



U.S. Department  
of Transportation

**Pipeline and  
Hazardous Materials Safety  
Administration**

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

JUL -6 2006

Mr. Gary Baughman  
Rieke Packaging Systems  
500 West Seventh Street  
Auburn, IN 46706

Ref. No.: 06-0071

Dear Mr. Baughman:

This is in response to your December 21, 2005 letter regarding packaging variations under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are paraphrased and answered as follows:

Q1. Is a single packaging (e.g., a drum) with an improved closure design considered a new design type or does Variation 5 of § 178.601(g) (5) apply?

A1. Changes in closures on single packagings are permitted without further design testing under the conditions prescribed in Variation 5. If the tests required in Variation 5 have been successfully completed, the new closure system is not considered a design change.

Q2. Is a drum with an improved closure design considered a new design type if the design is found to perform equal or better than the original design type in accordance with Variation 5?

A2. See A1.

Q3. If a manufacturer has several drum design types of various thicknesses, may they recertify all the drum types by testing the weakest design type with the new closure in accordance with § 178.601(g) (5)?

A3. Yes. When a closure device has been qualified by means of the tests referenced in Variation 5, § 178.601(g) (5), that closure device may be used on any packaging of the same type with at least the same integrity. Replacement closures and gasketings qualified under § 178.601(g) (5) are also authorized without additional testing for different tested design types



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178.601(g)(5)

packagings of the same type as the originally tested packaging, provided the original design type tests are more severe or comparable to tests which would otherwise be conducted on the packaging with the replacement closures or gasketings.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Hattie L. Mitchell". The signature is written in dark ink and is positioned to the right of the word "Sincerely,".

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



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Pollack  
§178.601  
Testing  
06-0011

December 21, 2005

Don Burger  
DOT, Office of Hazardous Material Standards  
US DOT, RSPA, (DHM-10)  
400 7<sup>th</sup> Street SW  
Washington, DC. 20590

Re: Testing Requirements of Improved Closures for Steel Drums

Dear Mr. Burger:

I am requesting clarification of testing requirements for Rieke Corporation's improved ViseGripII™ closure system for steel drums. This is a follow up to meetings where we discussed the possibility of compliance of CFR49 178.601, exemption 5 and our position that this closure system has demonstrated equal or significantly improved performance.

We request you consider the information and questions to clarify container testing requirements for steel drums using this improved closure and when appropriate and active DOT approved qualification testing for Rieke ViseGrip® closures exists. Again we feel we comply with the apparent desired controls provided for 178.601, variation 1 or 3 and beyond variation 5. We realize that many of these variations surrounding design are considered for either combination (i.e. Var. 1) or single packages (i.e. Variations 3, 5); however, it is difficult to separate the purpose of transportation regulations specifically by construction and not generally apply them for all regulated packages.

I will describe the matching characteristics of the previous and improved closure system. The closures are same in raw materials, manufacturing methods, container installation methods and closure closing procedures.

Now the most applicable improvement is: The closure has significant improvement at normal and extreme testing requirements of Packaging group II and I levels (178.603,178.604,178.605,178.606 &178.608). This has been consistently proven in testing to 178.601 requirements. Testing was performed by accredited testing labs, manufacturers for self-certification, and others who have found improved closure performance.

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PROVIDING THE TOTAL PACKAGE



Your website contains important information and clarification for (HMR, CFR49, 171-180) regulations that possibly apply. The overall intent and purpose of these regulations are germane.

1. DOT regulations have recognized smaller closures for internal packaging can be substituted. 178.601, (g) (3) and are not considered a design change.
2. DOT has allowed various gasket and thread systems to be considered as having equal performance and not considered design changes if they have equal or greater performance by testing 178.601 (g) (5). Ref. No. 96-1027
3. DOT has recognized that in containers of the same type and having equal or better integrity, by meeting 178.601(g)(5) requirements, the improved closure would not be considered a design change. Ref. No. 96-1027,
4. DOT has recognized on UN 1A1 containers that changes in closures and gasket materials are not considered a design change under the approval. Ref. No. 96-1088.

Q.1. Are the improved closures not considered a design change by 178.601 (g) (3) Variation 3 or 5, since the improved closures' sizes are identical to smaller by 7%, 10%, &14%, and the changes have not reduced the closure effectiveness when evaluated to 178.601 (g) (5)?

Q.2. Are the improved closures considered identical and not considered a design change if the integrity of the container design is found the same or improved when evaluated to 178.601(g) (5)?

Q.3. Would a drum manufacturer, using nominal metal thickness of 0.9mm, 1.0mm &1.1mm (yielding 3 drums) and installing 1 to 4 prior closure openings into these 3 drums that are currently certified to the same UN rating be able to prove no reduction in integrity as specified in 178.601 (g) (5) by evaluating the weakest design, i.e., the 0.9mm thickness with 4 improved closure opening combination? If not, in this example what would need to be tested?

If you have any questions, please call me at 260.925.3700.

Respectfully,

Gary Baughman  
Senior Manufacturing Engineer

GMB/dfs