U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

JUL 3 1 2013

Mr. Ronald J. Sorrell
Gh Package/Product Testing and Consulting, Inc.
4090 Thunderbird Lane
Fairfield, OH 45014

Ref No.: 13-0091

Dear Mr. Sorrell:

This is a response to your April 30, 2013 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 100-185) with regard to the assembly of a UN 4G fiberboard box. Specifically, you seek clarification on the criteria for passing the drop test specified in § 178.603.

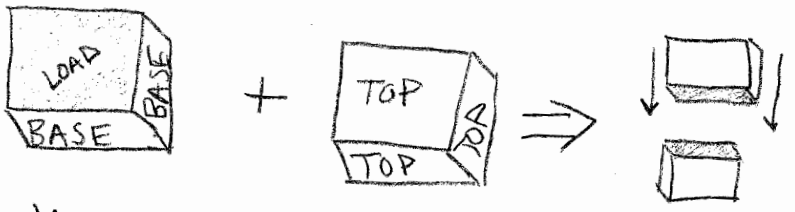
In your incoming email you describe a telescoping box with a loaded base and a top that slides over the base. The box is assembled both with and without a band or tape around the girth of the closed packaging. This packaging has been tested in accordance with the design qualification testing specified in Part 178 Subpart M and in both configurations successfully passed all required tests, including the drop test in § 178.603. However, for the assembled box not secured by a band or tape around the girth, you observe that after the drop test, the top portion of the telescoping box is raised 2-3 inches with no release of product. You question whether the raised lid after the drop test constitutes a closed packaging.

The answer is yes. Provided there is no release of contents from the packaging and the packaging passes all applicable UN Specification tests, this would be permissible. It should be noted that the standards for fiberboard boxes in § 178.516(b)(5) require that boxes must be designed so as to provide a snug fit to the contents. The drop test described above may be an indication that the assembled box not secured by a band or tape around the girth does not meet the intent of § 178.516(b)(5).

I hope this information is helpful. If you have any more questions, please do not hesitate to contact this office.

Sincerely,

Robert Benedict
Chief, Standards Development
Standards and Rulemaking Division



both methods tested

Security band or tape (if returned)

TOP

BASE

- Securely closed?
- Release if overturned
- Test reports?
- 178.516(b)(5)
- 175.24(f)(1)(ii)

customer wants:

NO SECURITY BAND OR TAPE

upon drop tests:

NO PRODUCT RELEASE

TOP

BASE

2-3" liff

Suchak
§178.516(b)(5)
Packaging
13-0091

Drakeford, Carolyn (PHMSA)

From: Lima, Anthony (PHMSA)
Sent: Tuesday, April 30, 2013 9:40 AM
To: Drakeford, Carolyn (PHMSA)
Subject: Request for Clarification from gh Package / Product Testing and Consulting, Inc.

Carolyn,

Please log Ron Sorrell's question below as a request for written clarification. Ben Moore thinks it's best to hash this issue out.

Thanks

Anthony Lima
Packaging Program Manager/Senior Investigator
Office Of Hazardous Materials Safety
Field Operations
U.S. DOT/PHMSA

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From: Moore, Benjamin (PHMSA)
Sent: Tuesday, April 30, 2013 9:32 AM
To: Lima, Anthony (PHMSA)
Cc: Ron Sorrell
Subject: RE: Telescoping box closure

Anthony and Ron,

I can't find anything that might cover this other than 178.516(b)(5) which states "Boxes must be designed so as to provide a snug fit to the contents," which it doesn't sound like it's really doing except that it's only occurring during a test. I would say a clarification from Standards might not be a bad idea, since I have a hard time saying this is not complying with the HMR.

Benjamin Moore
General Engineer
Office of Hazardous Materials Technology
PHONE: (202) 366-4545
FAX: (202) 366-3650

From: Lima, Anthony (PHMSA)
Sent: Tuesday, April 30, 2013 9:21 AM
To: Moore, Benjamin (PHMSA)
Cc: Ron Sorrell
Subject: RE: Telescoping box closure

Ben,

Ron's question below is probably best answered by other than field ops. If you think this should be handled as a request for clarification, we can forward the email to Standards instead. Please advise.

Thanks

Anthony Lima
Packaging Program Manager/Senior Investigator
Office Of Hazardous Materials Safety
Field Operations
U.S. DOT/PHMSA

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From: Ron Sorrell [mailto:rsorrell@ghtesting.com]
Sent: Tuesday, April 30, 2013 9:18 AM
To: Lima, Anthony (PHMSA)
Subject: Telescoping box closure

Hello Mr. Lima

I have a customer who uses a full telescoping box which ships hazmate material. He assembles the box with a loaded base and then slides the top over the base. A band is put around the girth of the closed telescoping box as a security seal. If not all the product is used, a piece of tape is put on the top and base to hold lid in place for return. We currently test the telescoping box with the band and the tape and put both in the report.

Now the customer wants to send the telescoping box with a load in it with no banding or tape at all. He does not want to use anything for the closure besides the lid of the telescoping box. We tested the telescoping box without any bands or tape and the lid wants to raise 2"-3" up the base as a result from the drops. So my question is "Does the lifting of the lid of the telescoping box 2"-3" after drop considered closed or open".

By the CFR 49 drop testing for non-bulk, the product is not exposed and the box is not ripped opened but what gets to me is the lid is a little less than half way up the base. Does this constitute a closed box?

Thank you for your time.

RONALD J. SORRELL

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