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Sniezek, Frank, Michael

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

This report contains the testing and test results performed on the Flexible Linear Shaped Charge packaged in a wood box.

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Sniezek, Frank M.

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I. REPORT NUMBER: DODPOPTR/AYD89002

II. TITLE: Performance Oriented Packaging Testing of Flexible Linear Shaped Charges in Wood Box

AUTHOR: Frank M. Sniezek

PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army
Armament Research, Development, and Engineering Center
HQ. U.S. Armament, Munitions, and Chemical Command
Picatinny Arsenal, New Jersey 07806-5000

DATE: 05 April 1989

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1. DATA SHEET

CONTAINER:

Type: Box
UN Code: 4C1
Nomenclature: Package, Shipping and Storage (For Charge,
Shaped, Linear, Flexible)
Specification Number: N/A
Drawing Number: 9332432
Material: Natural Wood
Capacity: 8.1 lbs
Dimensions: 50.25 x 5.50 x 2.06
Tare Weight: 7.8 lbs

PRODUCT:

Name: Flexible Linear Shaped Charge
Drawing Number: See Table Below.
United Nations Number: 0439
United Nations Packing Group: II
Physical State: Solid
Amount per Container: See Table Below.

<u>DRAWING NUMBER</u>	<u>AMOUNT PER CONTAINER</u>
5206212-1	6
5206212-2	6
5206212-3	6
5206212-4	6
5206212-5	6
5206213-1	3
5206213-2	3
5206213-3	3
5206213-4	3
5206213-5	3
5206213-6	3

2. BACKGROUND:

This report contains the testing and test results performed on the Flexible Linear Shaped Charge packaged in a wood box. The testing was performed exclusively using inert charges (5206213-3) weighted up to the heaviest charges (5206213-6) packaged IAW 9332432 for Performance Oriented Packaging Certification. Tests were performed in accordance with Performance Oriented Packaging test regulations.

3. TEST:

3.a. The containers were dropped once each from 7 feet (2.1 meters) in lieu of UN requirements of 4 feet (1.2 meters). The containers were dropped on a 3 inch solid steel plate reinforced by 18 inches of crushed rock in 6 different orientations. The tests were conducted at 3 temperatures (6 total containers). The orientations and temperatures were as follows:

TOP: +160° F
BOTTOM: -65° F
SIDE: Ambient
RIGHT END: Ambient
45 ON RIGHT END: +160° F
LEFT END: -65° F

Note: This exceeds the UN requirement which is 5 containers dropped once in 5 orientations (bottom, top, long side, and short side-end) at ambient temperature.

3.b. Stacking test was performed by adding a weight equivalent to a 16' (4.9 meters) stack height for 48 hours at 23° C (75° F) in lieu of 3 meters (9.8 feet) at 24 hours.

4. RESULTS:

The containers passed all tests. None of the contents of the containers were discharged or spilled. They are considered safe for international transportation in accordance with Performance Oriented Packaging Regulations. ~~EX~~

Reference Material: United Nations "Transport of Dangerous Goods",
Fourth Edition