

INCH-POUND

A-A-59138

25 September 1998

COMMERCIAL ITEM DESCRIPTION

CHARCOAL
(For Use In Ammunition)

The General Services Administration has authorized the use of this commercial item description as a replacement for Joint Army-Navy specification JAN-C-178 for all federal agencies.

1. SCOPE.

1.1 Scope. This commercial item description covers charcoal prepared by the destructive distillation of suitable hardwoods and is intended for use in ammunition.

1.2 Classes. The charcoal shall be in the following classes (see table I):

Class a -	Lump form
Class b -	Granulated
Class c -	Granulated
Class d -	Granulated.

2. SALIENT CHARACTERISTICS.

2.1 Material. Material shall be charcoal prepared by the destructive distillation of alder, willow, or suitable hardwoods in such a manner as to yield charcoal of the best composition and cleanliness of burning. Oven or kiln process is an acceptable alternate to destructive distillation. When specified in the contract or order, charcoal produced from a specific source shall be required (see 6.2). The charcoal shall be uniform and free from extraneous material such as unburned wood, sticks, dirt, grit, etc.

2.2 Moisture. The moisture content of the charcoal shall not exceed five percent.

2.3 Ash. The ash content shall not exceed five percent unless otherwise specified in the contract or order.

2.4 Granulation. The charcoal shall meet the granulation requirements of table I using U.S. Standard sieves in accordance with ASTM E 11.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Indian Head Division, Naval Surface Warfare Center, Standardization Team (Code 840M), 101 Strauss Avenue, Indian Head, MD 20640-5035.

AMSC N/A

FSC 6810

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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TABLE I. *Granulation.*

Class A	Class B	Class C	Class D
Lump form.	99.9% min. shall pass through a No. 50 sieve. 1.0% max. shall pass through a No. 140 sieve.	99.9% min. shall pass through a No. 100 sieve.	<ul style="list-style-type: none"> ● 98.0% min. shall pass through a No. 60 sieve. ● 80.0% min. shall pass through a No. 140 sieve. ● 50.0% min. and 80.0% max. shall pass through a No. 325 sieve.

3. REGULATORY REQUIREMENTS.

3.1 This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

4. QUALITY ASSURANCE PROVISIONS.

4.1 Product conformance. The product provided shall meet the salient characteristics of this Commercial Item Description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

4.2 Inspection requirements. The charcoal shall be inspected in accordance with ASTM D 1762 for the requirements of section 2 except granulation test procedures shall be as specified in 4.3.

4.3 Granulation test. The following granulation tests shall be made to determine compliance with the requirements of 2.4. Nest the designated sieves from top to bottom in order of decreasing size of opening and attach a receiving pan to the bottom sieve. Place a 100-gm sample on the upper sieve, cover, and shake for 25 minutes mechanically. The mechanical shaker shall be a single-eccentric type which imparts to the sieves a rotary motion and tapping action of uniform speed of 300 ± 15 gyrations and 150 ± 10 taps of the striker per minute. Weigh the portions retained on each sieve and calculate the percentage passing through each of the sieves.

5. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order (see 6.2).

6. NOTES.

6.1 Intended use. Class A charcoal is intended for use primarily as an ingredient in black powder. Classes B and C charcoal are intended for use as an ingredient in tracers, signals, flares, igniters, and similar items. Class D charcoal is intended for use in pyrotechnic mixtures.

6.2 Acquisition requirements. Acquisition documents must specify the following:

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- a. Title, number, and date of this commercial item description
- b. Class required (see 1.2)
- c. Specific source for charcoal if required (see 2.1)
- d. Packaging and packing requirements.

6.3 Referenced documents. Application for copies of ASTM standards should be addressed to the American Society for Testing and Materials Customer Service, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

Custodians:

Army - AR

Navy - OS

Preparing Activity:

Navy - OS

(Project 6810-1636)