



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

APR 05 2012

Mr. David Castillo
Sandia National Laboratories, New Mexico
Regulated Waste and Pollution Prevention Department, 04144
P.O. Box 5800, MS1112

Reference No.: 12-0058

Dear Mr. Castillo:

This responds to your February 21, 2012 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to proper shipping names. Specifically, you note that a manufacturer's documentation for the chemical 1-Hydroxybenzotriazole hydrate indicates it contains 14% water by mass. You add that the stoichiometric calculation of water contained in the 1-Hydroxybenzotriazole, monohydrate is 13.3% by mass. You ask which of the two Proper Shipping Name entries in the HMR table applies: UN0508, 1-Hydroxybenzotriazole, anhydrous, *dry or wetted with less than 20% water by mass*, or UN3474, 1-Hydroxybenzotriazole, monohydrate?

Under § 173.22, it is the shipper's responsibility to classify a hazardous material. This Office does not normally perform this function. However, because the 1-Hydroxybenzotriazole hydrate contains less than 20% water by mass, it is the opinion of this Office that UN0508, 1-Hydroxybenzotriazole, anhydrous, *dry or wetted with less than 20% water by mass*, would be the proper shipping name.

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

Andrews
\$172.101
Proper Shipping Name
12-0058

From: Castillo, Dave H [mailto:DHCASTI@sandia.gov]
Sent: Tuesday, February 21, 2012 5:17 PM
To: Lawson, Eleanor (PHMSA)
Cc: Schade, A Carl; Krauss, Maryann; Tetreault, Kenneth J
Subject: Interpretation
Importance: High

Eleanor,

Per our phone discussion today, I have the following question:

If the manufacture's documentation for the chemical *1-Hydroxybenzotriazole hydrate* indicates it contains 14% water by mass, which of the two Proper Shipping Name entries in the November 1, 2011 Hazardous Materials Table applies: 1-Hydroxybenzotriazole, anhydrous, *dry or wetted with less than 20% water by mass*, (UN0508) or 1-Hydroxybenzotriazole, monohydrate (UN3474)?

It should be noted that the stoichiometric calculation of water contained in 1-Hydroxybenzotriazole, *monohydrate* is 13.3% by mass. Therefore, it is not clear if the hydrate/monohydrate forms should be regarded as the anhydrous form when the *total* water is below 20%. Please let me know if you need any other information. Thanks.

David Castillo

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