

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

OCT 12 2005

Mr. Steven L. Dishion Corporate Dangerous Goods Transportation Risk Manger The Procter & Gamble Company Corporate Engineering Technologies Lab 8256 Union Centre Boulevard West Chester, OH 45069

Dear Mr. Dishion:

This responds to your June 27, 2005 letter requesting confirmation that a package containing mixed contents of hazardous materials in limited quantities is acceptable under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and International Maritime Dangerous Goods (IMDG) Code. You indicate that you have two-part and three-part hair dye kits that contain Flammable liquid, n.o.s., UN 1993, PG III and either Hydrogen peroxide, aqueous solution, UN 2984, PG III or Oxidizing solid, n.o.s., UN 1479, PG III or both. In addition, you state that the individual hazardous materials components do not react dangerously with one another or any other insert in the outer fiberboard packaging (i.e., conditioner, gloves, instructions, or the developer).

In accordance with §§ 176.80(b) and 177.848(a) of the HMR, materials in limited quantities are excepted from segregation requirements. However, §§ 173.21(e) and 173.24(e)(4) of the HMR prohibit materials that dangerously react from being placed together. Therefore, in accordance with the provisions mentioned above, limited quantities of materials may be shipped in the same packaging if mixing of the package contents does not cause a dangerous evolution of heat, flammable or poisonous vapors, or the formation of unstable corrosive materials.

Under the IMDG Code, a limited quantity of Flammable liquid, n.o.s., Class 3, UN 1993, PG III may not be placed in the same outer package with a limited quantity of either Hydrogen peroxide, aqueous solution, Class 5.1, UN 2984, PG III or Oxidizing solid, n.o.s., Class 5.1, UN 1479, PG III. Although the IMDG Code provides relaxation from the normal segregation provisions when limited quantities in different packages are involved, no relaxation is provided for materials in the same outer package. Paragraph 3.4.4.1 states "Different dangerous goods in limited quantities may be packaged in the same outer packaging provided the segregation provisions of chapter 7.2 are taken into account and the goods will not react dangerously in the event of leakage." In the case of



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Ref No.: 05-0164

400 Seventh Street, S.W.

Washington, D.C. 20590

the materials in your kit, IMDG Code chapter 7.2 requires "Separated from" segregation between Class 3 substances and Class 5.1 substances regardless as to whether or not a dangerous reaction would occur in the event of leakage.

It is the responsibility of the offeror to ensure that any mixed contents package containing limited quantities or consumer commodities is suitable and properly prepared for transportation. Based on the information you provided, your hair dye kits may be packaged as described in your letter, when transported by highway or vessel as consumer commodities in accordance with HMR; however, they may not be packaged as you described for transportation by vessel under the IMDG Code.

I hope this information is helpful. Please contact us if you require additional assistance.

Sincerely,

John A. Gale

Chief, Standards Development

Office of Hazardous Materials Standards

Procter&Gamble

The Procter & Gamble Company Corporate Engineering Technologies Lab 8256 Union Centre Boulevard, West Chester, Ohio 45069

Supko \$176.83 \$177.848 Segregation 05-0164

June 27, 2005

Mr. Edward T. Mazzullo
United States Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Office of Hazardous Materials Safety
400 7th Street, SW
Washington, DC 20590

Dear Mr. Mazzullo.

Procter & Gamble is a manufacturer of consumer products, including hair color kits. We are seeking confirmation that the current package design for our hair color kits is acceptable under both the HMR and the IMDG Code. The individual components of the hair color kits meet the definition and conditions and limitations to be classified as ORM-D material and described as a Consumer Commodity under the HMR, and as a Limited Quantity under the IMDG Code. The hair color kits are two or three part kits as described below:

- (a) The two part kits contain two hazardous materials one inner plastic container of hair dye and one inner plastic container of developer. The hair dyes are classified as "Flammable Liquid, n.o.s., (isopropyl alcohol), 3, UN 1993, PG III." The developers are classified as "Hydrogen Peroxide, Aqueous Solution, 5.1, UN 2984, PG III." The capacity of each inner packaging is less than the maximum permitted volume for Limited Quantities. Each hair color kit is created by placing one container of hair dye and one container of developer in a fiberboard carton. The kits also contain a hair conditioner and other non hazardous inserts (e.g., gloves and instructions). The individual kits are packed in fiberboard boxes marked with orientation arrows and the Consumer Commodity ORM-D marking.
- (b) Some three part kits contain two hazardous materials and one non hazardous material. The liquid hair dye is in a plastic container and is classified as "Flammable Liquid, n.o.s., (isopropyl alcohol), 3, UN 1993, PG III." The bleach powder is in a packet and is classified as "Oxidizing Solid, n.o.s., (Ammonium Persulfate, Potassium Persulfate, Sodium Persulfate), 5.1, UN 1479, PG III." The third component in the kit is a non hazardous developer. Again, that capacity of each inner packaging is less than the maximum permitted volume or mass for Limited Quantities. The kits are packaged essentially the same, in all important aspects, as the two part kits described in paragraph (a).
- (c) Some three part kits contain three hazardous materials one inner plastic container of liquid hair dye, one inner plastic container of liquid developer, and a packet of bleach powder. The hair dyes are classified as "Flammable Liquid, n.o.s., (isopropyl alcohol), 3, UN 1993, PG III." The developers are classified as "Hydrogen Peroxide, Aqueous Solution, 5.1; UN 2984, PG III." The bleach powder is classified as "Oxidizing Solid, n.o.s., (Ammonium Persulfate, Potassium Persulfate, Sodium Persulfate), 5.1, UN 1479, P. III." Again, the capacity of each inner packaging is less than the maximum permitted volume or mass for Limited Quantities. The kits are packaged essentially the same, in all important aspects, as the two part kits described in paragraph (a).

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By design the components in hair color kits do not react dangerously with each other. Because the consumer is intended to mix the components and pour the mixture on his / her hair, the mixture is designed to have little temperature rise and no gas evolution. The final temperature of the mixture is designed to be comfortable when applied to the skin. We believe the hair color kits produced for consumer use do not present an additional or prohibited hazard in transportation when the components are shipped together in the same carton in the hair color kits.

Under the HMR, hazardous materials in limited quantities, including ORM-D materials, are not subject to segregation requirements when loaded in transport vehicles or freight containers (see, for example, paragraph 176.80(b) for transport by vessel and paragraph 177.848(a) for transport by motor vehicle). Moreover, in previous interpretation letters (REF NO. 03-0082 and REF NO. 00-0064, copies enclosed for your convenience), your office has confirmed that different hazardous materials (dangerous goods) may be packaged together in the same outside package, if mixing of the hazardous materials (dangerous goods) would not cause a dangerous reaction. In a similar provision, Chapter 3.4, subsection 3.4.4.1, the IMDG code allows dangerous goods in limited quantities to be packaged in the same outer packaging, provided the segregation provisions in Chapter 7 of the IMDG are taken into account, and the goods will not interact dangerously in the event of leakage. With regard to the segregation provisions in Chapter 7 of the IMDG Code, we further note that in letters previously issued, acting in its capacity as the United States Competent Authority for purposes of implementation of the IMDG Code provisions, RSPA (now PHMSA) has taken the position that the provision of the HMR constitutes approval, without, necessarily, the need for issuance of additional documentation, by the United States competent authority where such may be required by the IMDG Code.

In conclusion, we would appreciate your confirmation that the packaging as described above is acceptable under both the HMR and the IMDG Code. Thank you for your help in this matter.

Sincerely,

Steven L. Dishion

Corporate Dangerous Goods Transportation Risk Manager

513.634.9520

Enclosures

cc:

Sarah R. McClure