Performance Oriented Package Testing of the M230 Propelling Charge

This report documents a Performance Oriented Packaging (POP) test analogy for the M230 Propelling Charge. This analogy is based on previous POP testing of the M205, M218, M219, and M220 Propelling Charges.
I. Report Number: DOD POP HM TR/AYD 93-005

II. Title: Performance Oriented Packaging Testing for M230.
Packed 200 per fiberboard box in accordance with
drawing 12952060.

Author: Dmitry Kirshteyn

Performing Activity: ARDEC

Address: Department of the Army
Commander, U.S. Army ARDEC
Picatinny Arsenal, NJ 07806-5000
Attn: SMCAR-AEP (Bldg. 455)

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1. **Data:**

   **Container:**
   
   - **Type:** Box, Fiberboard
   - **UN Code:** 4G
   - **Specification Number:** PPP-B-636
   - **Material:** Fiberboard
   - **Capacity:** 129.8 liters
   - **Dimensions:** 69.8 cm x 61.8 cm x 30.1 cm
   - **Gross Weight:** 34.6 kg

   **Product:**
   
   - **Name:** M230
   - **Part Number:** 12577522
   - **United Nations Number:** UN 0161
   - **United Nations Packaging Group:** II
   - **United Nations Nomenclature:** POWDER, SMOKELESS
   - **Physical State:** Solid
   - **Amount per Container:** 200 Propelling Charges
   - **NSN:** To be determined
2. References:

a. Code of Federal Regulations, Title 49, Parts 100-180, Oct 1, 92
b. Report, "DOD POP HM TR/AYD 92-026" (enclosed)

3. In accordance with the Code of Federal Regulations, General Requirements paragraph 178.601 (Variation 3), the enclosed test report shall be used as basis for a POP testing analogy for the M230 Propelling Charge. The packing method and materials of construction for the M230 Propellant Charge are identical to those used for the M205, M218, M219, and M220 Propellant Charges (Dwg. # 9313721). Dimensions for the M230 outer fiberboard box are 69.8cm x 61.8cm x 30.1cm versus 70cm x 55.4cm x 39.84cm for the tested configuration. The gross mass of M230 package is 38kg versus 40kg for the tested package. Based upon the similarity in physical characteristics and successful POP test results for the M205, M218, M219, and M220 Prop Charges, the following POP symbol shall be applied to M230 propellant charge containers that are packed IAW ARDEC DWG. 12952060.

4G/Y38/S/**
USA/DOD/AYD

** Insert last two digits of year in which container is packed out