



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

**AUG 24 2012**

Ms. Katie M. Barthlow  
Marketing and Promotions Manager,  
Replacement Parts  
Billco Manufacturing, Inc.  
100 Halstead Boulevard  
Zelienople, PA 16063-9799

Reference No. 12-0014

Dear Ms. Barthlow:

This is in response to your January 13, 2012 e-mail and subsequent telephone conversations with a member of my staff requesting clarification on how to properly describe and transport a two-bottle titration kit that your company manufactures and wants to ship in the United States, to Canada, and internationally under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You state the product is used to measure the concentration level of detergent in a wash tank. You ask that we focus our response on regulations issued in the final rule under Docket No. PHMSA-2009-0126 (HM-215K) (see 76 FR 3308, 1/19/2011), which eliminate the "Consumer commodity, ORM-D" exception under the HMR.

You describe the kit as one outer non-bulk packaging that contains two solutions in separate bottles and other non-hazardous materials, such as beakers and test tubes. You state the first solution is placed in either a 1,500 ml or 500 ml bottle; contains 0.001 to 1 percent phenolphthalein, 2-3 percent methanol, 43-53 percent water, and 47-57 percent ethyl alcohol; has flash point of a 24 °C (75 °F); and is described as "UN 1987, Alcohols, n.o.s., 3 (flammable liquid), PG III, LTD QTY." You state the second solution is placed in a 500 ml bottle, contains less than one percent of "UN 1824 Sodium hydroxide solution, 8 (corrosive), PG II" with water as the remaining ingredient, and is unregulated under the HMR. You enclosed the material safety data sheet (MSDS) for each solution.

The titration kit you describe may be transported as a limited quantity (LTD QTY) flammable liquid under § 173.150(b) of the HMR. The limited quantity provisions for Class 3 materials in § 173.150(b)(3) authorize exceptions from labeling, except when transported by air, and from specification packaging requirements when packaged in combination packagings according to the provisions in this section. Each package must conform to general packaging requirements in subpart B of 49 CFR Part 173 and may not

exceed 30 kg (66 pounds) gross weight. Flammable liquids in Packing Group III may be packed in inner packagings not over 5.0 L (1.3 gallons) net capacity each and packed in strong outer packagings. In addition, placarding of the transport vehicle is not required.

Under the Docket No. HM-215K final rule, the Pipeline and Hazardous Materials Safety Administration revised the HMR requirements for limited quantity hazardous materials to make them more compatible with existing international requirements. Under the new requirements, a package that 1) contains a limited quantity hazardous material, 2) bears the white square-on-point limited quantity marking prescribed in § 172.315(a)(2) on at least one side or one end, and 3) is transported by motor vehicle, or railcar is not required to be accompanied by a shipping paper and marked with the proper shipping name and identification number of each hazardous material it contains (see §§ 172.200(b)(3) and 172.315(a)). When intended for transportation by vessel, the exterior of a cargo transport unit that contains only limited quantity hazardous materials must be marked on one side or one end with the limited quantity mark that is identical to those on the packages it contains but the mark's dimensions must measure a minimum of 250 mm (9.8 inches) on each side.

This final rule also states under § 172.315(d) that as an alternative to the marking requirements in existing § 172.315(a) and (b), for transportation by aircraft until December 31, 2012, and for transportation by all other modes until December 31, 2013, a package containing a limited quantity may continue to be marked in conformance with the square-on-point with Identification Number requirements prescribed in § 172.315 in effect on October 1, 2010. Section 172.315 in the 2010 edition of the HMR states that a proper shipping name is not required to be marked on a package containing a limited quantity when the outer package is marked on at least one side or one end with an identification number displayed inside a white square-on-point configuration that is sized to be readily visible on the package. This section also requires that the border forming the square-on-point of this marking must be at least 2 mm in height and the identification number must be at least 6 mm in height.

Limited quantity hazardous materials offered or intended for transportation by aircraft must bear the white square-on-point limited quantity marking with the symbol “Y” in the center, as prescribed in § 172.315(b)(2), and must also conform to authorized substance and article provisions and the inner and outer package quantity limits in § 173.27(f). Provided some or all of the package's transportation is by aircraft, after January 1, 2013, consumer commodities that are Packing Group II and III flammable liquids may be described in all modes of transport as “ID 8000, Consumer commodity.” Also, hazardous materials intended or offered for transportation in accordance with international standards authorized in §§ 171.12 and 171.22 through 171.26 must comply with the additional conditions and limitations noted in those sections.

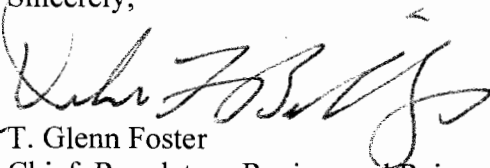
You also ask how the HMR regulate limited quantity hazardous materials that meet the definition of a hazardous substance or hazardous waste, and what the terms “hazardous substance” and “hazardous waste” mean. The HMR define a hazardous substance as a material listed in “Table 1 to Appendix A” of the Hazardous Materials Table (§ 172.101) that is in an amount in one package that meets or exceeds the reportable quantity (RQ)

listed in Table 1 for that material, and a hazardous waste as any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262 (see § 171.8). Limited quantities that meet the definition of a hazardous substance or hazardous waste must display the white square-on-point limited quantity marking prescribed in paragraph § 172.315(b)(2). Also, limited quantity hazardous materials that contain a hazardous substance must continue to be marked to denote the reportable quantity (RQ), including its technical name, in association with the limited quantity marking as prescribed in §§ 172.315(c) and 172.324(c).

Although you did not ask about limited quantity hazardous materials that meet the definition of a marine pollutant, for your information the Docket No. HM-215K final rule mentioned earlier also revised § 172.322(d)(4) to except limited quantity materials from having to bear the marine pollutant mark prescribed in § 172.322(e)(1) when marked in conformance with § 172.315. In addition, the final rule revised §§ 172.312(c)(2) and (c)(3) to except package orientation markings from being placed on packages: 1) prepared in accordance with § 173.150(b) or (c) that contain flammable liquids in inner packagings of one liter or less, unless they are offered or intended for transportation by aircraft, or 2) in which the flammable liquid is placed in inner packages containing 120 ml (4 fluid ounces) or less and packed with sufficient absorption material between the inner and outer packagings to completely absorb the liquid contents when offered or intended for transportation by aircraft.

I hope this satisfies your request.

Sincerely,



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

Edmonson  
\$172.101

**Edmonson, Eileen (PHMSA)**

**From:** Katie Barthlow [kbarthlow@billco-mfg.com]  
**Sent:** Friday, January 13, 2012 2:46 PM  
**To:** Edmonson, Eileen (PHMSA)  
**Subject:** UN1987, 500 mL Phenolphthalein  
**Attachments:** msds C579L67.pdf; MSDS Sodium Hydroxide.pdf

Applicability  
12-0014

Hi Eileen,

We spoke a few months ago about my company shipping a quantity of 1, 500 mL bottle of phenolphthalein in a kit with another bottle of sodium hydroxide (500 mL) with some beakers, test tube, etc. for a titration kit to measure the concentration level of our detergent in a wash tank. We want to ship via UPS Ground. You stated that since this is a low hazard group that all we needed to do is mark the shipment with the following label:

UN1987, Alcohols, NOS, PG111, LTD QTY

Does this still hold true, as I am getting some push back from shipping. They are concerned because we received these chemicals in large quantities and the boxes of course were marked hazardous. We are splitting up the chemicals into small kits so the risk is much more minimal when we ship the kits out. Please see attached MSDS for both chemicals that will be in the kit, 500 mL of each.

Can you please tell me that by placing the UN1987 sticker on the shipment that this will cover us from any HAZMAT rules? I also ordered the free CDs online and we have them in our shipping area.

Thank you in advance for your help!

Katie M. Barthlow  
*Marketing & Promotions Manager- Replacement Parts*

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