

MIL-C-21723A(OS)  
27 September 1971

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SUPERSEDING  
MIL-R-21723(NOrd)  
4 December 1958

## MILITARY SPECIFICATION

### COMPOSITION CH-6

(This specification has been approved by the Naval Ordnance Systems Command, Department of the Navy.)

#### 1. SCOPE

1.1 This specification covers the explosive, Composition CH-6. This composition is a mixture consisting of RDX and small amounts of calcium stearate, graphite and polyisobutylene. This Composition CH-6 is of one type and class.

#### 2. APPLICABLE DOCUMENTS

2.1 The following specifications, standards, drawings and publications or such portions thereof as designated herein of the issue in effect on the date of invitation for bids form a part of this specification.

#### SPECIFICATIONS

##### FEDERAL

O-C-105  
RR-S-366

Calcium Chloride, Anhydrous  
Sieves; Standard, Testing

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MILITARY

MIL-G-155  
MIL-R-398

Graphite  
RDX

STANDARDS

MILITARY

MIL-STD-129

Marking for Shipment and Storage

DRAWINGS

NAVAL ORDNANCE SYSTEMS COMMAND

BUORD LD No. 479593

Initiation Sensitivity Test  
Fixture for CH-6 Explosive  
Powder Mobility Gage for  
CH-6 Explosive

BUORD LD No. 479544

ORDNANCE CORPS, DEPARTMENT OF THE ARMY

F7548644

Box, Packing for High Explosives,  
Assembly, Details, Packing and  
Marking

F7548645

Carton, Packing, Reusable,  
Collapsible for High Explosives

INSTRUCTIONS

DEPARTMENT OF DEFENSE, OFFICE OF THE ASSISTANT  
SECRETARY OF DEFENSE (INSTALLATIONS AND LOGISTICS)

DOD Instruction  
4145.26M

DOD Contractors' Safety Manual  
for Ammunition, Explosives and  
Related Dangerous Materials

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(Copies of specifications, standards, drawings and instructions requested by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

### 3. REQUIREMENTS

3.1 Description. - Composition CH-6 is a homogeneous explosive mixture of RDX, graphite, calcium stearate and polyisobutylene. This mixture when compared with tetryl, withstands higher temperatures before cook off; has higher output yet matches the sensitivity of tetryl. The flow characteristics of this mixture permit the use of automatic pelleting machinery employing hopper feeding for the manufacture of Composition CH-6 pellets of a density of at least 1.61 and various diameters that will hold together under ordinary handling conditions.

3.2 Materials. - The materials used in the manufacture of the Composition CH-6 explosive purchased under this specification shall conform to the specifications listed in 2.1. In addition, the following materials shall be of the grade or class specified as follows:

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3.2.1 RDX. - MIL-R-398, Type B, Class A.

3.2.2 Graphite. - MIL-G-155, Grade I.

3.2.3 Polyisobutylene. - Vistanex LM-MH 2620 as manufactured by the Enjay Co., 15 West 51st Street, New York City, New York, or equivalent.

3.3 Composition. - The percentage composition of the Composition CH-6 shall be in accordance with Table I. Conformance with the tolerance limits shall be ascertained in accordance with the provisions of 4.4.4.1.

TABLE I - Composition

MATERIAL	PERCENT
RDX	97.50 ± 0.50
Calcium Stearate	1.50 ± 0.15
Graphite	0.50 ± 0.10
Polyisobutylene	0.50 ± 0.10

3.4 Moisture content. - The moisture content of the Composition CH-6 shall not exceed 0.20 percent.

3.5 Granulation. - The Composition CH-6 shall conform to the granulation requirements shown in Table II. Sieves shall conform to the requirements of Federal Specification RR-S-366. See 4.4.4.2.

TABLE II - Granulation

Through U. S. Standard Sieve Number	Maximum or Minimum	Percent
30 (590 micron)	Minimum	70
100 (149 micron)	Maximum	25

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3.6 Sensitivity. - The Composition CH-6 shall be capable of passing the sensitivity test described in 4.4.4.3.

3.7 Functioning. - The Composition CH-6 shall be capable of passing the functioning test described in 4.4.4.4.

3.8 Flow characteristics. - The Composition CH-6 shall be capable of free flow through an orifice  $0.500 \pm .010$  inch in diameter when tested in accordance with 4.4.4.5.

3.9 Pelleting characteristics. - The Composition CH-6 after being pressed into pellets in accordance with drawing 1620713, which is part of LD 479593, shall withstand the tumbling test described in 4.4.4.6 with less than 10.0 percent weight loss.

3.10 Impact. - The Composition CH-6 shall withstand the drop test of 4.4.4.7 without explosion or burning.

3.11 Density. - The average density in grams per milliliter for Composition CH-6 pellets pressed in accordance with drawing 1640713, which is part of LD 479593, shall be  $1.64 \pm .03$  grams per milliliter when determined in accordance with 4.4.4.8.

3.12 Acid and alkali content. - The Composition CH-6 shall show no excessive acid or alkali content when tested as described in 4.4.4.9.

#### 4. QUALITY ASSURANCE PROVISIONS AND TEST REQUIREMENTS

4.1 Responsibility for inspection. - Unless otherwise specified in the contract or purchase order, the

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supplier is responsible for the performance of all inspection requirements, as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. Inspection records of the examination and tests shall be kept complete and available to the Government as specified in the contract or order. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Batch. - For the purposes of sampling, a batch of Composition CH-6 shall be limited in weight to 5000 pounds maximum. A batch shall consist of that quantity of material subjected to the same unit chemical process intended to make the final product homogeneous. Physical blending of more than one batch wet or dry, shall not be permitted. A batch may be formed by reworking one or more batches by the slurry coating process in a crystallization still.

4.1.2 Sampling. - Sampling shall be performed on each batch before packing by thieving approximately equal quantities of material from each nutche (storage container) and blending into a composite sample of approximately two pounds, half of which shall be used for determining conformance of the material with the requirements of 3.2 through 3.12 inclusive of this specification. The remaining approximate one pound sample shall be retained for possible check analysis. A batch may be divided into more than one lot, and the acceptance tests performed on the batch may be reported for each of the lots.

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4.1.2.1 Sample pellets. - Composition CH-6 pellets used in the tests of 4.4.4.3, 4.4.4.4, 4.4.4.6 and 4.4.4.8 shall be prepared in accordance with drawing 1620713 which is part of LD 479593 using the Composition CH-6 from the composite sample 4.1.2. All 80 pellets used in these tests and possible retests shall be prepared as a single lot from which the required test pellets shall be drawn in a statistically random fashion using a table of random numbers or equivalent procedure.

4.1.2.2 Marking of sample containers. - Each sample container shall be labeled to show the name of the material, manufacturer, plant, lot and batch number, and the date of manufacture.

4.1.3 Place of inspection. - Inspection shall be at the point of manufacture unless otherwise specified in the contract or order.

4.2 Acceptance tests. - These tests are to be accomplished on the Composition CH-6 being submitted for acceptance under contract. Inspection and test procedures shall be submitted for Government approval prior to commencement of production. Acceptance tests shall either be performed by the manufacturer and witnessed by the Government inspector, or shall be conducted by the Government inspector. These tests are defined in 4.4.

4.3 Test equipment. - The following items of test equipment are required to perform the acceptance tests set forth in this specification:

Initiation Sensitivity Test Fixture - BUORD  
LD No. 479593 for CH-6 Explosive  
Standard testing sieves; top plate; bottom plate-  
Federal Specification RR-S-366

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Mechanical Sieve Shaking Machine  
Powder Mobility Test Fixture for CH-6 Explosive -  
BUORD LD No. 479544  
Westphal Balance for Density Determinations

4.4 Acceptance tests.

4.4.1 The contractor or Government inspector shall conduct acceptance tests as specified in 4.2 to assure that the Composition CH-6 is in compliance with the requirements of 3.2 through 3.12 inclusive of this specification.

4.4.2 Test conditions. - Unless otherwise specified the Composition CH-6 shall be subjected to acceptance tests under the following conditions.

4.4.2.1 Temperature: Room ambient 65 degrees F to 95 degrees F (18.3 degrees C to 35.0 degrees C).

4.4.2.2 Altitude: Normal ground.

4.4.2.3 Vibration: None.

4.4.2.4 Humidity: Room ambient to 95 percent relative maximum.

4.4.3 Test and inspection equipment and facilities. - The manufacturer shall furnish and maintain all necessary test equipment, facilities and personnel for performing all acceptance tests. The test equipment shall be adequate in quantity, and when definite requirements are not specified they shall be of sufficient accuracy and quality to permit performance of the required acceptance tests.

4.4.4 Test procedure.



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4.4.4.1 Analysis of Composition CH-6. - All analyses utilizing loose bulk material shall be carried out using duplicate analyses of a single sample. This provision is not applicable to the tests which utilize pellets. Each individual test result shall meet the requirements for acceptance of the Composition CH-6.

4.4.4.1.1 Moisture. - Transfer an accurately weighed portion of approximately 10.0 grams of the composite sample of Composition CH-6 from 4.1.2 to a tared weighing bottle with an outside ground cap. Place the bottle and contents with cap removed in an oven at  $100 \pm 5$  degrees C for 40 to 50 minutes; cool in a desiccator, stopper and reweigh. Calculate the loss in weight of the bottle and contents as percent moisture in the sample.

4.4.4.1.2 RDX. - Transfer an accurately weighed portion of approximately 10.0 grams of the composite sample of Composition CH-6 from 4.1.2 into a tared medium porosity, sintered-glass crucible. Place the crucible containing the sample on a suction flask and fill with 25 ml of hot acetone ( $55 \pm 5$  degrees C) and apply vacuum. Repeat this procedure 7 additional times (total acetone equals 200 ml). Dry the crucible and contents in an oven at  $100 \pm 5$  degrees C for 40 to 50 minutes. Cool in a desiccator and weigh. All of the above operations with the exception of the weighings must be conducted in a hood. Prior to discarding the acetone-RDX solution it should be mixed with a large volume of water and then filtered to remove the RDX from the solution. The waste RDX should be stored under water until ready for disposal by safe destructive chemical or burning procedures. Calculate the loss in weight as RDX in the sample on a dry basis as follows:

$$\text{Percent RDX} = \frac{(A-B-WM) 100}{W (1-M)}$$

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Where: A = Weight of crucible and sample  
 B = Weight of crucible and sample after extraction with hot acetone  
 M = Percent moisture expressed as a decimal fraction  
 W = Weight of sample

4.4.4.1.3 Calcium stearate. - Place the crucible and residue from 4.4.4.1.2 on the filter flask. Add 12 ml of hot glacial acetic acid ( $110 \pm 5$  degrees C) to the crucible and allow to stand for 2 minutes, then apply vacuum. Repeat this procedure twice with the same volume of acetic acid, then once with a filling of the crucible (total volume of glacial acetic acid equals 60 ml). Finally wash the residue with 25 ml of acetone and discard the acetic acid-acetone solution. Dry the crucible and residue in an oven at  $100 \pm 5$  degrees C for 40 minutes. Cool in a desiccator and weigh. All of the above operations with the exception of weighing must be conducted in a hood.

$$\text{Percent Calcium Stearate} = \frac{(B-C) 100}{W (1-M)}$$

Where: B = Weight of crucible and sample after extraction with hot acetone  
 C = Weight of crucible and sample after extraction with glacial acetic acid and acetone  
 M = Percent moisture expressed as a decimal fraction  
 W = Weight of sample

4.4.4.1.4 Polyisobutylene. - Warm the crucible and residue from 4.4.4.1.3 by placing it in an oven at  $100 \pm 5$  degrees C for 5 minutes, then place it on the filter flask. Add 25 ml of hot toluene ( $105 \pm 5$  degrees C) to

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the crucible and let stand for 2 minutes and apply vacuum. Repeat this procedure 7 more times (total volume of toluene equals 200 ml). Finally, wash the residue with 25 ml of acetone. Discard the toluene-acetone solution. Dry the crucible and residue in an oven at  $100 \pm 5$  degrees C for 40 to 50 minutes. Cool in a desiccator and weigh. All of the above operations with the exception of weighing must be conducted in a hood.

$$\text{Percent Polyisobutylene} = \frac{(C-D) 100}{W (1-M)}$$

Where: C = Weight of crucible and sample after extraction with glacial acetic acid and acetone  
 D = Weight of crucible and sample after extraction with toluene and acetone  
 M = Percent moisture expressed as a decimal fraction  
 W = Weight of sample

4.4.4.1.5 Graphite. - Calculate the weight of the residue remaining in crucible in 4.4.4.1.4 as percent graphite in the sample on a dry basis as follows:

$$\text{Percent Graphite} = \frac{(D-E) 100}{W (1-M)}$$

Where: D = Weight of crucible and sample after extraction with toluene and acetone  
 E = Weight of crucible  
 W = Weight of sample  
 M = Percent moisture expressed as a decimal fraction

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4.4.4.2 Granulation. - Place a weighed portion of approximately 15 grams of the composite sample of Composition CH-6 from 4.1.2 on the specified screen sieve which is provided with a bottom pan. Cover and shake for 15 minutes in a mechanical shaker geared to produce  $300 \pm 15$  gyrations and  $150 \pm 10$  taps of the striker per minute. Weigh the portion retained by the sieve and calculate on a percentage basis as required. See 3.5.

4.4.4.3 Sensitivity. - Select 15 pellets from the lot of sample pellets prepared in accordance with 4.1.2.1. After checking the transfer charge assembly for output in accordance with 4.4.4.3.1, assemble the pellets in the test fixture as shown on drawing 1553629, which is part of LD 479593, using barrier 1620712, pc. 1, which is part of LD 479593, between the transfer charge assembly and the pellet. The red end of the transfer charge assembly must be positioned to face upward. Place the assembled test fixture in a suitable safety chamber and initiate the primer by passing a current of approximately 3 amperes through the firing circuit. A CH-6 pellet which explodes on initiation of the primer to produce an indentation in the base equal to or greater than 0.003 inch in depth shall be classed as defective. The lot of Composition CH-6 from which the pellets were made shall be accepted on the basis of no defectives in the test and rejected on the basis of 2 or more defectives in the test. In the case of occurrence of one defective an additional test shall be allowed with acceptance of the lot on the basis of no defectives in the additional test. Measurement of the depth of indentation shall be in accordance with 4.4.4.3.2. In cases where the primer or transfer charge fails to explode, the test result shall be disregarded and another assembly tested.

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4.4.4.3.1 Transfer charge assembly output. - Prior to performing the sensitivity and functioning tests of 4.4.4.3 and 4.4.4.4 respectively, the output of the transfer charge shall be evaluated. Select 15 transfer charge assemblies at random from the lot of transfer charge assemblies prepared for use in the sensitivity and functioning tests. All transfer charges used in the sensitivity and functioning tests of 4.4.4.3 and 4.4.4.4 shall be from the same lot. The test fixture for measuring the output of the transfer charge assembly shall be similar to that shown on drawing 1553629 which is part of LD 479593, except that the barrier and CH-6 pellet shall be omitted from the assembly allowing the transfer charge assembly to rest on the base. The primer holder containing the Mark 114 Mod 2 primer shall be positioned in the adapter to rest on top of the transfer charge assembly. Place the assembled test fixture in a suitable safety chamber and initiate the primer by passing a current of approximately 3 amperes through the firing circuit. The average indentation depth produced in the bases by the explosions of the 15 transfer charge assemblies shall be  $0.039 \pm .001$  inch and each individual transfer charge assembly shall produce an indentation in the base having a depth of  $0.039 \pm .003$  inch. The occurrence of an individual transfer charge or a group of transfer charges which fails to produce the required depth of indentation on initiation of the primer shall cause rejection of the lot of transfer charge assemblies. In cases where the primer fails to explode, the test result shall be disregarded and another assembly tested.

4.4.4.3.2 Measurement of indentation depth. - Before measuring the depth of indentation in the base remove any foreign material such as deposits from the dent. Depth of indentation measurements shall be made with a dial indicator capable of measuring 0.001 inch units and accurate

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to at least 0.0005 inch. The point of the dial indicator probe shall have an approximate 30 degree included angle and the end of the point shall have a radius of  $0.025 \pm .002$  inch. Zero the indicator with the point of the probe in the deepest part of the dent. Remove the point of the probe and take the readings at two points near the cut face edges of the base. These points shall be approximately 0.125 inch away from the center of each of the two outside cut faces of the dented surface. The average of the two readings obtained is the depth of the indentation.

4.4.4.4 Functioning. - Select 15 pellets from the lot of sample pellets prepared in accordance with 4.1.2.1. After checking the transfer charge assembly for output in accordance with 4.4.4.3.1, assemble the pellets in the test fixture as shown on drawing 1553629, which is part of LD 479593, using barrier 1620712 pc. 2 which is part of LD 479593 between the transfer charge and pellet. Place the assembled test fixture in a suitable safety chamber and initiate the primer by passing a current of approximately 3 amperes through the firing circuit. A CH-6 pellet which does not explode on the initiation of the primer to produce an indentation in the base equal to or greater than 0.052 inch in depth shall be classed as defective. The lot of Composition CH-6 from which the pellets were made shall be accepted on the basis of no defectives in the test and rejected on the basis of 2 or more defectives in the test. In the case of occurrence of one defective, an additional test shall be allowed with acceptance of the lot on the basis of no defectives in the additional test. Measurement of the depth of indentation shall be in accordance with 4.4.4.3.2. In cases where the primer or transfer charge fails to explode, the test result shall be disregarded and another assembly tested.



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4.4.4.5 Flow characteristics. - Fill the Powder Mobility Gage shown on drawing 1518531, which is part of LD 479544, with Composition CH-6 from the composite sample of 4.1.2. Care shall be exercised in filling the gage to prevent packing of the explosive. After completion of the filling operation release the door and allow the Composition CH-6 to flow from the gage. The occurrence of a sample of the Composition CH-6 which does not flow through the gage orifice on release of the door shall cause rejection of the lot from which the sample was taken.

4.4.4.6 Pelleting characteristics. - Select 5 pellets from the lot of sample pellets prepared in accordance with 4.1.2.1. Weigh the five pellets and place them in a cylindrical metal can, 5 inches in diameter by 9 inches high. The can containing the pellets shall be rotated end over end for 10 minutes at 21 revolutions per minute. After completion of the tumbling, the pellets shall be removed from the can, wiped free of dust and reweighed. The weight loss shall be expressed as percent of the total original weight of the five pellets. See 3.9.

4.4.4.7 Impact. - Place 35 milligrams of Composition CH-6 taken from the composite sample of 4.1.2 on the rough side of a piece of No. 05 sandpaper which is supported on the steel anvil shown in Figure 1. Place the hardened steel striker shown in Figure 2 over the sample of explosive resting on the sandpaper and anvil. Drop a 2 1/2 kilogram steel weight from the height determined by the procedure of 4.4.4.7.1 in a frictionless guided drop so that it impacts the striker centrally. Repeat this test 15 times using a new sample of Composition CH-6 and a new sheet of sandpaper for each test. The burning or explosion of the Composition CH-6 in one or more of the test drops shall cause rejection of the lot of Composition CH-6 from which the sample was taken.

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4.4.4.7.1 Determination of impact testing height. - Employing the same test equipment to be used in 4.4.4.7 and using the same test procedure as described in 4.4.4.7 with the exception that Government furnished tetryl shall be substituted for the Composition CH-6, determine the maximum height within one inch from which the 2 1/2 kilogram weight can be dropped without explosion of the tetryl. This maximum no-fire height shall be determined by testing 15 samples of tetryl at a height at which one or more of the samples explode. The testing height shall then be decreased in one inch increments until a height is reached where 15 successive drops can be made using a new sample of tetryl each time without the occurrence of an explosion. This is the maximum no-fire height for the tetryl. Take 90 percent of this maximum no-fire height to the nearest 1/2 inch as the testing height for the Composition CH-6 in 4.4.4.7.

4.4.4.8 Density. - Select 15 pellets from the lot of sample pellets in accordance with 4.1.2.1. The densities of the pellets can be measured by the procedures of either 4.4.4.8.1 or 4.4.4.8.2.

4.4.4.8.1 Displacement method. - Coat the pellets with a thin film of protective water proofing such as clear acrylic lacquer in an aerosol spray. A weight increase in excess of 0.025 gm will make the pellet unacceptable for the test. A small amount of wetting agent shall be added to the water to aid in removal of air from the pellet surfaces. Density shall be determined by the water-displacement/water-loss method using an appropriate specific gravity balance.

4.4.4.8.2 Dry measurement method. - Select 15 pellets from the lot of sample pellets prepared in accordance with 4.1.2.1. For each pellet, measure (to the nearest thousandth) the following:



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- (1) The diameter of the pellet in two locations, 90° apart.

$$D = (D_1 + D_2)/2 \text{ where } D \text{ is the diameter of the pellet in inches}$$

- (2) The height of the pellet in four places, each 90° apart.

$$H = (H_1 + H_2 + H_3 + H_4)/4 \text{ where } H \text{ is the height of the pellet in inches.}$$

Each pellet shall also be weighed to an accuracy of  $\pm 0.002$  gm. Call this weight  $W$ . With the above information, the density of the pellet is calculated as:

$$\begin{aligned} \text{Density} &= 0.0777 (W)/(D^2H) \\ &= 0.0777W/(D^2H) \text{ gm/cc.} \end{aligned}$$

4.4.4.8.3 Calculate the average of the 15 density determinations. See 3.11.

4.4.4.9 Acid and alkali content test. - Place 10  $\pm$  0.1 grams of Composition CH-6 taken from the composite sample of 4.1.2 in a 100 ml beaker. Add 50 ml of freshly boiled distilled water and agitate the slurry for approximately 5 minutes at ambient temperature and filter. Add 2 drops of 1% phenolphthalein solution to the filtrate and examine the filtrate for color change. The filtrate shall remain colorless and show no evidence of pink color. Following this add 0.05 ml of 0.1N NaOH solution to the above filtrate and reexamine the filtrate for color change. The filtrate shall change from colorless to a pink color after addition of the NaOH solution. Failure of the filtrate from the Composition CH-6 sample to remain colorless after

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addition of the phenolphthalein indicator solution or to change from colorless to a pink color on addition of the 0.1N NaOH solution shall cause rejection of the lot of Composition CH-6 from which the sample was taken. See 3.12.

4.5 Failure of the Composition CH-6 to meet any of the requirements and tests of this specification shall be considered cause for rejection.

5. PREPARATION FOR DELIVERY

5.1 Packing.

5.1.1 Level A. - The Composition CH-6 shall be packed and marked in accordance with Dwg. F7548644.

5.1.2 Level C. - The composition shall be packed and marked in accordance with Dwg. F7548645.

5.2 Marking. - In addition to marking required by the container drawings, marking shall conform to MIL-STD-129.

6. NOTES

6.1 Intended Use. - The Composition CH-6 is intended for use in leads and boosters in high explosive ordnance.

6.2 Ordering Data. - Procurement documents should specify the specific title, number and date of this specification and exceptions to this specification, applicable drawings and other documents.

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6.3 Explosive safety precautions. - Explosive safety precautions shall be in accordance with DOD Instruction 4145.26M, DOD Contractors' Safety Manual for Ammunition, Explosives and Related Dangerous Material.

6.4 Advisory manufacturing process for Composition CH-6.

6.4.1 Materials. -

RDX - MIL-R-398, Type B Class A

Graphite - MIL-G-155, Grade I

Polyisobutylene - Vistanex LM-MH 2620 as manufactured by the Enjay Co., 15 West 51st Street, New York City, New York or equivalent

Calcium Chloride, Anhydrous - O-C-105, Type II, Grade B, Class 1

Sodium Stearate - Technical grade

6.4.2 Composition. - Table I, paragraph 3.3.

6.4.3 Procedure. - The materials are processed as follows in an agitated jacketed vessel:

(a) The RDX is mixed with 10 parts of water by weight and the slurry is heated to 75 degrees C.

(b) The polyisobutylene is dissolved in 35 parts toluene by weight and the solution added slowly to the heated RDX water slurry of (a).

(c) The RDX, water, polyisobutylene and toluene mixture is digested at 78 to 82 degrees C for 10 minutes.

(d) The sodium stearate is mixed with 13 parts of water by weight and the graphite is mixed with the sodium stearate solution to obtain wet blending of the graphite.

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(e) The calcium chloride is dissolved in 20 parts of water by weight.

(f) The sodium stearate-graphite solution of (d) and then the calcium chloride solution of (e) are added slowly to the RDX, water polyisobutylene and toluene mixture of (c) with a short period of agitation after the addition of each solution. For each 100 parts of product, by weight 1.51 parts of sodium stearate by weight and 1.1 parts of calcium chloride by weight are used. Calcium stearate is precipitated in the presence of RDX, water, polyisobutylene and toluene mixture by the reaction of sodium stearate with calcium chloride.

(g) The toluene is removed by distillation and the slurry cooled to about 50 degrees C.

(h) The mixture is filtered and washed with distilled water to remove absorbed acids or alkalis after which it is dried at 70°C on trays over steam coils.

6.5 Specification information. - This specification is under the technical cognizance of the Naval Ordnance Laboratory, Silver Spring, Maryland, which prepared it for the Naval Ordnance Systems Command.

Preparing Activity  
Navy - OS  
Proj. No. 1376-N405