



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

JUN 12 2012

Ms. Dragana Kostic Veneziano
Hach Company
100 Dayton Ave
Ames, Iowa 50010

Reference No.: 12-0104

Dear Ms. Kostic Veneziano:

This responds to your email dated April 27, 2011 requesting the proper hazard classification and description of a solution of granulated calcium hydride suspended in Isooctane under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask for guidance in selecting a proper shipping description and whether you are permitted to designate this solution with two separate proper shipping descriptions (“UN 1404, Calcium hydride, 4.3 Packing Group I” and “UN 1262, Octanes, 3, Packing Group II”).

According to your email and the supporting test data you provided, the solution of granulated calcium hydride suspended in Isooctane was tested using a Department of Transportation (DOT) approved method and was found to meet the classification criteria for Division 4.3 and Class 3.

As specified in § 173.22 of the HMR, it is the shipper's responsibility to properly classify a hazardous material. This Office does not generally perform that function. However, based on your email and supporting test data, it is the opinion of this Office that designating a solution of granulated calcium hydride suspended in Isooctane with two separate proper shipping descriptions (“UN 1404, Calcium hydride, 4.3 Packing Group I” and “UN 1262, Isooctane, 3, Packing Group II”) is incorrect. Based on your data, it is also the opinion of this Office that “UN 3482, Alkaline earth metal dispersions, flammable, 4.3, (3), Packing Group I” is the most appropriate proper shipping description as Calcium hydride may be considered the hydride of an alkaline earth metal and Isooctane is a flammable liquid.

I hope this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

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

Drakeford, Carolyn (PHMSA)

Benedict
3172-101
Proper Shipping Name
12-0104

From: INFOCNTR (PHMSA)
Sent: Monday, April 30, 2012 9:14 AM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Requesting a Letter of Interpretation
Attachments: Stresau Test Report.pdf; Picture of the product.pdf; Water in Oil Box.JPG

Hi Carolyn,

We received the following request for a letter of interpretation.

Thanks,
Victoria

From: Kostic, Dragana [<mailto:dkostic@Hach.com>]
Sent: Friday, April 27, 2012 9:37 AM
To: INFOCNTR (PHMSA)
Subject: Requesting a Letter of Interpretation

Request for Letter of Interpretation

Information Center
US Department of Transportation
e-mail infocntr@dot.gov<<mailto:infocntr@dot.gov>>

UN 3482

Dear Sir or Madame,

I am requesting Letter of Interpretation for Hach Company product Water in Oil Kit. It consists of 50 glass test tubes, each containing 0.4 g of granulated calcium hydride suspended in 4.0 mL of isooctane. Test tubes are nested in the covered styrofoam box which would be packed in a fiberboard box. Pictures of the single test tube and the box containing them, are attached. The suspension of calcium hydride in isooctane was tested by the outside testing laboratory using DOT approved method and was found to be hazard class 4.3 and PG I. Testing results are attached.

The reason we ask for interpretation is that none of the DOT available n.o.s. categories seem to adequately describe hazards of this product. Both substances are listed in the Hazardous Materials Table. Precedence Table designates 4.3 as a primary hazard, and 3 as secondary. We have considered several classifications but cannot be sure that any of them exactly describe the hazards. Below are some of the UN numbers we have looked into:

We considered giving this product two separate UN numbers UN1404 4.3 PG I and UN1262 3, PG II all packed in one. This could be confusing to customers.

- UN1404 (does not have subsidiary risk 3)
- UN3132 (subsidiary risk 4.1, flammable solid, but we have flammable liquid, 3)
- UN3148 (n.o.s. category to which we have assigned subsidiary risk of 3, but were told by IATA that we cannot assign subsidiary risk if it is not assigned in the Table)
- UN3207 (which has right hazard categories but our product is not organometallic). We are not sure if "Compound dispersion" would be applicable to our product. Technical name would be (Calcium hydride immersed in isooctane).

Please provide a letter of interpretation as to the appropriate UN number and proper shipping name for this product.

If you need additional information or clarification on this product feel free to give me a call.

Best Regards,

Dragana Kostic Veneziano
Product Compliance Chemist
Hach Company
100 Dayton Ave
Ames, Iowa 50010
Phone 515-232-2533 (3308)
e-mail dkostic@hach.com

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