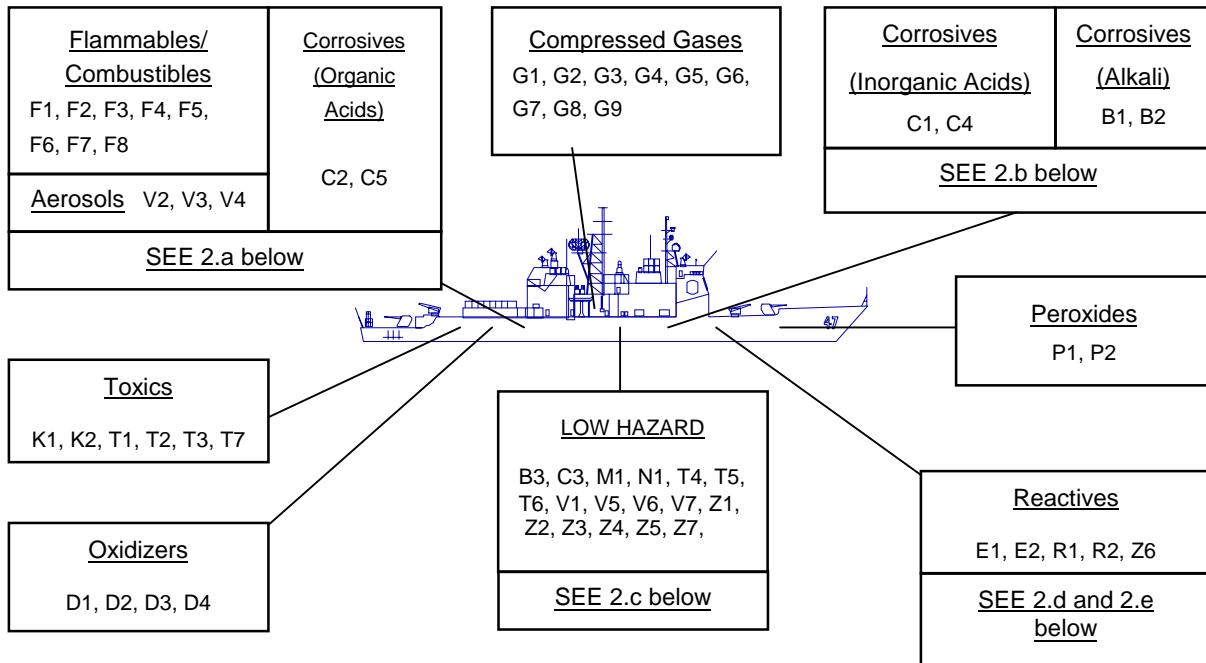


**Appendix C23-C**

**HAZARDOUS MATERIAL COMPATIBILITY STORAGE DIAGRAM  
(USING HMIS HAZARD CHARACTERISTIC CODE (HCC))**

The Hazardous Characteristic Code (HCC) for each SHML item can be found in the Hazardous Material Information System (HMIS). The HCC and their intended use are defined and explained in appendix C23-D.



Instructions:

1. Each block represents a separate stowage location. The codes in the boxes are grouped with other codes with which they are compatible for storage. A subdivision within a block represents secondary separation within the primary classification.
2. The following secondary stowage requirements apply:
  - a. Stow organic acids in a locker lined with acid-resistant material in the flammable liquids storeroom separated by a partition, or by at least 3 feet, from all other material. Separate aerosols (v2, v3, v4) from flammables by placing in a locker or barrier such as floor to ceiling wire mesh, chain link fence, etc. to protect personnel from aerosols that can become self-propelled projectiles.
  - b. Separate B1, B2, C1, and C4 by at least 3 feet from each other.
  - c. Separate B3 and C3 by at least 3 feet from each other.

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- d. Further segregate R1 into a Spontaneously Combustible storage within the Reactive Storage area.
- e. Should not store R2 in areas protected with water sprinkler system. Fire protection should be non-water based.

**Appendix C23-D**

**HMIS CODING AND STORAGE REQUIREMENTS**

**Table C23-D-1**

**HAZARD CHARACTERISTIC CODE**  
**FOR HAZARDOUS MATERIAL GROUPS**

The Hazard Characteristic Code (HCC) is a two digit alpha-numeric code that is used to provide a means of categorizing hazardous materials (HM). It is an identification and tracking mechanism which links the stock number with details of the product hazards. Trained scientific or engineering personnel assign HCCs using the data provided on the Material Safety Data Sheet (MSDS), thereby, uniformly identifying hazardous materials managed by all Government activities. This information is captured in the DoD Hazardous Materials Information System (HMIS), and it allows the systemic tracking and identification for any regulatory purpose.

HCCs allow relatively untrained personnel to properly receive, handle, store, process and manage hazardous materials at a high level and are most effective when used in conjunction with the detailed regulations of Title 10, 29, 40, and 49 of the Code of Federal Regulations. NAVSUPPUB 485 provides storage location guidance for each HCC. The HCC also serves as an identifier for automated processing of hazardous materials transactions, space utilization management, and compatible storage.

<u>HAZARD GROUP</u>	<u>HCC</u>
1. Radioactive Materials	
a. Licensed.....	A1
b. License Exempt.....	A2
c. License Exempt, Authorized.....	A3
2. Alkali Materials	
a. Corrosive, Inorganic.....	B1
b. Corrosive, Organic.....	B2
c. Low Risk.....	B3
3. Acid Materials	
a. Corrosive, Inorganic.....	C1
b. Corrosive, Organic.....	C2
c. Low Risk.....	C3
d. Corrosive and Oxidizer, Inorganic.....	C4
e. Corrosive and Oxidizer, Organic.....	C5
4. Oxidizers	
a. Oxidizer.....	D1
b. Oxidizer and Poison.....	D2
c. Oxidizer and Corrosive, Acidic.....	D3
d. Oxidizer and Corrosive, Alkali.....	D4

**Table C23-D-1** (Cont'd)

<u>HAZARD GROUP</u>	<u>HCC</u>
5. Explosives (See OP4, OP5, and OP2165)	
a. Explosives, Military.....	E1
b. Explosives, Low Risk.....	E2
6. Flammable/Combustible Materials	
a. Flammable Liquid, DOT Packing Group I, OSHA.....	F1
b. Flammable Liquid, DOT Packing Group II, OSHA IB.....	F2
c. Flammable Liquid, DOT Packing Group III, OSHA IC.....	F3
d. Flammable Liquid, DOT Packing Group III, OSHA II.....	F4
e. Flammable Liquid and Poison.....	F5
f. Flammable Liquid and Corrosive, Acidic.....	F6
g. Flammable Liquid and Corrosive, Alkali.....	F7
h. Flammable Solid.....	F8
7. Compressed Gases	
a. Gas, Poison (Nonflammable).....	G1
b. Gas, Flammable.....	G2
c. Gas, Nonflammable.....	G3
d. Gas, Nonflammable, Oxidizer.....	G4
e. Gas, Nonflammable, Corrosive.....	G5
f. Gas, Poison, Corrosive (Nonflammable).....	G6
g. Gas, Poison, Oxidizer (Nonflammable).....	G7
h. Gas, Poison, Flammable.....	G8
i. Gas, Poison, Corrosive, Oxidizer (Nonflammable) .....	G9
8. Medical Substances	
a. Infectious Substance.....	K1
b. Cytotoxic Drugs .....	K2
9. Magnetized Material .....	M1
10. Not Regulated as Hazardous .....	N1
11. Peroxides	
a. Peroxide, Organic, DOT Regulated .....	P1
b. Peroxide, Organic, Low Risk.....	P2
12. Reactive Chemicals	
a. Reactive Chemical, Flammable.....	R1
b. Water Reactive Chemical .....	R2
13. Toxic Chemicals	
a. DOT Poison - Inhalation Hazard.....	T1
b. UN Poison, Packing Group I .....	T2
c. UN Poison, Packing Group II .....	T3
d. UN Poison, Packing Group III .....	T4
e. Pesticide, Low Risk.....	T5
f. Health Hazard.....	T6
g. Carcinogen (OSHA, NTP, IARC) .....	T7

**Table C23-D-1** (Cont'd)

<u>HAZARD GROUP</u>	<u>HCC</u>
14. Miscellaneous Hazardous Materials	
a. Miscellaneous Hazardous Materials - DOT Class 9 .....	V1
b. Aerosol, Nonflammable.....	V2
c. Aerosol, Flammable.....	V3
d. DOT Combustible Liquid, OSHA IIIA.....	V4
e. High Flash Point Materials, OSHA IIIB.....	V5
f. Petroleum Products.....	V6
g. Environmental Hazard.....	V7
15. OSHA and DOT Articles	
a. Article Containing Asbestos.....	Z1
b. Article Containing Mercury.....	Z2
c. Article Containing Polychlorinated Biphenyl (PCB) .....	Z3
c. Article, Battery, Lead Acid, Nonspillable.....	Z4
d. Article, Battery, Nickel Cadmium, Nonspillable.....	Z5
e. Article, Battery, Lithium.....	Z6
f. Article, Battery, Dry Cell.....	Z7