TECHNICAL MANUAL

ARMY AMMUNITION DATA SHEETS

FOR

DEMOLITION MATERIALS

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HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1994
REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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*This manual supersedes TM 43-0001-38, dated 25 June 1981, including all changes.
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CHAPTER 1
INTRODUCTION

1-1. Purpose

This manual is a reference handbook published as an aid in planning, training, familiarization, and identification of demolition items.

1-2. Scope

a. For each item of materiel, there are illustrations and descriptions together with characteristics and related data. Included in the related data are weights, dimensions, performance data, packing, shipping and storage data, Classification, and logistics control codes (LCC).

b. Information concerning supply operation, and maintenance of the items will be found in the publications referenced for those items. A complete listing of these publications is maintained in DA Pam 310 series indexes.

c. Within this manual, items with the following type-classifications are included:

   (1) Standard (LCC-A), (LCC-B),
   (2) Contingency (CON),
   (3) Limited Procurement (LP),
   (4) Reclassified obsolete (OBS) for regular Army use, but used by National Guard or Reserve units.
   (5) Reclassified OBS for all Army use, but used by Marine Corps, Air Force or Navy Items with the following type-classification are not included: Reclassified OBS for all US. use, No U.S. stocks remain. (Foreign use or stock may remain).

d. Numerical values, such as weights, dimensions, candlepower, etc., are nominal values, except when specified as maximum or minimum. Actual items may vary slightly from these values, Allowable limits can be obtained from the drawings indicated in the data sheets.

1-3. Metric Conversion Chart

For approximate conversions to/from metric measures see table 1-1.

1-4. Quantity-Distance Classes and Storage Compatibility Groups

Quantity-Distance (QD) classes and Storage Compatibility Groups (SCG) listed in this manual are changed, For conversion to new system see table 1-2.
Table 1-1. Metric Conversion Chart

### WEIGHT

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know</th>
<th>Multiply By</th>
<th>To Find</th>
<th>Symbol</th>
</tr>
</thead>
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<tr>
<td>kg</td>
<td>grams</td>
<td>0.035</td>
<td>ounces</td>
<td>oz</td>
</tr>
<tr>
<td>t</td>
<td>tonnes</td>
<td>2.2</td>
<td>pounds</td>
<td>lb</td>
</tr>
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### VOLUME

<table>
<thead>
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<th>Symbol</th>
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<th>Multiply Add To Find</th>
<th>Symbol</th>
</tr>
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<tbody>
<tr>
<td>ml</td>
<td>milliliters</td>
<td></td>
<td>fl oz</td>
</tr>
<tr>
<td>l</td>
<td>liters</td>
<td>2.1</td>
<td>pints</td>
</tr>
<tr>
<td>l</td>
<td>liters</td>
<td>1.06</td>
<td>quarts</td>
</tr>
<tr>
<td>l</td>
<td>liters</td>
<td>0.26</td>
<td>gallons</td>
</tr>
<tr>
<td>m³</td>
<td>cubic meters</td>
<td>35</td>
<td>cubic feet</td>
</tr>
<tr>
<td>m³</td>
<td>cubic meters</td>
<td>1.3</td>
<td>cubic yards</td>
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</table>

### LENGTH

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know</th>
<th>Multiply To Find</th>
<th>Symbol</th>
</tr>
</thead>
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<tr>
<td>in</td>
<td>inches</td>
<td>2.5</td>
<td>centimeters</td>
</tr>
<tr>
<td>fl</td>
<td>feet</td>
<td>30</td>
<td>centimeters</td>
</tr>
<tr>
<td>yd</td>
<td>yards</td>
<td>0.9</td>
<td>meters</td>
</tr>
<tr>
<td>mi</td>
<td>miles</td>
<td>1.6</td>
<td>kilometers</td>
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</table>

### AREA

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know</th>
<th>Multiply To Find</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>in²</td>
<td>square inches</td>
<td>6.5</td>
<td>sq centimeter</td>
</tr>
<tr>
<td>ft²</td>
<td>square feet</td>
<td>0.09</td>
<td>sq meters</td>
</tr>
<tr>
<td>yd²</td>
<td>square yards</td>
<td>0.8</td>
<td>sq meters</td>
</tr>
<tr>
<td>nm</td>
<td>sq miles</td>
<td>2.6</td>
<td>sq kilometers</td>
</tr>
<tr>
<td>acres</td>
<td></td>
<td>0.4</td>
<td>hectares</td>
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### TEMPERATURE

<table>
<thead>
<tr>
<th>Symbol</th>
<th>When You Know Subtract Multiply To Find</th>
<th>Symbol</th>
</tr>
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<tbody>
<tr>
<td>°C</td>
<td>Fahrenheit 32</td>
<td>by 0.55 Celcius</td>
</tr>
</tbody>
</table>

### FOOTNOTES:

**New QD and SCG’S are compatible with classes used by NATO nations.**

**Numbers in parenthesis are minimum distance x 100 feet to protect against specific fragment hazards and vary with items and types of ammunition. (Refer to TM 9-1300-206.)**

**There is no simple conversion from old SCG’S to new system. The SCG groups listed in this column are typical for the majority of items in the corresponding listed QD class but do not apply to every individual item in the class. For SCG of individual items refer to TM 9-1300-206.**

---

Table 1-2. Quantity-Distance Classes and Storage Compatibility Groups

<table>
<thead>
<tr>
<th>Quantity-distance hazard class</th>
<th>Storage compatibility group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old</td>
<td>Newvä</td>
</tr>
<tr>
<td>8</td>
<td>6.1 D</td>
</tr>
<tr>
<td>7</td>
<td>1.1 E</td>
</tr>
<tr>
<td>6</td>
<td>1.2 (18) F</td>
</tr>
<tr>
<td>5</td>
<td>1.2 (12) F</td>
</tr>
<tr>
<td>4</td>
<td>1.2 (08) G</td>
</tr>
<tr>
<td>3</td>
<td>1.2 (04) C</td>
</tr>
<tr>
<td>2</td>
<td>1.3 S</td>
</tr>
<tr>
<td>1</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Footnotes:

vä New QD and SCG’S are compatible with classes used by NATO nations.
CHAPTER 2

INITIATING AND PRIMING DEVICES
**Type Classification:**

Std A OTCM 37041, dtd 26 May 1960.

**Use:**

Electric Blasting Cap M6 is used to initiate high explosives with a blasting machine or other suitable source of electric power. It is capable of detonating all standard military explosives.

**Description:**

Blasting Cap M6 consists of a base charge of RDX, an intermediate charge of lead azide and an ignition charge of smokeless powder, potassium chlorate and lead salt of dinitro cresol in an aluminum alloy cup. Two 12-foot lead wires, connected by a bridge wire in the ignition charge, extend through a rubber (or rubber and sulfur) plug assembly in the open end of the cup. Two circumferential crimps secure the plug assembly in the cup.

**Functioning:**

To function the cap, its leads are connected to a blasting machine. The blasting machine is actuated to produce electrical current which flows through the cap’s bridge wire producing heat. If sufficient current is put through the bridge wire, the head ignites the ignition charge which initiates the intermediate charge which, in turn, causes detonation of the base charge.

**Tabulated Data:**

<table>
<thead>
<tr>
<th>Container material</th>
<th>Aluminum alloy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>2.35 in. x 0.24 in.</td>
</tr>
<tr>
<td>Filler: Base charge</td>
<td>RDX</td>
</tr>
<tr>
<td>Intermedi ate charge</td>
<td>Lead azide</td>
</tr>
<tr>
<td>Ignition charge</td>
<td>Special mix (e.g. Smokeless Powder)</td>
</tr>
<tr>
<td>Method of actuation</td>
<td>Electric current</td>
</tr>
</tbody>
</table>
**Shipping and Storage Data:**

- Quantity-distance class: 1.1
- Storage compatibility: B
- DOT shipping classification: Explosive A
- DOT designation: DETONATORS-
  HANDLE CAREFULLY
- UNO serial number: 0030
- UNO proper shipping name: Detonator, electric
- DODIC: M130
- Specification: MIL-C-14003 A
- Packaging: 6 per carton, 1 carton per barrier bag, 25 bags per fiberboard container, 6 containers (900 caps) per wooden box (or as required)

*Packing box:
- Weight (w/contents): 113 lb
- Dimensions: 23-1/8 x 19-1/2 x 21 in.
- Cube: 5.48 cu ft

*NOTE: See DOD Consolidated Ammunition Catalog for complete packing data including NSN’S.

**References:**

- FM 5-250
- TM 9-1375-213-12
- TM 9-1375-213-34
Nonelectric Blasting Cap M7 is used to detonate all military explosives.

This nonelectric blasting cap consists of an aluminum alloy cup containing an ignition charge of lead styphnate, an intermediate charge of lead azide, and a base charge of RDX. The cup is flared at the mouth to mate with the matching shape of the nipple of a firing device Base Coupling and the flared end facilitates insertion of time-blasting fuse or detonating cord.

On initiation by time-blasting fuse, primer or detonating cord the ignition charge detonates the intermediate charge which detonated the base charge, in turn. Detonation of the base charge initiates the explosive charge.

**Tabulated Data:**

- **Container material:** Aluminum alloy
- **Color:** Unpainted
- **Dimensions:**
  - **Length:** 2.35 in
  - **Diameter:** 0.24 in. (base); 0.26 in. (mouth)
Filler:
   Base charge --------------- REX
   Intermediate charge ------ Lead azide
   Ignition charge ---------- Lead styphnate
   Method of actuation ------ Flame or impact
                            (Time-blasting fuse or detonating cord or Firing Device Coupling Base)

Shipping and Storage Data:
   Quantity-distance class ------- 1.1
   Storage compatibility -------- B
   DOT shipping classification - Explosive A
   DOT designation --------------- DETONATORS - HANDLE CAREFULLY
   UNO serial number ----------- 0029
   UNO proper shipping name - Detonators, non-electric
   DODIC ------------------------ M131
   Drawing No. ------------------ 8830948

Packaging ------------------------ 6 per carton, 1 carton per vapor-proof bag, 50 bags per fiberboard container, 12 containers (3600 caps) per water-proof lined wooden box
                                 10/50/10 = 5000

*Packing box:
   Weight (w/contents) -------- 114 lb
   Dimensions ------------------ 23-1/8 x 19-1/2 x 21 in.
   Cube ------------------------ 5.48 cu ft

*NOTE: See DOD Consolidated Ammunition Catalog for complete packing data including NSN's.

References:
   FM 5-250
   TM 9-1375-213-12
   TM 9-1375-213-34