CLASSIFICATION OF EXPLOSIVES

Based upon a request by Dyno Nobel North America, (Formerly, The Ensign-Bickford Company), Crossroads Tower, Eleventh Floor, Salt Lake City, UT, the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations, (49 CFR). A copy of your application, all supporting documentation and a copy of this approval must be retained and made available to DOT upon request.

**U.N. PROPER SHIPPING NAME AND NUMBER:**
Pentaerythritol tetranitrate, wetted [or] Pentaerythritol tetranitrate, wetted, [or] PETN, wetted [with not less than 25 percent water, by mass, or] Pentaerythritol tetranitrate, [or] Pentaerythritol tetranitrate [or] PETN, desensitized [with not less than 15 percent phlegmatizer by mass], UN0150

**U.N. CLASSIFICATION CODE:** 1.1D

**REFERENCE NUMBER** | **PRODUCT DESIGNATION/PART NUMBER**
--- | ---
EX1983080050 | PETN

**U.N. PROPER SHIPPING NAME AND NUMBER:**
Articles, explosive, n.o.s., UN0349

**U.N. CLASSIFICATION CODE:** 1.4S

**REFERENCE NUMBER** | **PRODUCT DESIGNATION/PART NUMBER**
--- | ---
EX1997010145 | Shock Tube

**U.N. PROPER SHIPPING NAME AND NUMBER:**
Detonator assemblies, non-electric, [for blasting], UN0361

**U.N. CLASSIFICATION CODE:** 1.4B

**REFERENCE NUMBER** | **PRODUCT DESIGNATION/PART NUMBER**
--- | ---
EX1986060138 | HTP-1
U.N. PROPER SHIPPING NAME AND NUMBER: Articles, explosive, n.o.s., UN0349

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX1998050065  60 grains/ft. (Nom.) HMX Nylon

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX1987030042  92 C-476 (30" HD Nonel with High Strength Detonator, 250 units pack) SLHD Iredet (31") (SLHD Series, SLMS Series)

U.N. PROPER SHIPPING NAME AND NUMBER: Articles, explosive, n.o.s., UN0349

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX1998070014  80 grains/ft (Nom.) RDX Nylon

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX1987030044  92 C-476 (8' Nonel MS/LP)-(16' Nonel MS/LP) MS/LP Iredet (8' Thru 16')

U.N. PROPER SHIPPING NAME AND NUMBER: Articles, explosive, n.o.s., UN0349

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX1998070015  80 grains/ft (Nom.) PYX/PFA
<table>
<thead>
<tr>
<th>U.N. PROPER SHIPPING NAME AND NUMBER:</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Igniters, UN0325</td>
<td>223-A-001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>U.N. CLASSIFICATION CODE:</th>
<th>1.4G</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>U.N. PROPER SHIPPING NAME AND NUMBER:</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles, explosive, n.o.s., UN0349</td>
<td>80 grains/ft (Nom.) HMX HT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>U.N. CLASSIFICATION CODE:</th>
<th>1.4G</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>U.N. PROPER SHIPPING NAME AND NUMBER:</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuse, igniter [tubular metal clad], UN0103</td>
<td>95-B-23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>U.N. CLASSIFICATION CODE:</th>
<th>1.4S</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>U.N. PROPER SHIPPING NAME AND NUMBER:</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articles, explosive, n.o.s., UN0349</td>
<td>Shock Tube</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>U.N. CLASSIFICATION CODE:</th>
<th>1.4G</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>U.N. PROPER SHIPPING NAME AND NUMBER:</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuse, igniter [tubular metal clad], UN0103</td>
<td>92-B-563</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>U.N. CLASSIFICATION CODE:</th>
<th>1.4S</th>
</tr>
</thead>
</table>

Tracking No: 2003080105
REFERENCE NUMBER: EX1999010231
PRODUCT DESIGNATION/PART NUMBER: 80 grain/ft. RDX LS, 80 grain/ft. RDX LS XHV, 80 grain/ft. RDX Exposed, 80 grain/ft. HMX Nylon, 80 grain/ft. HMX Nylon XHV, 80 grain/ft. HNS, 40 grain/ft. RDX Ribbon.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER: EX1988100097
PRODUCT DESIGNATION/PART NUMBER: 92-C-410 (with 4'-120' Nonel Cord) (92-C-413 LLHD 40'-120' 152-C-039 Minicap LP 40'-120') MS Ircdet (40' Thru 120') LLHD Ircdet (40' Thru 120') (MS Series, LLHD Series, LP Series) (MS Series)

U.N. PROPER SHIPPING NAME AND NUMBER:
Articles, explosive, n.o.s., UN0463

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER: EX2000090058
PRODUCT DESIGNATION/PART NUMBER: Cord Waste, 2 Inches Max.

U.N. PROPER SHIPPING NAME AND NUMBER:
Fuse, non-detonating [instantaneous or quickmatch], UN0101

U.N. CLASSIFICATION CODE: 1.3G

REFERENCE NUMBER: EX1989050244
PRODUCT DESIGNATION/PART NUMBER: A-3 (Quickmatch IIA & IIB)

U.N. PROPER SHIPPING NAME AND NUMBER:
Articles, explosive, n.o.s., UN0349

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER: EX1993100011
PRODUCT DESIGNATION/PART NUMBER: Sub-tube Waste and Shock Tube Waste
U.N. PROPER SHIPPING NAME AND NUMBER:
Pentaerythrite tetranitrate [or] Pentaerythritol tetranitrate [or] PETN, [with not less than 7 percent wax by mass], UN0411

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1991110282

PRODUCT DESIGNATION/PART NUMBER
Poly 327

U.N. PROPER SHIPPING NAME AND NUMBER:
Articles, explosive, n.o.s., UN0349

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER
EX2002010274

PRODUCT DESIGNATION/PART NUMBER
60 gram / ft. HMX Nylon Detonating Cord in Non-Propagating Packaging

NOTES:
The following packaging method is assigned: Inner Packaging - Trays, expanded plastic, each containing not more than seventeen (17) feet of detonating cord in an interlocking series of "Figure-8" configurations with a steel mesh clip inserted at each cord cross-over point on the tray. Outer Packaging - Specification 4G fiberboard box, each containing not more than twenty-nine (29) inner packagings or 500 feet total length of detonating cord in a continuous strand.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
EX1987030043

PRODUCT DESIGNATION/PART NUMBER
92 C-410 (4'- 20' Trunkline Delay Nonel with Minicap Detonator) TLBB Iredel (4' Thru 20')

U.N. PROPER SHIPPING NAME AND NUMBER:
Boosters, [without detonator], UN0042

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1996080031

PRODUCT DESIGNATION/PART NUMBER
Booster (8-2500 grams)
U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER PRODUCT DESIGNATION/PART NUMBER
EX1986020030 Nonel, Primadet, Detonator, Trunkline Delay (NID Series) TLBB Iredet (4' Thru 12') TLBB Iredet (4' Thru 12') TLBB Iredet (20' Thru 60')

U.N. PROPER SHIPPING NAME AND NUMBER:
Boosters, [without detonator], UN0042

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER PRODUCT DESIGNATION/PART NUMBER
EX1996090057 Booster (8-2500 grams) (CMMPM in Mexico)

U.N. PROPER SHIPPING NAME AND NUMBER:
Lighters, fuse, UN0131

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER PRODUCT DESIGNATION/PART NUMBER
EX1992100187 Hot Wire Lighters (HWL)

U.N. PROPER SHIPPING NAME AND NUMBER:
Boosters, [without detonator], UN0042

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER PRODUCT DESIGNATION/PART NUMBER
EX1997080094 Booster with Optional Sensitizer (8-2500 grams), WL

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER PRODUCT DESIGNATION/PART NUMBER
EX1989010257 92-C-413 (Short-Lead Nonel Primadets) (SLMS Iredet) (SLMD Iredet) (SLMS Series, SLHD Series)
U.N. PROPER SHIPPING NAME AND NUMBER:
Cartridges, flash, UN0050

U.N. CLASSIFICATION CODE: 1.3G

REFERENCE NUMBER
PRODUCT DESIGNATION/PART NUMBER
EX1995030108A Lead-In-Line Microcap

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
PRODUCT DESIGNATION/PART NUMBER
EX1987030041 92 C-476 (36" HD Nonel with High Strength Detonator) SLHD Iredet (31") (SLHD Series, SLMS Series)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0289

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER
PRODUCT DESIGNATION/PART NUMBER

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
PRODUCT DESIGNATION/PART NUMBER
EX1988090125 92-C-410 (with 8'-30' Nonel Cord (152-C-039 Minicap LP 8'-30') (152-C-21 MS Multidet 8' to 30') MS Iredet (8' Thru 30') (MS Series, LP Series)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D
<table>
<thead>
<tr>
<th>REFERENCE NUMBER</th>
<th>PRODUCT DESIGNATION/PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>EX1992020035</td>
<td>DET CORD 4/800</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.N. PROPER SHIPPING NAME AND NUMBER:</strong> Detonator assemblies, non-electric, [for blasting], UN0361</td>
<td></td>
</tr>
<tr>
<td><strong>U.N. CLASSIFICATION CODE:</strong> 1.4B</td>
<td></td>
</tr>
<tr>
<td>REFERENCE NUMBER</td>
<td>PRODUCT DESIGNATION/PART NUMBER</td>
</tr>
<tr>
<td>EX1991030132</td>
<td>152-C-26 (EZ DET Series), EZ-DET (special packaging)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.N. PROPER SHIPPING NAME AND NUMBER:</strong> Cord, detonating, [flexible], UN0065</td>
<td></td>
</tr>
<tr>
<td><strong>U.N. CLASSIFICATION CODE:</strong> 1.1D</td>
<td></td>
</tr>
<tr>
<td>REFERENCE NUMBER</td>
<td>PRODUCT DESIGNATION/PART NUMBER</td>
</tr>
<tr>
<td>EX1992020036</td>
<td>DET CORD 400-1200 (4 Strand)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.N. PROPER SHIPPING NAME AND NUMBER:</strong> Detonator assemblies, non-electric, [for blasting], UN0361</td>
<td></td>
</tr>
<tr>
<td><strong>U.N. CLASSIFICATION CODE:</strong> 1.4B</td>
<td></td>
</tr>
<tr>
<td>REFERENCE NUMBER</td>
<td>PRODUCT DESIGNATION/PART NUMBER</td>
</tr>
<tr>
<td>EX1988090126</td>
<td>92-C-410 30'(with 30' Nonel Cord) (92-C-413 LLHD 30' 152-C-039 Minicap LP 30' (152-C-21 MS Multidet 30') MS Iredet (30') LLHD Iredet (30') (MS Series, LLHD Series, LP Series)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.N. PROPER SHIPPING NAME AND NUMBER:</strong> Cord, detonating, [flexible], UN0289</td>
<td></td>
</tr>
<tr>
<td><strong>U.N. CLASSIFICATION CODE:</strong> 1.4D</td>
<td></td>
</tr>
<tr>
<td>REFERENCE NUMBER</td>
<td>PRODUCT DESIGNATION/PART NUMBER</td>
</tr>
<tr>
<td>EX1997010142</td>
<td>40 grains/ft (Nom.) RDX Ribbon LS (PRC Key No. X-4712)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U.N. PROPER SHIPPING NAME AND NUMBER:</strong> Detonator assemblies, non-electric, [for blasting], UN0361</td>
<td></td>
</tr>
<tr>
<td><strong>U.N. CLASSIFICATION CODE:</strong> 1.4B</td>
<td></td>
</tr>
</tbody>
</table>
REFERENCE NUMBER
EX1994010031

PRODUCT DESIGNATION/PART NUMBER
EZTL Non-Electric Detonator Assembly, EZTL (special packaging)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0289

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER
EX1997010143

PRODUCT DESIGNATION/PART NUMBER
50 grains/ft (Nom.) HMX Lo Profile (PRC Key No. X-4711)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, non-electric, [for blasting], UN0029

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER
EX1994010120

PRODUCT DESIGNATION/PART NUMBER
Detonators (High Strength Caps)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0289

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER
EX1997010144

PRODUCT DESIGNATION/PART NUMBER
60 grains/ft (Nom.) HMX Nylon (PRC Key No. X-4710)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, non-electric, [for blasting], UN0029

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER
EX1994010119

PRODUCT DESIGNATION/PART NUMBER
DEI-MEXICO Instant Non-Electric Detonator (High Strength Cap)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D
REFERENCE NUMBER: EX2000020062  
PRODUCT DESIGNATION/PART NUMBER: WST0334-5, WST0334-4, WST0334-3, WST0334-2, WST0334-1

U.N. PROPER SHIPPING NAME AND NUMBER: Detonators, non-electric, [for blasting], UN0029

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER: EX1994010192  
PRODUCT DESIGNATION/PART NUMBER: Boostinator

U.N. PROPER SHIPPING NAME AND NUMBER: Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER: EX1992020037  
PRODUCT DESIGNATION/PART NUMBER: DET CORD 700-2100 (7 Strand)

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER: EX1996010023  
PRODUCT DESIGNATION/PART NUMBER: Optislide

U.N. PROPER SHIPPING NAME AND NUMBER: Cord, detonating, [flexible], UN0289

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER: EX1997030052  
PRODUCT DESIGNATION/PART NUMBER: 80 grains/ft (Nom.) HNS/PFA LS

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER: EX1987060128  
PRODUCT DESIGNATION/PART NUMBER: Minicap/Nonel Cord Assembly (Millessecond Conector) Iredet MSC (MS Connector Series)
U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1986030070

PRODUCT DESIGNATION/PART NUMBER
B209-131 (M 700 Safety Fuse)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
EX1993100010

PRODUCT DESIGNATION/PART NUMBER
Primadet spooled non-electric detonator assemblies

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX2002040362

PRODUCT DESIGNATION/PART NUMBER
Low Flex Detonating Cord

NOTES:
This classification is valid for a family of detonating cord products containing from 18 to 600 grains of PETN per linear foot.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, electric, [for blasting], UN0255

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
EX1996100098

PRODUCT DESIGNATION/PART NUMBER
SCB Seismic Detonator

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, detonating, [flexible], UN0065

U.N. CLASSIFICATION CODE: 1.1D
REFERENCES NUMBER
EX2002040363

PRODUCT DESIGNATION/PART NUMBER
Primasheal Linear Explosives

NOTES:
This classification is valid for a family of detonating cords containing from 10.5 to 600 grains of PETN composition per linear foot of cord.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
EX1996010025

PRODUCT DESIGNATION/PART NUMBER
Optitrunkline

U.N. PROPER SHIPPING NAME AND NUMBER:
Cord, igniter, UN0066

U.N. CLASSIFICATION CODE: 1.4G

REFERENCE NUMBER
EX1995120031

PRODUCT DESIGNATION/PART NUMBER
Thermalite Igniter Cord - CMMPM

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER
EX1996010024

PRODUCT DESIGNATION/PART NUMBER
Optisurface

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotetramethylenetetranitramine, desensitized [or] Octogen, desensitized [or] HMX, desensitized, UN0484

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030175

PRODUCT DESIGNATION/PART NUMBER
HMX "Desensitized" (1% wax, 0.5% Graphite)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

Tracking No: 2003080105
REFERENCE NUMBER: EX1994040177
PRODUCT DESIGNATION/PART NUMBER: EBCo PrimaDet "Detpak" Figure 80 Non-Electric Detonator Assemblies

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotetramethylene tetranitramine, wetted [or] HMX, wetted [or] Octogen, wetted [with not less than 15 percent water, by mass], UN0226

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER: EX1993030173
PRODUCT DESIGNATION/PART NUMBER: HMX, 15% water wet, "Class 1"

U.N. PROPER SHIPPING NAME AND NUMBER:
Fuse, safety, UN0105

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER: EX1998030017
PRODUCT DESIGNATION/PART NUMBER: Uncountered Sword (CMMPM)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotetramethylene tetranitramine, wetted [or] HMX, wetted [or] Octogen, wetted [with not less than 15 percent water, by mass], UN0226

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER: EX1993030174
PRODUCT DESIGNATION/PART NUMBER: HMX, 15% water wet, "Sonderclass"

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric [for blasting], UN0360

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER: EX1997010044
PRODUCT DESIGNATION/PART NUMBER: Fuse Assemblies - CMMPM Manufactured

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethylenetetranitramine, desensitized [or] Cyclonite, desensitized [or] Hexogen, desensitized [or] RDX, desensitized, UN0483

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER: EX1993030180A
PRODUCT DESIGNATION/PART NUMBER: RDX Standard Grade
U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric [for blasting], UN0360

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER
EX1992100065
PRODUCT DESIGNATION/PART NUMBER
Primadet Salt Mine Series

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethyleneoctanitramine, desensitized [or] Cyclonite, desensitized [or] Hexogen, desensitized [or] RDX, desensitized, UN0483

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030179
PRODUCT DESIGNATION/PART NUMBER
RDX, Desensitized, "PG-17" (1.5% wax, 0.5% graphite)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric [for blasting], UN0360

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER
EX1999010230
PRODUCT DESIGNATION/PART NUMBER
CMMPM Detonator Assembly and CMMPM MS Connector

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethyleneoctanitramine, desensitized [or] Cyclonite, desensitized [or] Hexogen, desensitized [or] RDX, desensitized, UN0483

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030180
PRODUCT DESIGNATION/PART NUMBER
RDX, Desensitized, "DA" (1.0% wax, 0.5% graphite)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, electric [for blasting], UN0456

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER
EX1999030158
PRODUCT DESIGNATION/PART NUMBER
EZ Tronic Detonator System (6.5 m Wire Length)
U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethylenetetranitramine, desensitized [or] Cyclonite, desensitized [or] Hexogen, desensitized [or] RDX, desensitized, UN0483

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030181

PRODUCT DESIGNATION/PART NUMBER
RDX, Desensitized, "SC" (1.0% wax, 0.5% graphite)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, electric [for blasting], UN0456

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER
EX1999120055

PRODUCT DESIGNATION/PART NUMBER
6-2065

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethylenetetranitramine, wetted [or] Cyclonite, wetted [or] Hexogen, wetted [or] RDX, wetted [with not less than 15 percent water by mass], UN0072

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030176

PRODUCT DESIGNATION/PART NUMBER
RDX, 15% water wet, "Class 1"

U.N. PROPER SHIPPING NAME AND NUMBER:
Substances, explosive, n.o.s., UN0475

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX2000090055

PRODUCT DESIGNATION/PART NUMBER
0107 Miscellaneous Secondary High Explosives (Twenty-five Explosives)

U.N. PROPER SHIPPING NAME AND NUMBER:
Cyclotrimethylenetetranitramine, wetted [or] Cyclonite, wetted [or] Hexogen, wetted [or] RDX, wetted [with not less than 15 percent water by mass], UN0072

U.N. CLASSIFICATION CODE: 1.1D

REFERENCE NUMBER
EX1993030177

PRODUCT DESIGNATION/PART NUMBER
RDX, 15% water wet, "Class 5"

U.N. PROPER SHIPPING NAME AND NUMBER:

Tracking No: 2003080105
Substances, explosive, n.o.s., UN0475

**U.N. CLASSIFICATION CODE:** 1.1D

**REFERENCE NUMBER**  
EX2000020063

**PRODUCT DESIGNATION/PART NUMBER**  
0380 HMX / Aluminum Powder

**U.N. PROPER SHIPPING NAME AND NUMBER:**  
Cyclotrimethylenetetranitramine, wetted [or] Cyclonite, wetted [or] Hexogen, wetted [or] RDX, wetted [with not less than 15 percent water by mass], UN0072

**U.N. CLASSIFICATION CODE:** 1.1D

**REFERENCE NUMBER**  
EX1993030178

**PRODUCT DESIGNATION/PART NUMBER**  
RDX, 15% water wet, "Class 7"

**U.N. PROPER SHIPPING NAME AND NUMBER:**  
Substances, explosive, n.o.s., UN0480

**U.N. CLASSIFICATION CODE:** 1.4D

**REFERENCE NUMBER**  
EX2000090056

**PRODUCT DESIGNATION/PART NUMBER**  
Exudation Contaminated Material

**U.N. PROPER SHIPPING NAME AND NUMBER:**  
Detonator assemblies, non-electric [for blasting], UN0360

**U.N. CLASSIFICATION CODE:** 1.1B

**REFERENCE NUMBER**  
EX1998100021

**PRODUCT DESIGNATION/PART NUMBER**  
"Digidet Electronic Delay Detonator" and "Digidet Electronic Delay Detonator, EZTL"

**U.N. PROPER SHIPPING NAME AND NUMBER:**  
Substances, explosive, n.o.s., UN0480

**U.N. CLASSIFICATION CODE:** 1.4D

**REFERENCE NUMBER**  
EX2000100120

**PRODUCT DESIGNATION/PART NUMBER**  
0341 Explosive Contaminated Trash

**U.N. PROPER SHIPPING NAME AND NUMBER:**  
Detonator assemblies, non-electric [for blasting], UN0360

**U.N. CLASSIFICATION CODE:** 1.1B
REFERENCE NUMBER: EX1993010191
PRODUCT DESIGNATION/PART NUMBER: EBCo "Detpak" Non-Electric Delay Detonator Assemblies, EZ-DET, (EBCo Detpak Non-Electric Detonator Assemblies) EZTL (EZ Trunkline)

U.N. PROPER SHIPPING NAME AND NUMBER: Not regulated as an explosive, UN0000

U.N. CLASSIFICATION CODE: 00

REFERENCE NUMBER: EX1993090115
PRODUCT DESIGNATION/PART NUMBER: Shock Tube

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER: EX2002010273
PRODUCT DESIGNATION/PART NUMBER: EBCo "DETPAK" Detonator Assembly (MS unit)

NOTES:
This classification is only valid when the non-electric detonators have shock tubing not less than 50 feet in length and packaged as follows: Inner Packaging - Corrugated fiberboard compartments in the outer packaging, each containing not more than fifteen (15) devices. Outer Packaging - Specification 4G fiberboard box, each containing one or two inner packagings.

U.N. PROPER SHIPPING NAME AND NUMBER: Fuse, igniter [tubular metal clad], UN0103

U.N. CLASSIFICATION CODE: 1.4G

REFERENCE NUMBER: EX1993090180
PRODUCT DESIGNATION/PART NUMBER: Connector, Thermalite (Manufactured in Mexico)

U.N. PROPER SHIPPING NAME AND NUMBER: Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER: EX2001010211
PRODUCT DESIGNATION/PART NUMBER: EBCo EZDET Non-electric Detonator Assembly (Shock Tube Length: 24 ft)
**U.N. PROPER SHIPPING NAME AND NUMBER:**
Detonators, non-electric, [for blasting], UN0029

**U.N. CLASSIFICATION CODE:** 1.1B

**REFERENCE NUMBER**
EX2001020253

**PRODUCT DESIGNATION/PART NUMBER**
DEL-MEXICO Instant Caps (High Strength Cap, Mini Cap, Micro Cap)

**U.N. PROPER SHIPPING NAME AND NUMBER:**
Detonator assemblies, non-electric, [for blasting], UN0361

**U.N. CLASSIFICATION CODE:** 1.4B

**REFERENCE NUMBER**
EX1993100012

**PRODUCT DESIGNATION/PART NUMBER**
Lead in Line (LIL) spooled non-electric detonator assemblies

**U.N. PROPER SHIPPING NAME AND NUMBER:**
Detonators, non-electric, [for blasting], UN0267

**U.N. CLASSIFICATION CODE:** 1.4B

**REFERENCE NUMBER**
EX2002010271

**PRODUCT DESIGNATION/PART NUMBER**
Detonators, Elemented (High Strength Cap), Detonators, Elemented (Mini Cap), Detonators, Elemented (Micro Cap)

**NOTES:**
This classification is only valid when the non-electric detonators are packaged by one of the two following methods:
Packaging Method for Detonators Containing More Than 550 Milligrams of PETN --
Inner Packaging - Trayblock, flame retarded compressed pulpboard with recessed cavities and a chipboard oversleeve, each containing not more than twenty-five (25) detonators in up to a 5x5 offset array with a unit-to-unit distance not less than 1.25 inches between any two devices. Intermediate Packaging - Box, fiberboard, each containing not more than four (4) inner packagings which have been previously overpacked in a foil barrier bag. Outer Packaging - Specification 4G fiberboard box, each containing one intermediate packaging.
NOTE: Con’t – EX2002010271

Packaging Method for Detonators containing 550 milligrams or less of PETN:
Inner Packaging - Trayblock, flame retarded compressed pulpboard with recessed
cavities and a chipboard oversleeve, each containing not more than fifty (50) detonators in
up to a 5x10 offset array with a distance not less than 0.625 inches between any two
devices. Intermediate Packaging - Box, fiberboard, each containing not more than four
(4) inner packagings which have been previously overpacked in a foil barrier bag. Outer
Packaging - Specification 4G fiberboard box, each containing one intermediate
packaging.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER       PRODUCT DESIGNATION/PART NUMBER
EX2002010272             EBCp EZ DET Non-electric Detonator Assembly

NOTES:
This classification is only valid when the non-electric detonator assemblies have shock
tubing not less than 12 feet in length and are packaged as follows: Inner Packaging -
Fiberboard inset compartments, in the outer packaging, each containing not more than
forty-five (45) devices. Outer Packaging - Specification 4G fiberboard box, each
containing one or two inner packagings.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonators, non-electric, [for blasting], UN0029

U.N. CLASSIFICATION CODE: 1.1B

REFERENCE NUMBER       PRODUCT DESIGNATION/PART NUMBER
EX2001020254             Detonators Elemented (No Drawing Number) (High
                          Strength Cap, Mini Cap, Micro Cap)

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B
REFERENCE NUMBER  
EX2002040364

PRODUCT DESIGNATION/PART NUMBER  
EBCo MS Harbor Master

NOTES:
This classification is only valid when the detonator assemblies are not less than 30 feet in length and are packaged in the following manner:
For 30 foot lengths only -
Inner Packaging - Bundles, affixed with wire, each containing not less than twenty (20) assemblies.
Outer Packaging - Specification 4G fiberboard box, each containing not more than four (4) inner packagings.

For 50 foot and longer lengths -
Inner Packaging - Bundles, affixed with wire, each containing not more than five (5) assemblies.
Outer Packaging - Specification 4G fiberboard box, each containing not more than twenty-eight (28) inner packagings.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER  
EX2002060005

PRODUCT DESIGNATION/PART NUMBER  
DUAL EZTL non-electric delay detonator

NOTES:
This classification is only valid when the non-electric detonator body is contained within a separately molded plastic connector block, the shock tubing does not exceed 0.15 inches in diameter and is not less than 12 feet in length, and the detonator assemblies are packaged as follows:
Inner Packaging - Not necessary
Outer Packaging - Specification 4G fiberboard box, each containing not more than ninety (90) devices.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B
REFERENCE NUMBER  | PRODUCT DESIGNATION/PART NUMBER  
EX2002060006     | OPTISURFACE II (240) 

NOTES: 
This classification is only valid when the non-electric detonator body is contained within a separately molded plastic connector block, the shock tubing does not exceed 0.118 inches in diameter, the lead azide base charge does not exceed 260 milligrams, and the detonator assemblies are packaged as follows: 
Inner Packaging - Dividers, cardboard egg-crate design, each containing one device per cell and not more than one hundred (100) devices in up to a 10x10 array. 
Outer Packaging - Specification 4G fiberboard box, each containing not more than two inner packagings, separated with a fiberboard pad.

U.N. PROPER SHIPPING NAME AND NUMBER: 
Detonator assemblies, non-electric, [for blasting], UN0361 

U.N. CLASSIFICATION CODE: 1.4B 

REFERENCE NUMBER  | PRODUCT DESIGNATION/PART NUMBER  
EX2002060007     | OPTISURFACE II (120) 

NOTES: 
This classification is only valid when the non-electric detonator body is contained within a separately molded plastic connector block, the shock tubing does not exceed 0.118 inches in diameter, the lead azide prime charge does not exceed 100 milligrams, the PETN base charge does not exceed 140 milligrams and the detonator assemblies are packaged as follows: 
Inner Packaging - Dividers, cardboard egg-crate design, each containing one device per cell and not more than one hundred (100) devices in up to a 10x10 array. 
Outer Packaging - Specification 4G fiberboard box, each containing not more than two inner packagings, separated with a fiberboard pad.

U.N. PROPER SHIPPING NAME AND NUMBER: 
Detonator assemblies, non-electric, [for blasting], UN0361 

U.N. CLASSIFICATION CODE: 1.4B 

Tracking No: 2003080105
REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX2002060008  OPTI-TL II (240)

NOTES:
This classification is only valid when the non-electric detonator body is contained within
a separately molded plastic connector block, the shock tubing does not exceed 0.118
inches, the shock tubing is not less than 12 feet in length, the lead azide base charge does
not exceed 250 milligrams and the detonator assemblies are packaged as follows:
Inner Packaging - Row Dividers, fiberboard, dividing the outer package contents in up to
three rows.
Outer Packaging - Specification 4G fiberboard box, each containing not more than one
hundred (100) non-electric detonator assemblies.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX2002060009  OPTI-TL II (120)

NOTES:
This classification is only valid when the non-electric detonator body is contained within
a separately molded plastic connector block, the shock tubing does not exceed 0.118
inches, the shock tubing is not less than 12 feet in length, the lead azide prime charge
does not exceed 105 milligrams, the PETN base charge does not exceed 140 milligrams
and the non-electric detonator assemblies are packaged as follows:
Inner Packaging - Row Dividers, fiberboard, dividing the outer package contents in up to
three rows.
Outer Packaging - Specification 4G fiberboard box, each containing not more than one
hundred (100) non-electric detonator assemblies.

U.N. PROPER SHIPPING NAME AND NUMBER:
Detonator assemblies, non-electric, [for blasting], UN0361

U.N. CLASSIFICATION CODE: 1.4B
REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX2002090260     EBCo EZ DET Non-Electric Detonator Assembly,
                    EBCo MS Unit Non-Electric Detonator Assembly

NOTES:
This classification is only valid when the shock tube lengths are not less than 80 feet, the
shock tube diameters are not more than 0.150 inches and the electric detonators are
packaged as follows:
Inner Packaging - Fiberboard separator in outer packaging.
Outer Packaging - Specification 4G fiberboard box with two compartments, each
containing not more than twenty-five (25) devices per compartment and not more than
fifty (50) devices per outer package.

U.N. PROPER SHIPPING NAME AND NUMBER:
Substances, explosive, n.o.s., UN0480

U.N. CLASSIFICATION CODE: 1.4D

REFERENCE NUMBER  PRODUCT DESIGNATION/PART NUMBER
EX2002060166     Explosives Contaminated Materials-Graham
                    (Revised and Amended Listing - June 2002)

NOTES:
This classification is only valid when the explosives contaminated materials contain not
more than eight (8) percent by weight of any or all explosive substances. The following
packaging method is assigned:
Inner Packaging - Bags, static-resistant plastic, each containing not more than twenty-five
(25) pounds net weight of explosive-contaminated materials.
Outer Packaging - Specification 1G fiberdrum, or Specification 4G fiberboard box, each
containing not more than eight (8) inner packagings.

DATED: March 8, 2004

Approved by:

[Signature]
Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety
**Fax Cover Sheet**

Fax number: 202-366-3308

<table>
<thead>
<tr>
<th>Tracking #</th>
<th>2003080105</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pages:</td>
<td>24</td>
</tr>
</tbody>
</table>

**To:** MARK ANDERSON

**Organization:** DYNO NOBEL INC.

**Telephone:**

Fax: 860-843-2604

**From:** CAROL MONROE

**Dept:** EXEMPTIONS & APPROVALS

**Telephone:** 202-366-4511

**Subject:** APPROVAL