This POP report is for the Mine, Apers, M16A1 or M16A2, which is packaged 4 mines/Mil-B-46506 wirebound box. This report describes the results of testing conducted on a similar packaging which is used as an analogy for this item.
I. REPORT NUMBER: DOD POP HMTR/AYD 91-016

II. TITLE: Performance Oriented Packaging Report for Mine, Apers, M16A1 or M16A2

AUTHOR: Frank M. Sniezek

PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army
ARDEC, SMCAR-AEP
HQ, U.S. Army Armament, Munitions, and Chemical Command
Picatinny Arsenal, NJ 07806-5000

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Approved for public release; Distribution is unlimited
1. DATA SHEET

CONTAINER

Type: Box
UN Code: 4C1
Nomenclature: Box, Wirebound, Packing, Ammunition, for Mine, Apers, M16A1 or M16A2 (With Fuze, Mine, Combination, M605)

Specification Number: Mil-B-46506
Drawing Number: 7548179
Material: Wood and wire
Gross Weight: 39.0 pounds
Outside Dimensions: 15 3/8 in. x 9 13/16 in. x 8 9/32 in.
Inside Dimensions: 13 in. x 8 3/4 in. x 6 5/8 in.

PRODUCT

Name: Mine, Apers, M16A1 or M16A2
Drawing Number: 8796365
United Nations Number: 0321
Physical State: Solid
Amount per Container: 4

2. BACKGROUND, TESTS, AND RESULTS

Reference the following documents:
b. Federal Register dated December 21, 1990
c. Federal Register Notice dated February 21, 1991

Instead of testing the specific container used for the M16A1 or M16A2 Apers Mine, wirebound boxes built to the same specification, but with the following weight and dimensions were tested.

Gross Weight: 87 lb.
Inside Dimensions: 13 x 10 7/16 x 6 15/16

This falls within the guidelines for analogy IAW Variation III of Reference 2c.

A Stacking Test was conducted on 3 containers with a weight of 2500 pounds for 24 hours. This weight exceeds the minimum requirement of a weight equivalent to a 10 foot stack height which is 1314 pounds.

A Loose Cargo Test was conducted IAW with the Federal Register on the same 3 containers. The packages were tested at a vibration table frequency such that the bottom of the packages was raised 1/2 inch from the platform, which exceeds the requirement of 1/16 inch.

A Four Foot Drop Test was conducted on one of the containers that was subjected to the Loose Cargo Test. One container was dropped five times at different orientations as follows: top, bottom, long side, short side, and a top corner at the closure. This exceeds the requirement of one drop per container.

Test results indicate that there was no leakage or spillage of the containers following any of the tests conducted, and as such, meets the requirements of the Federal Register and The United Nations Transport of Dangerous Goods.