



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

SEP 27 2017

Mr. Ryan Woon  
Analytical Services Supervisor  
RASIRC  
7815 Silverton Avenue  
San Diego, CA 92126

Reference No. 17-0038

Dear Mr. Woon:

This letter is in response to your April 12, 2017, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the shipment of hydrogen peroxide by air. You describe a scenario where "UN3098, Oxidizing liquid, corrosive, n.o.s. (hydrogen peroxide), 5.1, II" is being shipped in 250-750 mL containers that have a pressure relief device installed to open when reaching an internal pressure of 0.5 psi. You further note that § 173.24(g) only allows the venting of packagings when air transport is not involved. Specifically, you ask if the container described in your letter can be placed in an outer packaging (i.e., heat sealable pressure bag, United Nations (UN) rated drum or pressure vessel) and be shipped by air while in compliance with § 173.24(g).

The answer is no. As you note, § 173.24(g) of the HMR does not allow for venting of packagings when air transport is involved, except for shipments of cryogenic liquids and dry ice. However, special permits may authorize relief from any requirement in the HMR, provided the applicant demonstrates an equivalent level of safety to that intended by the regulation. To apply, you must submit an application to the Associate Administrator for Hazardous Materials Safety in conformance with the requirements prescribed in 49 CFR Part 107, Subpart B. You may obtain information on the special permit application process from our Web site at <http://www.phmsa.dot.gov/hazmat/regs/sp-a>, or by calling the Approvals and Permits Division at (202) 366-4511.

I hope this information is helpful. 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  
§ 173.24(g)  
Packaging Spec  
17-0038

**Dodd, Alice (PHMSA)**

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**From:** INFOCNTR (PHMSA)  
**Sent:** Thursday, April 13, 2017 3:05 PM  
**To:** Hazmat Interps  
**Subject:** FW: Interpretation Letter Request  
**Attachments:** DOT Letter.docx

Hi Shante/Alice,

Please submit this as a letter of interpretation. Mr. Woon spoke with Jodi.

Please let me know if you have any questions.

Thanks,  
Jordan

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**From:** Ryan Woon [mailto:rwoon@rasirc.com]  
**Sent:** Wednesday, April 12, 2017 1:10 PM  
**To:** PHMSA HM InfoCenter <PHMSAHMInfoCenter@dot.gov>  
**Subject:** Interpretation Letter Request

Hello,

I've submitted the attach letter with a question in regards to regulations stated in the Hazardous Material Regulations section in 49CFR.

Thank you for your time and I look forward to hearing from you.

Ryan

Ryan Woon  
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7815 Silverton Ave.  
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(858)-259-1220 ext. 253

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Office of Hazardous Materials Safety  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
East Building, 2nd Floor  
Washington, DC 20590

To whom this may concern,

My e-mail is in regards to shipping non bulk packages under the regulations stated in the Hazardous Material Regulations section in 49CFR via air transport.

The chemical is UN 3098 PG II and the technical name is, "Hydrogen Peroxide". The chemical is stored in a container that has a pressure relief valve installed on it that opens up when an internal pressure over 0.5psi is observed. The shipping volume would vary between 250-750mL per container.

Under 173.24(g), venting of packages is only allowed when air transport is not involved. Can the inner container be placed in intermediate packaging or an outer package in order to meet requirements? The goal of the intermediate packaging or the outer package would be to prevent unintentional release of hazardous materials into the air transport.

The package design would place the inner container in intermediate packaging that is a heat sealable pressure bag rated for 95kPA. This would then go into a 4GV packaging kit tested to carry the inner container.

If not acceptable, another option is to place the inner container in an outer package such as a UN rated drum that can hold 200kPA or a UN rated pressure vessel. The UN rated pressure vessels typically hold up to 115psi or more.

If you have any questions or need further clarification, please do not hesitate to contact me.

Thank you for your time and I look forward to hearing back from you.

Ryan

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