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19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
This POP report is for the M82 Percussion Primer, which is packaged 500 of Primer Percussion - Electric M75 or Primer Percussion M82/Mil-B-2427 wood box. This report describes the results of testing conducted on a similar packaging which is used as an analogy for these items.					
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I. REPORT NUMBER: DOD POP HMTR/AYD 92-009

II. TITLE: Performance Oriented Packaging Report for Primer, Percussion
-Electric M75 or Percussion M82

AUTHOR: Frank M. Snizek

PERFORMING ACTIVITY: ARDEC

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1. DATA SHEET

CONTAINER

Type: Box
UN Code: 4C1
Nomenclature: Box, Packing, Ammunition, for Primer, Percussion-Electric M75 or Percussion M82
Specification Number: Type II, Grade A, Class 2, Mil-B-2427
Drawing Number: 8796679
Material: Wood
Gross Weight: 49 pounds
Outside Dimensions: 24 1/8 x 12 x 11 3/16
Inside Dimensions: 21 1/4 x 10 1/2 x 9

PRODUCT

Name: Primer Percussion - Electric M75 or Percussion M82
Drawing Number: 8861197
United Nations Number: 0314
Physical State: Solid
Amount per Container: 500 - Primer Percussion - Electric M75
500 - Primer Percussion M82

2. BACKGROUND, TESTS, AND RESULTS

Reference the following document:
a. 49CFR, October 1, 1991 Edition

Instead of testing the specific container used for the M82 or M75 Percussion Primer, three wooden boxes built to the same specification but packed with a fiberboard box loaded with sand were tested. The corresponding weight and dimensions of the tested box are as follows:

Gross Weight: 150 pounds
Outside Dimensions: 26 1/4 x 14 3/8 x 12 3/4
Inside Dimensions: 23 1/8 x 11 3/4 x 10 11/16

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 1412 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 49CFR.