



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

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

AUG 01 2016

Mr. David Weisbrich  
Entergris, Inc.  
10851 Louisiana Avenue South  
Bloomington, MN 55438

Ref. No.: 16-0021

Dear Mr. Weisbrich

This responds to your email dated January 25, 2016 requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) on the use of plastic drums that are more than five years old (as determined from the date of manufacture). In your email you state that for air transport plastic packagings older than five years must be approved by the appropriate national authority.

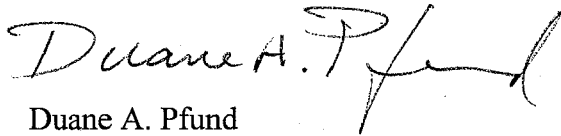
Plastics packagings, provided they show no reduction in integrity, are eligible for reuse at a date that is five years past their date of manufacture provided they are subjected to the leakproofness test prescribed in §178.604. As provided in §173.28(b)(7)(iv)(B), after five years from the date of manufacture, a plastics packaging otherwise authorized for reuse may continue to be used only if it is leakproofness tested prior to each reuse. Unless otherwise approved by the appropriate national authority, plastic drums and jerricans, rigid plastics intermediate bulk containers (IBC) and IBCs with plastics inner packaging older than five years may not be used in accordance with the UN Model Regulations (see 4.1.1.15), the International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air (4; 1.1.20) of the International Maritime Dangerous Goods Code (see 4.1.1.15).

For the purposes of international transport of hazardous materials in a package older than five years, compliance with the leakproofness test requirement in §178.604 before reuse constitutes approval from the appropriate national authority. A Competent Authority Approval means an approval by the competent authority that is required under an international standard (for example, the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air and the International Maritime Dangerous Goods Code).

A specific regulation in the HMR may be considered a competent authority approval (see § 107.1).

I hope this answers your inquiry. If you need additional assistance, please contact the Standards and Rulemaking Division at (202) 366-8553.

Sincerely,

A handwritten signature in cursive script that reads "Duane A. Pfund". The signature is written in dark ink and is positioned above the printed name.

Duane A. Pfund  
International Standards Coordinator  
Standards and Rulemaking Division

**Goodall, Shante CTR (PHMSA)**

Keary  
17324  
General requirement for  
packaging and packages  
16-0021

**From:** Kelley, Shane (PHMSA)  
**Sent:** Tuesday, January 26, 2016 2:17 PM  
**To:** Goodall, Shante CTR (PHMSA); Dodd, Alice (PHMSA)  
**Cc:** Antonielli, Jennifer (PHMSA)  
**Subject:** FW: shipment on hold 200L plastic drums

Hi Shante and Alice can you please log this in and assign to 13 thanks!!

---

**From:** David Weisbrich  
**Sent:** Tuesday, January 26, 2016 1:45:12 PM  
**To:** Kelley, Shane (PHMSA)  
**Subject:** Re: shipment on hold 200L plastic drums

Hello again,

Shane we would like to go ahead and get that formalized letter. Is there anything I need to fill out to get this started or just through this email? Thanks and sorry for all the emails!

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**From:** shane.kelley@dot.gov <shane.kelley@dot.gov>  
**Sent:** Tuesday, January 26, 2016 11:39 AM  
**To:** David Weisbrich  
**Subject:** RE: shipment on hold 200L plastic drums

Excellent! Our pleasure to assist – feel free to reach out as needed.

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**From:** David Weisbrich [mailto:david.weisbrich@entegris.com]  
**Sent:** Tuesday, January 26, 2016 12:39 PM  
**To:** Kelley, Shane (PHMSA)  
**Subject:** Re: shipment on hold 200L plastic drums

Hello Shane,

We did pass on the information that you sent to us to our customer and they were pleased, I guess for right now we will go with that and if we get word back that they require more then we can do it at that time. Thanks again for your time and help!

---

**From:** shane.kelley@dot.gov <shane.kelley@dot.gov>  
**Sent:** Tuesday, January 26, 2016 10:57 AM  
**To:** David Weisbrich  
**Subject:** RE: shipment on hold 200L plastic drums

Hi David,

Certainly. The process for signature on letterhead would require this to go through a much more formalized coordination process internally that can take several weeks. I am happy to log in as a formal request if you would like me to do so, just let me know.

---

**From:** David Weisbrich [<mailto:david.weisbrich@entegris.com>]

**Sent:** Tuesday, January 26, 2016 11:54 AM

**To:** Kelley, Shane (PHMSA)

**Subject:** Re: shipment on hold 200L plastic drums

Shane,

Thanks for your time and help much appreciated. Did you say something about sending a letter with a fancy letterhead as well or would you prefer just to pass this information on and then have the carrier contact you if need be? Thanks.

---

**From:** [shane.kelley@dot.gov](mailto:shane.kelley@dot.gov) <[shane.kelley@dot.gov](mailto:shane.kelley@dot.gov)>

**Sent:** Tuesday, January 26, 2016 10:26 AM

**To:** David Weisbrich

**Cc:** [Duane.Pfund@dot.gov](mailto:Duane.Pfund@dot.gov); [jennifer.antonielli@dot.gov](mailto:jennifer.antonielli@dot.gov)

**Subject:** RE: shipment on hold 200L plastic drums

David,

Thank you for your email. As we discussed this morning, our U.S. Hazardous Materials Regulations (HMR;49 CFR Parts 100-180) include specific provisions that address plastics compatibility but they are performance based rather than based on a specific lifetime limit. Specifically, appendix B of part 173 (Testing chemical compatibility & rate of permeation), are contained in 173.24(e) (included below for reference).

For purposes of international transport of hazardous materials, our Office is the designated competent authority however we handle this particular issue through our regulatory requirements (see 49 CFR 107.1 definition of a competent authority approval which stipulates a specific regulation of the HMR constitutes an approval). As such no separate approval document is required or issued. You can provide the carrier with this information and I am glad to speak directly to the carrier if it will help - you can give them my contact information.

Best

Shane

**Shane C. Kelley**

Assistant International Standards Coordinator  
Office of Hazardous Materials Safety  
Pipeline and Hazardous Materials Safety Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE, E23-318  
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**From:** David Weisbrich [<mailto:david.weisbrich@entegris.com>]  
**Sent:** Tuesday, January 26, 2016 10:35 AM  
**To:** Kelley, Shane (PHMSA)  
**Subject:** Re: shipment on hold 200L plastic drums

Thanks, if you call it would probably be best to call my cell as I spend most of my time in the lab. 612-770-2524, thanks.

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**From:** [shane.kelley@dot.gov](mailto:shane.kelley@dot.gov) <[shane.kelley@dot.gov](mailto:shane.kelley@dot.gov)>  
**Sent:** Tuesday, January 26, 2016 8:51 AM  
**To:** David Weisbrich; [Duane.Pfund@dot.gov](mailto:Duane.Pfund@dot.gov)  
**Subject:** RE: shipment on hold 200L plastic drums

Hi David,

We have received this inquiry and will have a response for you today. Thank you.

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**From:** David Weisbrich [<mailto:david.weisbrich@entegris.com>]  
**Sent:** Monday, January 25, 2016 2:55 PM  
**To:** Pfund, Duane (PHMSA); Kelley, Shane (PHMSA)  
**Subject:** shipment on hold 200L plastic drums

Hello,

My name is David Weisbrich and I work for Entegris in Bloomington, MN. Our customer has a shipment of 200L drums on hold because the date these were manufactured on was 2008 and the airline said that anything past five years since manufacturing needed approval by the appropriate national authority. How does one go about getting this approval. This hold -up of course is a hot issue so if you could get back to me asap that would be great, thanks. These drums passed the UN/DOT periodic retesting in 2008. My cell is 612-770-2524, thanks.

Is this something that will take more than a day or two to figure out? I want to be able to tell our customers something by the end of the day, please and thanks.



#### 49 CFR 173.24

(e) *Compatibility*. (1) Even though certain packagings are specified in this part, it is, nevertheless, the responsibility of the person offering a hazardous material for transportation to ensure that such packagings are compatible with their lading. This particularly applies to corrosivity, permeability, softening, premature aging and embrittlement.

(2) Packaging materials and contents must be such that there will be no significant chemical or galvanic reaction between the materials and contents of the package.

(3) *Plastic packagings and receptacles*. (i) Plastic used in packagings and receptacles must be of a type compatible with the lading and may not be permeable to an extent that a hazardous condition is likely to occur during transportation, handling or refilling.

(ii) Each plastic packaging or receptacle which is used for liquid hazardous materials must be capable of withstanding without failure the procedure specified in appendix B of this part ("Procedure for Testing Chemical Compatibility and Rate of Permeation in Plastic Packagings and Receptacles"). The procedure specified in appendix B of this part must be performed on each plastic packaging or receptacle used for Packing Group I materials. The maximum rate of permeation of hazardous lading through or into the plastic packaging or receptacles may not exceed 0.5 percent for materials meeting the definition of a Division 6.1 material according to §173.132 and 2.0 percent for other hazardous materials, when subjected to a temperature no lower than—

(A) 18 °C (64 °F) for 180 days in accordance with Test Method 1 in appendix B of this part;

(B) 50 °C (122 °F) for 28 days in accordance with Test Method 2 in appendix B of this part; or

(C) 60 °C (140 °F) for 14 days in accordance with Test Method 3 in appendix B of this part.

(iii) Alternative procedures or rates of permeation are permitted if they yield a level of safety equivalent to or greater than that provided by paragraph (e)(3)(ii) of this section and are specifically approved by the Associate Administrator.

#### 49 CFR 107.1

Competent Authority Approval means an approval by the competent authority that is required under an international standard (for example, the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air and the International Maritime Dangerous Goods Code). Any of the following may be considered a competent authority approval if it satisfies the requirement of an international standard:

(1) A specific regulation in subchapter A or C of this chapter.

(2) A special permit or approval issued under subchapter A or C of this chapter.

(3) A separate document issued to one or more persons by the Associate Administrator.