



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

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

DEC 05 2012

Mr. John G. Mayfield  
Manager, Dangerous Goods Transportation  
Customer Channels Group  
Thermo Fisher Scientific  
300 Industry Drive  
Pittsburgh, PA 15275

Reference No.: 12-0166

Dear Mr. Mayfield:

This is in response to your August 7, 2012 email and follow-up telephone discussion requesting clarification of the packaging requirements of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You observe that for Titanium powder, dry, UN2546, special provisions N5 and N34 are assigned to packing group II, but not to packing group I or III. Special provisions N5 and N34 respectively provide that glass or aluminum materials of construction are not authorized for any part of a packaging which is normally in contact with the hazardous material. You question the applicability of these two special provisions, note that you currently have this material, in packing group II, packaged in glass inner receptacles, and ask whether the glass inner receptacles are authorized for use under the HMR.

The use of glass receptacles as an inner packaging for Titanium powder, dry, UN2546, packing group II, is not authorized under the HMR. As the HMR is currently written, for the material in packing group II, special provision N5 prohibits the use of glass materials of construction for any part of a packaging that is normally in contact with the hazardous material. You may wish to apply for a special permit in accordance with the requirements in § 107.105 to ship material as currently packaged.

However, under both the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air, and the International Maritime Dangerous Goods (IMDG) Code, glass receptacles are authorized for use as inner packagings for this material in packing group II. If the material as described is shipped in accordance with the ICAO Technical Instructions or the IMDG Code, and complies with HMR §§ 171.22, 171.23, 171.24, and 171.25 as applicable, then the use of glass inner receptacles is permitted.

The appropriateness of the HMR assignment of special provisions N5 and N34 to Titanium powder, dry, UN 2546, packing group II may be considered for a future rulemaking. If you believe a change in HMR is warranted, you are welcome to file a petition for rulemaking in accordance with § 106.95 including all information (see § 106.100) needed to support your petition.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Delmer Billings". The signature is fluid and cursive, with a large initial "D" and a long, sweeping underline.

Delmer Billings  
Senior Regulatory Advisor  
Standards and Rulemaking Division

Babich  
§ 172.101

**Drakeford, Carolyn (PHMSA)**

**From:** INFOCNTR (PHMSA)  
**Sent:** Tuesday, August 07, 2012 1:05 PM  
**To:** Drakeford, Carolyn (PHMSA)  
**Subject:** FW: Letter of Interpretation

Applicability  
12-0166

Carolyn,

We received the following request for a formal letter of interpretation.

Thanks,  
Victoria

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**From:** Mayfield, John G. [<mailto:john.mayfield@thermofisher.com>]  
**Sent:** Tuesday, August 07, 2012 11:52 AM  
**To:** INFOCNTR (PHMSA)  
**Subject:** Letter of Interpretation

Hello:

The 49 CFR 172.101 table appears to display an inconsistency in the special provision requirements (column 7) for Titanium powder, dry, UN2546.

For packing group II it lists N5 and N34 as requirements, but for packing groups I and III, no such notes are referenced. Since N5 limits the use of glass inner packagings, and there does not appear to be any type of restriction on the packaging of this material, I am requesting an interpretation as to whether these notes are accurate.

We have material presently packaged in glass inner containers and would appreciate a response as quickly as possible.

You may contact me directly e-mail or by phone as listed below.

Have a Safe Day,

John G. Mayfield, DGSA  
Manager, Dangerous Goods Transportation  
Customer Channels Group  
Thermo Fisher Scientific  
300 Industry Drive  
Pittsburgh, PA 15275 USA  
Phone: 724 517-2449  
FAX: 724 517-1546  
[John.Mayfield@ThermoFisher.com](mailto:John.Mayfield@ThermoFisher.com)

Please note the new address and phone number effective March 28, 2011

8/20/2012  
PHONE CONVERSATION  
w/ JOHN MAYFIELD  
USING Pg II