This POP report is for the Fuse, Blasting, Time, M700 which is packaged 4000 feet/ Mil-B-2427 wood 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 91-011

II. TITLE: Performance Oriented Packaging Report for Fuse, Blasting, Time, M700

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PERFORMING ACTIVITY: ARDEC

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1. DATA SHEET

CONTAINER
Type: Box
UN Code: 4C1
Nomenclature: Box, Packing, Ammunition for Fuse, Blasting, Time, M700
Specification Number: Type II, Grade A, Class 2, Mil-B-2427
Drawing Number: 9242365 (Level A) or 9242367 (CONUS)
Material: Wood
Gross Weight: 107 pounds (Level A)
55 pounds (CONUS)
Outside Dimensions: 30 1/2 x 15 5/16 x 17 7/32 (Level A)
31 5/8 x 15 13/16 x 16 19/32 (CONUS)
Inside Dimensions: 27 3/8 x 13 3/4 x 14 7/8 (Level A)
28 1/2 x 14 1/4 x 14 1/4 (CONUS)

PRODUCT
Name: Fuse, Blasting, Time, M700
Specification Number: Mil-F-45144
United Nations Number: 0105
Physical State: Solid
Amount per Container: 4000 feet

2. BACKGROUND, TESTS, AND RESULTS
Reference the following document:
a. 49CFR, October 1, 1991 Edition

Instead of testing the wooden box containing the actual item, three wooden boxes built to the same specification but packed with a fiberboard box filled with sand were tested. The corresponding weight and dimensions of the tested box are as follows:

Gross Weight: 150 pounds
Outside Dimensions: 31 5/8 x 16 x 17 3/8
Inside Dimensions: 28 1/2 x 14 1/4 x 14 7/8

This falls within the guidelines for analogy IAW Variation III of para. 178.601(g)(3) of Reference a.

A Stacking Test was conducted on one container with a weight of 1600 pounds for 72 hours in lieu of three containers for 24 hours. This weight exceeds the minimum requirement for a 10 foot stack height which is 1036 pounds.

A Loose Cargo Test was conducted on three containers for one hour. The packages were tested at a vibration table frequency such that the bottom of the packages were raised 1/4 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 indicated no leakage or spillage of the contents from the containers following any of the tests conducted, meeting the requirements of the 49 CFR.