Performance Oriented Packaging Testing of M143E1 S&A

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Final

FROM TO

This report contains the testing and test results performed on the M143E1 Patriot S&A Device (packed 1 S&A/drum).
1. **DATA:**

**CONTAINER:**

Type: Drum, Metal  
UN Code: 1A2  
Nomenclature: Drum, Metal, Shipping  
Specification Number: MS27664  
Drawing Number: 9282999-63  
Material: Metal  
Capacity: 2.27 kg (5 lbs)  
Dimensions: 35.9 cm H x 26.0 cm dia. (14.12 in H x 10.26 in dia)  
Gross Weight: 6.8 kg (15 lbs)

**PRODUCT:**

Name: M143E1 S&A  
Drawing Number: 9331669  
United Nations Number: 0410  
United Nations Packing Group: II  
Physical State: Solid  
Amount per Container: 1 S&A

2. **BACKGROUND:**

This report contains the testing and test results performed on the M143E1 S&A. The metal drum (PN 9282999-63) contains 1 S&A and is packed in accordance with drawing no. 9331669. Tests were performed in accordance with Performance Oriented Packaging test regulations.

3. **TEST:**

**DROP:**

Drums were dropped once each from 1.2 meters (4 feet). The drums were dropped on 3 inch solid steel plate reinforced by 18 inches of crushed rock in 2 different orientations. The orientations were as follows:

- 3 drops diagonally on chime  
- 3 drops on longitudinal seam

**LOOSE CARGO VIBRATION:**

Vibration tests were performed on 3 drums for 1 hour each. The frequency applied caused the drum to be raised from the vibrating platform 1/16 in. (1.6mm).
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:

b. Federal Register Part II