



Pipeline and Hazardous Materials Safety Administration

MAY 19 2016

Robb Boros Regulatory Compliance Specialist Patterson Companies, Inc. 1905 Lakewood Drive Boone, IA 50036

Ref. No.: 16-0012

Dear Mr. Boros:

This letter is in response to your January 15, 2016, email and subsequent phone call regarding the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to the classification of soda lime. In your email, you describe soda lime that is comprised of calcium hydroxide and a small concentration of sodium hydroxide. In your letter, you state that according to your manufacturers, in some scenarios soda lime may contain sodium hydroxide or potassium hydroxide in concentrations of less than 4%. In your email and phone correspondence, you ask for verification of statements about classification and use of the HMR for international shipments. Your questions have been paraphrased and answered as follows:

- Q1: You ask whether Soda lime containing less than 4% sodium hydroxide found to meet the definition of one or more hazard classes and divisions would be a hazardous material and therefore subject to the HMR.
- A1: The answer is yes. The § 172.102 Hazardous Materials Table (HMT) qualifies the use of shipping description "UN1907, Soda lime" with having more than 4% sodium hydroxide. Nevertheless, if a material (in this case, soda lime containing less than 4% sodium hydroxide) meets the defining criteria of one or more hazard classes, it must be shipped as a hazardous material in accordance with § 173.2(a).
- Q2: You ask if Soda lime containing less than 4% sodium hydroxide that is found to meet the definition of a corrosive material (class 8), would require a generic shipping name since the material in question does not meet the qualifying concentration of sodium hydroxide for "UN1907 Soda lime."
- A2: The answer is yes. Because the proper shipping name "UN1907, Soda lime" is qualified with having a concentration of sodium hydroxide of more than 4%, the material you describe should be transported under a more specific proper shipping name. In this specific case, a generic proper shipping name would be the most accurate name to describe your material.

- Q3: You ask if soda lime containing more than 4% sodium hydroxide that also meets the definition of a class 8, packing group II hazardous material, would require a generic shipping name since UN1907 Soda lime would only be eligible for soda lime containing more than 4% sodium hydroxide meeting packing group III criteria.
- A3: In conformance with § 173.22 of the HMR, it is the shipper's responsibility to properly classify a hazardous material. This Office generally does not perform this function. However, based on the information you provided it is the opinion of this Office that the material you described would be properly classified as "UN3626, Corrosive, solid, basic, inorganic, n.o.s." instead of "UN1907, Soda lime."
- Q4: You ask if "UN3262 Corrosive, solid, basic, inorganic, n.o.s." (with the applicable technical name in parentheses) would be an appropriate proper shipping name for soda limes describe in numbers Q2 and Q3 above.
- A4: The answer is yes. See A2 and A3 above.
- Q5: You ask if a hazardous material subject to the HMR, but excepted from or not subject to international regulations when shipped into the United States, must comply with all applicable requirements in the HMR (classification, packaging, labeling, marking, shipping paperwork) prior to its arrival in the United States (see § 171.22(c)).
- A5: The answer is yes. Any shipment of hazardous materials transported into the United States must be in conformance with the HMR (see § 171.222(c))

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster

Chief, Regulatory Review and Reinvention Branch

Standards and Rulemaking Division

Goodall, Shante CTR (PHMSA)

Andrews 171,22(c) Authorization and condition

From:

Geller, Shelby CTR (PHMSA)

Sent:

Friday, January 15, 2016 2:45 PM

To:

Hazmat Interps

Subject:

FW: Request for Interpretation

Dear Shante and Alice.

Forwarded is a request for a formal letter of interpretation. Mr. Boros spoke with Eamonn and myself. His address is:

Robb Boros

c/o Patterson Logistics Services, Inc. 1905 Lakewood Drive Boone, IA 50036

Thanks, Shelby

From: Boros, Robb [mailto:robb.boros@pattersoncompanies.com]

Sent: Thursday, January 14, 2016 5:24 PM

To: INFOCNTR (PHMSA)

Subject: Request for Interpretation

The material in question is soda lime which is used in closed breathing environments, such as general anesthesia, to remove carbon dioxide from breathing gases to prevent CO2 retention and carbon dioxide poisoning. The soda lime is a powder pressed into a small pellet which is easily crushed back into a powder when pressed between finger and thumb.

The soda lime is comprised of calcium hydroxide with a small concentration of sodium hydroxide. Some formulations contain a small concentration of potassium hydroxide in addition to the sodium hydroxide. According to the manufacturers, the concentration of sodium hydroxide is less than 4%; and when present the concentration of potassium hydroxide is less than 4% as well.

I am looking to verify the following:

- 1. Soda lime containing less than 4% sodium hydroxide found to meet the defining criteria for one or more hazard classes and divisions would be a hazardous material and therefore subject to the HMR.
- 2. Soda lime containing less than 4% sodium hydroxide found to meet the definition of a corrosive (class 8), would require a generic shipping name since the material in question does not meet the qualifying concentration of sodium hydroxide for UN1907 Soda lime.
- 3. Soda lime containing more than 4% sodium hydroxide in class 8 found to be packing group N, would require a generic shipping name since UN1907 Soda lime would only be eligible for soda lime containing more than 4% sodium hydroxide meeting packing group III criteria.

- 4. **UN3262 Corrosive, solid, basic, inorganic, n.o.s.** (with the applicable technical names in parentheses) would be an appropriate proper shipping name for the soda limes described in numbers 2 and 3 above.
- 5. It is my understanding of that a material subject to the HMR, but excepted from or not subject to international regulations when shipped into the United States must comply with all applicable requirements in the HMR (classification, packaging, labeling, marking, shipping paperwork) prior to arrival to the United States. [171.22(c)]

Thanks

Robb Boros

Regulatory Compliance Specialist Patterson Companies, Inc. 515.433.1700 robb.boros@pattersoncompanies.com

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