



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

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

JUN 10 2014

Mr. E.A. Altemos  
HMT Associates, L.L.C.  
603 King Street  
Suite 300  
Alexandria, VA 22314

Ref. No. 14-0048

Dear Mr. Altemos:

This responds to your March 13, 2014 request for clarification of packaging specifications under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180.) Specifically, you ask if a 6HA1 composite packaging design may include a small hole, known as a weep hole, in the outer protective steel drum.

It is your understanding that although § 178.504 contains requirements regarding closures, the use of weep holes in the outer protective steel drum of a composite packaging is not prohibited in the HMR. Your understanding is that requirements for closures apply to openings in the heads or body of a drum, and do not prohibit a small (usually several millimeters diameter) weep hole not fitted with a closure conforming to the closure provisions in § 178.504(b). You also state that weep holes are widely used in composite packaging for two reasons: (1) to allow drainage of moisture or condensation between the inner receptacle and outer protective drum to minimize possibility of internal corrosion that could compromise the packaging; (2) to allow the escape of air from the outer packaging during insertion of the snugly fitting inner receptacle.

Your understanding is correct. The HMR do not prohibit the use of small weep holes in the outer packaging of a composite packaging (6HA1) if they are part of the original design. The packaging must meet the general packaging requirements in § 173.24, the specification packaging requirements for 6HA1 in § 178.522, and the tested design type of the packaging must have included the weep hole.

I hope this answers your inquiry. If you need additional assistance, please contact this office at (202) 366-8553.

Sincerely,

Robert Benedict  
Chief, Standards Development Branch  
Standards and Rulemaking Division

# HMT ASSOCIATES, L.L.C.

603 KING ST.  
SUITE 300  
ALEXANDRIA, VA 22314-3105

703-549-0727

FACSIMILIE: 703-549-0727

WRITERS DIRECT DIAL NUMBER

703-549-0727, ext. 11

E.A. ALTEMOS  
PATRICIA A. QUINN

March 13, 2014

Booth  
§178.522  
§178.504  
Packaging  
14-0048

Mr. Charles Betts  
Director, Standards and  
Rulemaking (PHH-10)  
Pipeline and Hazardous Materials  
Safety Administration  
Department of Transportation  
1200 New Jersey Avenue, SE  
East Building, 2<sup>nd</sup> Floor  
Washington, D.C. 20590-0001

Mr. Don Burger  
Chief, General Approvals  
and Permits (PHH-31)  
Pipeline and Hazardous Materials  
Safety Administration  
Department of Transportation  
1200 New Jersey Avenue, SE  
East Building, 2<sup>nd</sup> Floor  
Washington, D.C. 20590-0001

Dear Messrs. Betts and Burger:

The question of whether it is permissible under the Hazardous Materials Regulations (HMR) to provide a small hole (commonly referred to as a "weep hole") in the steel outer packaging of composite packagings (UN 6HA1) has arisen. It has been suggested by a freight forwarder that because the standard for composite packagings (6HA1) in §178.522 requires that the outer protective drum meet the requirements for a steel drum as prescribed in §178.504(b), weep holes are not allowed because all openings in a steel drum must be closed with gasketed closures. While it is certainly true that the outer steel drum of a composite packaging is supposed to meet the requirements for a steel drum in §178.504(b) of the HMR, and while that paragraph prescribes requirements for "closures" applied to openings in the heads or body of a drum, I do not read those requirements to necessarily preclude a small (usually only several millimeters diameter) weep hole not fitted with a closure conforming to the closure provisions in §178.504(b) when the drum is serving as the "protective steel drum" (this is the terminology used in 178.522(a)(1) of the composite packaging requirements) outer of a composite packaging. Moreover, it is my understanding that weep holes of the type described are widely used in composite packagings for two important reasons. First, as a safety benefit, the small hole allows drainage of any moisture or condensation between the inner receptacle and outer protective drum so as to minimize the possibility of internal corrosion that could compromise the packaging. In addition, on a perhaps more practical note, since §178.522(b)(2) requires inner receptacles to fit "snugly" into the outer packaging, a weep

HMT ASSOCIATES, L.L.C.

Mr. Charles Betts  
Mr. Don Burger  
March 13, 2014  
Page 2

hole allows the escape of air from the outer packaging during insertion of the snugly fitting inner receptacle – an operation that would otherwise be difficult unless a means is provided for the entrapped air to escape.

In conclusion, your confirmation of my understanding that the applicable requirements of the HMR do not preclude provision of a small-diameter “weep hole” in the outer packaging of composite packagings (6HA1) will be most appreciated. This assumes, of course, that the tested design type of the packaging also included the weep hole.

Thank you for your consideration of this matter, and please do not hesitate to contact me if you have questions or require additional information in relation to this request.

Sincerely,



E. A. Altemos