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2a. SECURITY CLASSIFICATION AUTHORITY

3. DISTRIBUTION / AVAILABILITY OF REPORT

2b. DECLASSIFICATION / DOWNGRADING SCHEDULE

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(If applicable)
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6c. ADDRESS (City, State, and ZIP Code)
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Picatinny Arsenal, NJ 07806-5000

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Performance Oriented Packaging Testing of Cartridge, 120mm, M830

12. PERSONAL AUTHOR(S)
Mr. Raymond Dunscomb, Packaging Engineer

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17. COSATI CODES		
FIELD	GROUP	SUB-GROUP

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
Performance Oriented Packaging, POP, Cartridge, M830,
Metal Ammunition Container

19. ABSTRACT (Continue on reverse if necessary and identify by block number)
This report contains the testing and test results performed on the M830 cartridge, 120mm
(packed 1 cartridge per metal container).

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21. ABSTRACT SECURITY CLASSIFICATION
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22a. NAME OF RESPONSIBLE INDIVIDUAL
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22c. OFFICE SYMBOL
SMCAR-AEP

1. DATA

CONTAINER:

Type: Drum
UN Code: 1A2
Nomenclature: Container, Ammo, Metal
Specification Number: MIL-C-70478
Drawing Number: 9386831
Material: Steel
Capacity: 57.4 lbs (26.0 kg)
Dimensions: 44.50 in. x 7.75 in. x 7.75 in. (113 cm x 19.7 cm x 19.7 cm)
Gross Weight: 75.4 lbs (34.2 kg)

PRODUCT:

Name: Cartridge, 120mm, HEAT-MP-T, M830
Drawing Number: 12526622
United Nations Number: 0321
United Nations Packing Group: II
Physical State: Solid
Amount per Container: 1 Cartridge

2. BACKGROUND:

This report contains the testing and test results performed on the M830 Cartridge. The metal container (PN 9386831) contains 1 cartridge and is packed in accordance with drawing no. 12630718. Tests were performed in accordance with TECOM Safety Certification Tests which are more severe than Performance Oriented Packaging test regulations.

3. TEST:

DROP:

Containers were dropped twice each from 2.1 meters (7 feet). The containers were dropped on 3 inch solid steel plate reinforced by 18 inches of crushed rock in 5 different orientations. Orientations were as follows:

Bottom
Top
Side
Bottom Corner
Top Corner

A total of sixty containers were tested at -46°C and +63°C.

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LOOSE CARGO VIBRATION:

Loose Cargo Vibration test was performed on 60 containers for 1/2 hour each, after previously being subjected to secure cargo vibration for 6 hours. The frequency & input applied (1 in. Double Amplitude at 5 Hz) is considerably more severe than the values specified for POP certification. Therefore the requirements for this testing were met.

4. RESULTS:

The containers passed all tests since none of the contents were discharged. They are considered safe for international transportation in accordance with Performance Oriented Packaging regulations.

5. REFERENCED MATERIAL:

- a. United Nations, "Transport of Dangerous Goods", 6th Edition.
- b. Federal Register Part II



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