



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

April 3, 2024

Mr. Erik Steinbeck
Parker Hannifin Lord Corporation
601 South Street
Saegertown, PA 16433

Reference No. 24-0024

Dear Mr. Steinbeck:

This letter is in response to your February 14, 2024, email and subsequent conversation with my staff requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the transportation of materials poisonous by inhalation in intermodal freight containers. You describe a scenario where drums containing “UN2487, Phenyl isocyanate, 6.1, (3), PG I” are transported by vessel in closed intermodal freight containers from China to the Port of New York. The intermodal freight containers are then placed on a vehicle chassis and secured with the locks specifically designed to latch down the container—without intermediary cross-docking or unloading—and transported to their final destination. You note the packaging provisions in § 173.227(c) state that “1A1, 1B1, 1H1, 1N1, 6HA1 or 6HH1 drums described in paragraph (b) of this section may be used without being further packed in a 1A2 or 1H2 drum if the shipper loads the material, blocks and braces the drums within the transport vehicle and seals the transport vehicle used.” In addition, § 173.227(c) states that “Drums may not be stacked (double decked) within the transport vehicles. Shipments must be from one origin to one destination only without any intermediate pickup or delivery.” You ask whether an intermodal freight container mounted on a vehicle chassis and secured with locks as described in your email may be considered a closed transport vehicle for the purposes of the packaging provisions in § 173.227(c).

The answer is yes. Based on the pictures and videos provided in your email, it is the opinion of this Office that the intermodal freight container configuration described may be considered a closed transport vehicle in accordance with § 173.227(c), as the closed container described is positioned on a vehicle chassis and secured using locks specifically designed to integrate it with the semi-trailer in a mechanical manner.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Shane C. Kelley
Director
Standards and Rulemaking Division

Jones, Jessie Jane CTR (PHMSA)**Subject:** FW: UN2487- Phenyl Isocyanate. China to US imports. 173.227(c) applicability.

From: Erik Steinbeck <erik.steinbeck@parker.com>**Sent:** Wednesday, February 14, 2024 4:17:25 PM**To:** Kelley, Shane (PHMSA) <shane.kelley@dot.gov>**Cc:** DerKinderen, Dirk (PHMSA) <Dirk.DerKinderen@dot.gov>; Webb, Steven (PHMSA) <steven.webb@dot.gov>**Subject:** RE: UN2487- Phenyl Isocyanate. China to US imports. 173.227(c) applicability.

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One additional photo of a chassis without freight container. Notice the posts- which rotate to locking into the corner posts.





From: Erik Steinbeck

Sent: Wednesday, February 14, 2024 4:06 PM

To: Kelley, Shane (PHMSA) <shane.kelley@dot.gov>

Cc: DerKinderen, Dirk (PHMSA) <Dirk.DerKinderen@dot.gov>; Webb, Steven (PHMSA) <steven.webb@dot.gov>

Subject: UN2487- Phenyl Isocyanate. China to US imports. 173.227(c) applicability.

Shane,

Per your request- please see the below photos, and the supplementary video link- both of which detail the mechanical union of freight container to chassis body. Essentially there are 4 kingpins, one on each corner of the chassis. The freight container is positioned atop the chassis, and the mounting pins are secured into place with a cam-over locking mechanism. I think the video does a better job of illustrating the process. I hope this helps.

Please advise if you need anything else from me to support a letter of interpretation on this topic. Happy to help in any way. Thanks again!

[Container on chassis safety. \(youtube.com\)](https://www.youtube.com/watch?v=...)





Erik

From: Erik Steinbeck <erik.steinbeck@parker.com>
Sent: Friday, January 5, 2024 1:24 PM
To: DerKinderen, Dirk (PHMSA) <Dirk.DerKinderen@dot.gov>
Subject: 173.227(c). LOI #17-0005. Phenyl isocyanate imports
Importance: High

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon sir,

We have two suppliers of an isocyanate substance properly classified under UN2487. One in the US, and one in China. Our US source will discontinue manufacture in July of this year, and the Chinese source cannot accommodate the US packaging requirements set-forth in 173.227, specifically the requirement for an outer and an inner drum configuration-

which is considerably more stringent than IMDG packing instruction P602. However, 173.227(c) provides relief from the outer drum requirement so long as certain requirements are met. Our proposed shipments will be loaded, blocked, braced and sealed at origin (Shanghai) in 40ft cargo units. These will move directly by vessel to the port of New York, and then to our final location in Saegertown without intermediary cross-docking or unloading. That being said, I assumed we met the conditions of 173.227(c) and hence could omit the outer drum. However, our attorney on retainer cited the attached LOI which states a freight container (cargo unit) is not a "Transport Vehicle", so the relief is NOT afforded.

Considering the robustness of an ocean cargo unit relative to an over the road dry van, I would like to challenge PHMSA to broaden their definition of transport vehicle, or otherwise amend paragraph C to accommodate importers. Presumably the update to 173.227 in 1990 was an intentional act to harmonize with the IMDG regulation- so limiting the definition of transport vehicle to a tractor, truck or semitrailer defeats the intended purpose.

As well, perhaps we can reconsider what is included within the term "transport vehicle." A freight container leaving a distribution point is mounted onto a chassis for the purpose of transporting cargo by any mode. Is it possible that when a freight container is mounted onto a chassis and motive power, or loaded onto a vessel; the combined unit of the trailer and the freight container, or vessel and freight container may be considered a transport vehicle?

This is an urgent matter, so I greatly appreciate your time and efforts as always.

Kind regards,

Erik Steinbeck, CDGP DGSA
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