

APPENDIX 4-A

STORAGE OF GRAPHITE

1. *Description.* Graphite is a natural variety of carbon. It is a good conductor of electricity, is resistant to acids and alkalis, and is easily molded. The following types and grades will be received for storage:

TYPE	GRADE	
Amorphous Lump	One Grade Only	
Crystalline Flake	Crucible	
“ “	Lubricant and Packing	(Large Flake)
“ “	“ “	(Medium Flake)
“ “	“ “	(Small Flake)
“ “	“ “	(Fine Flake)
“ “	“ “	(Extra Fine Flake)
Crystalline Fines	One Grade Only	

2. *Packaging.* Graphite will be packaged and received in containers meeting current acquisition specifications. All containers in a shipment lot will be of the same nature, nominal size and shape. Should graphite be received in containers other than drums or barrels, the material will require repackaging/overpackaging. Authorization for such repackaging/overpackaging will be secured through the DNSC-OL.

3. *Marking*

- a. *Amorphous Lump.* Commodity and type, gross and net weights, and Government contract number.
- b. *Crystalline Flake.* Commodity and type, grade, flake size, gross and net weights, and Government contract number.
- c. *Crystalline Fines.* Commodity and type, gross and net weights, and Government contract number.

4. *Storage*

- a. Graphite in bags will be stored in box pallets in dry warehouses. Segregation will be by type for amorphous lump and crystalline fines, and by type and grade for crystalline flake.
- b. To facilitate the taking of a physical inventory at any time by count and computation, the same number of bags shall be placed in each box pallet, except when an odd number of bags in the top box pallet of a stack of uniform height will complete the lot. Thereafter, the pallets shall be block stacked in uniform rows and to a uniform height. In doing so, economical use of space must be given full consideration and segregation requirements must be met. Each block stack shall have a placard indicating the number of bags in each box pallet in the stack.
- c. Graphite in conventional drums or wooden barrels shall be stored in a warehouse, shed or other structure so as to protect drums from the weather and barrels from direct sunlight.
- d. In every case, storage identity shall be maintained as indicated for graphite received in bags.

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e. When material is to be stored in warehouse, shed or other structure, the first tier of drums or barrels shall be placed on floor pallets in upright position, after which one inch thick random length and width hardwood dunnage lumber shall be used between each succeeding tier. If the use of dunnage lumber between tiers is not practicable because of weight of containers or difficulty in handling, pallets between tiers may be used.

f. Drums or barrels shall be stored in uniform rows and tiers so as to facilitate the taking of inventory at any time by counting the rows and tiers and computing the total quantity. Economical use of space must be given full consideration, and all segregation and other requirements must be met. A uniform number of drums or barrels shall be placed on each pallet, except when an odd number occurs on the top pallet (light pallet) of a stack of uniform height will complete the lot.

g. Drums shall be marked only on the sides. Drums stored cordwood fashion on concrete runners shall be marked with required identification data on the tops of drums.

5. *Precautions To Be Taken*

a. *Health.* Proper respiratory protection, gloves and clothing should be worn and dust minimized during repackaging operations.

b. *General.* Repackaging of graphite should not be undertaken within the vicinity of other commodities unless commodities are in sealed containers. Precautions should be taken to prevent contamination of graphite during repackaging.

6. *Average Storage Factor*

a. 9 square feet per short ton.

FOR ADDITIONAL INFORMATION ON THIS COMMODITY REFER TO THE MATERIAL SAFETY DATA SHEET OR THE MOST RECENT PURCHASE SPECIFICATION.