



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

APR 30 2003

400 Seventh St., S.W.  
Washington, D.C. 20590

Mr. H. Perry Hock  
Technical Director  
gh Package & Product Testing  
and Consulting, Inc.  
325 Commercial Drive  
Fairfield, OH 45014

Ref. No. 02-0283

Dear Mr. Hock:

This responds to your letter regarding the performance testing of UN standard packagings under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you inquire whether the drop test height for a drum intended for a solid, may be adjusted as if it were a liquid with a specific gravity greater than 1.2, using the formula specified in § 178.603(e)(2)(ii). I apologize for the delay in responding.

The answer is no. Packagings intended for solids must be drop tested with either the hazardous material to be transported or a non-hazardous material having essentially the same physical characteristic according to the drop heights specified in § 178.603(e)(1). You may, however, apply for an approval authorizing a different test method than those prescribed under § 178.601(h). The procedures for applying for an approval are specified in § 107.705.

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

Sincerely,

Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials Standards



020283

178.603



gh Package & Product Testing and Consulting, Inc.

325 Commercial Dr. Fairfield, OH 45014

Phone (513) 870-0080 Fax (513) 870-0017

335 W. Melinda Lane Phoenix, AZ 85027

Phone (623) 869-8008 Fax (623) 869-8003

May 28, 2002

To: Mr. Edward T. Mazzullo Director, Office of Hazardous Materials Standards U.S. DOT/RSPA (DHM-10) 400 7th Street S.W. Washington, DC 20590-0001

Stevens § 173.24a (b)(3) § 178.603 Testing 02-0283

From: Mr. H. Perry Hock Technical Director gh Package/Product Testing and Consulting, Inc. 325 Commercial Dr. Fairfield, OH 45014

Subject: Non - Bulk Single pack testing pursuant to CFR 49, § 173.24a (b)(3) and §178.603

Dear Mr. Mazzullo,

I have a question regarding CFR 49, §173.24a (b)(3) and §178.603 for non-bulk single packs.

Scenario - We have a 30 gallon drum to be filled to a maximum gross weight of 300 kg of solid hazardous material. Using sand, lead and steel, we are capable of only achieving 250 kg. Why can the drop height not be raised as if it were for liquids? I ask this since §178.603 allows the drop height for liquids to become the specific gravity multiplied by the group level.

Another way to look at this scenario might be to The specific gravity of the solid being placed in the 30 gallon drum equals 2.6. Can you use the heights determined using §178.603 (e)(2)(ii)?

If you cannot use the heights determined using §178.603 (e)(2)(ii), why?

I ask because it would be contradictory to not allow this use since the drum could be tested with water and the drop height be calculated based on §178.603 (e)(2)(ii), and then apply §173.24a (b)(3) - A packaging tested for a liquid can carry a solid to a gross mass not exceeding the rated capacity of the packaging in liters, multiplied by the specific gravity marked on the packaging.

I look forward to your response. If you need clarification or have questions regarding this letter, please call me at 513.870.0080

Yours Truly,

H. Perry Hock Technical Director gh Package & Product Testing and Consulting, Inc.

HPH/hph