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REPORT DOCUMENTATION PAGE

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1b. RESTRICTIVE MARKINGS

3. DISTRIBUTION AVAILABILITY STATEMENT
UNLIMITED

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4. PERFORMING ORGANIZATION REPORT NUMBER(S)
DOD POP TR/AYD 92-025

5. MONITORING ORGANIZATION

6a. NAME OF PERFORMING ORGANIZATION
PACKAGING DIVISION, AED

6b. OFFICE SYMBOL
(if applicable)
SMCAR-AEP

7a. NAME OF MONITORING ORGANIZATION

6c. ADDRESS (City, State, and ZIP Code)
U.S. ARMY ARDEC
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7b. ADDRESS (City, State, and ZIP Code)

8a. NAME OF FUNDING / SPONSORING ORGANIZATION

8b. OFFICE SYMBOL
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9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
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8c. ADDRESS (City, State, and ZIP Code)

10. SOURCE OF FUNDING NUMBERS

PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.

11. TITLE (Include Security Classification)
PERFORMANCE ORIENTED PACKAGING TESTING OF SAFETY AND ARMING ASSEMBLIES FOR THE BLU 91/B AND BLU 92/B MINES Packed 144 Per Wood Box

12. PERSONAL AUTHOR(S)
DZURY, CHRIS

13a. TYPE OF REPORT
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16. SUPPLEMENTARY NOTATION
SEE ATTACHED

17. COSATI CODES		
FIELD	GROUP	SUB-GROUP

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

This report contains the test results and test procedures for Performance Oriented Packaging Tests performed on the pack for both the Safety and Arming Assembly for the BLU 91/B Mine and the BLU 92/B Mine. This pack consists of 144 Safety and Arming Assemblies in a fiberboard box inner pack with a wooden box outer pack. Both Safety and Arming Assemblies are packed in the same way and have the same Proper Shipping Name and Identification Number which is "Fuzes, Detonating UN 0257".

93-01778



20. DISTRIBUTION AVAILABILITY STATEMENT
 UNCLASSIFIED UNLIMITED SAME AS RPT DTIC USERS

21. ABSTRACT SECURITY CLASSIFICATION
UNCLASSIFIED

22a. NAME OF RESPONSIBLE INDIVIDUAL
CHRIS DZURY

22b. TELEPHONE (Include Area Code)
(201) 724-2515

22c. OFFICE SYMBOL
SMCAR-AEP

1. DATA SHEET

Container:

Type: Box

UN Code: 4C
Specification Number: PPP-B-621
Material: Wood
Capacity: 2126.67 cubic inches
Dimensions: Inside: 17 3/4 X 13 1/2 X 8 7/8
Tolerance: \pm 1/8
Packing and Marking Drawing: 12937990
Gross Container Weight: 43 lbs
Closure Method (Method/Type): Metal Strapping

Product 1:

Name: Safety and Arming Assembly for the BLU 91/B Mine
NSN: 1345-01-153-2816
Proper Shipping Name: Fuzes, Detonating
Identification Number: UN 0257
Physical State: Solid
Quantity per Container: 144

Product 2:

Name: Safety and Arming Assembly for the BLU 92/B Mine
NSN: 1345-01-204-4282
Proper Shipping Name: Fuzes, Detonating
Identification Number: 0257
Physical State: Solid
Quantity per Container: 144

2. BACKGROUND:

This report contains the testing and test results performed on the pack for both the Safety and Arming Assembly for the BLU 91/B Mine and for the Safety and Arming Assembly for the BLU 92/B Mine. Both Safety and Arming Devices are packed twenty-four (24) S & A's per PVC plastic tray, six (6) trays (144 S & A's total) per fiberboard box. A barrier bag is sealed around the trays inside of the fiberboard box, with a bag of desiccant inside, for moisture protection. Each tray has twenty-four S & A compartments and a PVC lid which snaps into place on top of the tray. The sealed fiberboard box is then placed into a wood box which is sealed with metal strapping. The two types of S & A Assemblies are always shipped separately.

For purposes of testing, the fiberboard box was packed with steel weights and filler. After the the wood box was packed out, the final weight of each box tested was 62 lbs with the exception of one box, which was drop tested. Its final weight was 47.5 lbs. Each wood box was sealed with metal strapping.

3. TESTING AND RESULTS:

The following tests were conducted in accordance with Code of Federal Regulations Title 49:

a. Stacking Test:

Three boxes were placed under a load of 2560 lbs. for 24 hours. This exceeded the POP requirement which is the weight a box would see at the bottom of a stack ten feet high. There was no leakage or spillage of contents from the fiberboard box innerpacks or wood box outerpacks.

b. Loose Cargo Test:

Three boxes, which were stack tested, were loose cargo tested for 1 hour on a table with a metal floor and wood constraining walls. There was no leakage or spillage of contents from the fiberboard box innerpacks or wood box outerpacks.

c. Drop Testing:

One box with no prior testing was drop tested onto a metal surface from four feet in the following orientations:

1. top
2. bottom
3. long side
4. short side
5. directly on a corner

There was no leakage or spillage of contents from the wood box.

4. CONCLUSION:

This packaging configuration has successfully met the requirements of Performance Oriented Packaging Testing (no leakage or spillage of contents from the packaging) and is considered safe for domestic and international shipment.

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