



U.S. Department  
of Transportation

1200 New Jersey Avenue SE  
Washington, DC 20590

**Pipeline and Hazardous  
Materials Safety  
Administration**

APR 02 2015

Mr. Robert Dritschel  
Reagent Chemical  
115 U.S. Highway 202  
Ringoes, NJ 08551

Reference No. 14-0182

Dear Mr. Dritschel:

This is in response to your recent e-mail requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the requirements for transporting "NA 3178, Smokeless powder for small arms (*100 pounds or less*), 4.1 (flammable solid), Packing Group (PG) I." We have paraphrased your questions and answered them in the order provided.

- Q1. Can any quantity of smokeless powder be classified under the "Consumer commodity, ORM-D" designation?
- A1. The answer is no. The "None" in Column 8A (Packaging Exceptions) of the Hazardous Materials Table (HMT; § 172.101) for the entry "NA 3178, Smokeless powder for small arms, 4.1, PG I," denotes that the HMR does not permit this material to use the limited quantity and consumer commodity exceptions prescribed for PG II and PG III, Division 4.1 materials in § 173.151.
- Q2. Is there any quantity of smokeless powder that can be transported without a hazardous materials bill of lading?
- A2. Division 1.3C or 1.4C smokeless powder for small arms may be reclassified as Division 4.1 provided all the conditions in § 173.171 are met. Division 4.1, PG I material may be transported by motor vehicle under the Materials of Trade (MOTs) exception in § 173.6. To retain its classification as a Division 4.1 material when transported as MOTs, smokeless powder must meet the conditions of both §§ 173.171 and 173.6. These sections together require that smokeless powder:
- must be transported domestically by motor vehicle;
  - must be reclassified in conformance with §§ 173.56 and 173.58;
  - may not exceed 45.5 kg (100 pounds) net mass in one motor vehicle;
  - must be placed only in combination packages –
    - in amounts up to 0.5 kg (1 pound) gross mass per inner packaging,
    - where inner packagings are arranged and protected to prevent simultaneous ignition of the contents,

- where the outer packaging is a UN 4G fiberboard box that meets the PG I performance standard, and
- where the completed package must be the manufacturer's original packaging, or one of equal or greater strength and integrity, and must be the same type that was examined for the material as required in § 173.56;
- must not exceed a net weight of 7.3 kg (16 pounds) in one completed package;
- must be placed in packagings that are sift proof for solids, securely closed, secured against shifting, and protected against damage; and
- must be marked with common name or proper shipping name to identify the material it contains, including the letters "RQ" if it contains a reportable quantity of a hazardous substance.

In addition, the operator of the motor vehicle must be informed of the presence of smokeless powder on board the vehicle and the requirements of § 173.6.

- Q3. Does the driver of any quantity of smokeless powder have to be hazmat trained and/or certified?
- A3. Unless otherwise excepted, the answer is yes. Each hazmat employee affecting the safe commercial transportation of a hazardous material, such as smokeless powder for small arms, must be certified by a hazmat employer as being trained in accordance with 49 CFR Part 172, Subpart H. The hazmat employer must create and retain a record of the employee's training and provide the employee with recurrent hazmat training every three years (see § 172.704 (c) and (d)). In addition, operators of motor vehicles, including personal vehicles, transporting hazardous materials must fulfill the driver training requirements prescribed in §§ 177.800(c) and 177.816. Drivers of smokeless powder reclassified as a Division 4.1 material and transported under the MOTs exception must be trained in the provisions of §§ 173.6 and 173.171, as applicable, to ensure that the smokeless powder is eligible to be reclassified as a Division 4.1 and complies with all applicable conditions in § 173.6 and 173.171 to retain this eligibility. Further, in conformance with the Federal Motor Carrier Safety Administration's regulations, only drivers transporting hazardous materials in vehicles that are required to be placarded under Subpart F of Part 172 of the HMR must have a hazardous materials endorsement on their Commercial Driver's License (see § 383.93).
- Q4. Smokeless powder can be reclassified from Division 1.3 or 1.4 (explosive) to 4.1 for domestic shipments by following the conditions required to qualify for this exception in § 173.171 of the HMR. Does adherence to these noted conditions provide relief from any other HMR requirements?
- A4. Other than as referenced earlier in this letter, the answer is no.
- Q5. What are the HMR's requirements that permit several 8 pound containers weighing less than 100 pounds total to be transported domestically by vessel?

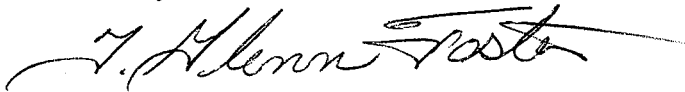
A5. Smokeless powder for small arms that has been approved and classed as Division 1.3C or 1.4C (explosive) may be reclassified as a Division 4.1 material when transported domestically by motor vehicle, rail car, vessel, or cargo-only aircraft, provided the applicable provisions in § 173.171 are met. Section 173.171 requires that:

- These powders must be reclassified in conformance with the provisions prescribed in §§ 173.56 and 173.58 (see § 173.171(a));
- The total quantity of smokeless powder may not exceed 45.5 kg (100 pounds) net mass in one rail car, motor vehicle, or cargo-only aircraft, or in one freight container on a vessel where the vessel contains up to four of these freight containers (see § 173.171(b));
- Only combination packagings with inner packagings not exceeding 3.6 kg (8 pounds) net mass are authorized, where inner packagings must be arranged and protected so as to prevent simultaneous ignition of the contents, and the complete package must be of the same type which has been examined as required in § 173.56 (see § 173.171(c)); and
- Inside packages that have been examined and approved by the Associate Administrator may be packaged in UN 4G fiberboard boxes meeting the PG I performance level, provided all inside containers are packed to prevent shifting and the net weight of smokeless powder in any one completed package does not exceed 7.3 kg (16 pounds) (see § 173.171(d)).

Please note that, in addition to these conditions, all other applicable HMR requirements to the transportation of these materials must be met.

I hope this satisfies your request.

Sincerely,



T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standards and Rulemaking Division

Edmanson  
§ 173.171  
ORM-D  
14-0182

**Dodd, Alice (PHMSA)**

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**From:** Ciccarone, Michael CTR (PHMSA)  
**Sent:** Friday, October 03, 2014 9:39 AM  
**To:** Hazmat Interps  
**Subject:** FW: Smokeless Powder Transportation

Shante and Alice,

Please submit this for a formal letter of interpretation. Mr. Dritschel briefly spoke with Shelby Geller in the HMIC.

Thanks,

Mike

-----Original Message-----

**From:** Bob Dritschel [<mailto:bdritschel@reagentchemical.com>]  
**Sent:** Friday, October 03, 2014 8:29 AM  
**To:** INFOCNTR (PHMSA)  
**Subject:** FW: Smokeless Powder Transportation

I would like to request a formal letter of interpretation for the following questions.

If the formal letter of interpretation can be sent back via email, I would appreciate it.  
If it cannot, please mail the letter to the following address:

Robert Dritschel  
Reagent Chemical  
115 US Hwy 202  
Ringoos, NJ 08551

I am inquiring in regard to the transportation requirements for Smokeless Powder, specifically listed as NA3178

The questions that I have are as follows:

- 1 Can any quantity of smokeless powder be classified under the ORM-D designation?
- 2 Is there any quantity of smokeless powder that can be transported without placarding and a HazMat Bill of Lading?
- 3 Does the driver transporting any quantity of smokeless powder have to be HazMat certified?
- 4 I see in 49 CFR 173.171 that smokeless powder can be reclassified from HazMat Division 1.3 to 4.1 for domestic shipments by following the noted conditions; does the adherence to the noted conditions relieve any of the other requirements for hazardous material transportation?
- 5 What would be the domestic requirements to transport several 8 pound containers weighing less than 100 pounds total in the transportation vessel?

I appreciate your response,

Bob Dritschel