
Air Force Logistics Command
ATTN: DFS
DSN: 787-3197
COMM: (513) 257-3197

MARINE CORPS

Headquarters, United States Marine Corps
ATTN: LPP-2
DSN: 226-1051/1061
COMM: (202) 696-1051/1061

ICPs

Marine Corps Logistics Base
ATTN: 850
DSN: 567-6439
COMM: (912) 439-6493

DLA

Headquarters, Defense Logistics Agency

ATTN: DLA-DLSC-I
DSN: 427-3504
COMM: (703) 767-3504

ICPs

Defense Construction Supply Center
Directorate of Quality Assurance
QA Programs and Systems Management Division
ATTN: DCSC-QR
DSN: 850-4290
COMM: (614) 238-4290

Defense Electronics Supply Center
Directorate of Quality Assurance
QA Programs and Systems Management Division
ATTN: DESC-QR
DSN: 986-6000
COMM: (513) 296-6000

Defense General Supply Center
Directorate of Quality Assurance
Quality Programs and Systems Management Division
ATTN: DGSC-QR
DSN: 695-4140
COMM: (804) 275-4140

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Defense Industrial Supply Center
Directorate of Quality Assurance
Product Quality Division
ATTN: DISC-QEC
DSN: 442-6388
COMM: (215) 697-6388

Defense Personnel Support Center
Directorate of Clothing and Textiles
Quality Assurance Division
ATTN: DPSC-FQ
DSN: 444-3229
COMM: (215) 737-3229

Defense Personnel Support Center
Directorate of Medical Materiel
Quality Assurance Division
ATTN: DPSC-RQ
DSN: 444-2187
COMM: (215) 737-2187

Defense Personnel Support Center
Directorate of Subsistence
Quality Assurance Division
ATTN: DPSC-HQ
DSN: 444-2956
COMM: (215) 737-2956

SAs

Headquarters, Defense Logistics Agency
ATTN: DLA-OWP
DSN: 284-7541
COMM: (703) 274-7541

GSA

General Service Administration, Federal Supply Services,
Operations Management Division
ATTN: FCRE
DSN: N/A
COMM: (703) 557-1930

DNA

Field Command, Defense Nuclear Agency
ATTN: FCDNA/FCLMM
DSN: 244-9717
COMM: (505) 844-9717

CG

Commandant, United States Coast Guard
ATTN: G-ELM
AV: N/A
COMM: (202) 267-0655
FTS: 267-0655

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