



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

April 29, 2025

Erin Gaul
Senior Consultant
Labelmaster Services Inc.
5724 North Pulaski Rd
Chicago, IL 60646

Reference No. 24-0092

Dear Ms. Gaul:

This letter is in response to your October 1, 2024, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to limited quantity shipments. In your email, you state that retailers request that distribution centers ship consumer products under the limited quantity exceptions for flammable liquids in 49 CFR § 173.150(b). You note that these products—such as bottles of cologne—are placed into a corrugated retail packaging, which is then placed into a plastic poly bag.

Does the packaging—as pictured in your email—meet the requirements in 49 CFR § 173.150(b), which requires that limited quantities of flammable liquids be packaged in combination packagings with a strong outer packaging? Is it true that limited quantities shipped in accordance with 49 CFR § 173.150(b) may not use plastic poly bags as the outer packaging?

Based on the pictures and descriptions provided in your email, it is the opinion of this Office that the plastic poly bags would not qualify as a strong outer packaging as required in 49 CFR § 173.150(b). Section 171.8 defines a strong outer packaging as “the outermost enclosure that provides protection against the unintentional release of its contents. It is a packaging that is sturdy, durable, and constructed so that it will retain its contents under normal conditions of transportation.” The plastic poly bags as shown in your email, do not appear to meet this definition.

However, please note that we cannot determine if the corrugated retail packaging described in your email may itself meet the definition of a strong outer packaging—that must be determined by the offeror. If the corrugated retail packaging meets all the applicable HMR requirements and is considered the strong outer packaging, the plastic poly bag could be used as an overpack provided it meets the requirements in 49 CFR § 173.25.

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

Sincerely,

A handwritten signature in blue ink that reads "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

From: [INFOCNTR \(PHMSA\)](#)
To: [Dodd, Alice \(PHMSA\)](#)
Cc: [Hazmat Interps](#)
Subject: FW: LOI for Sturdy packaging
Date: Wednesday, October 9, 2024 4:12:58 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)

Hello Alice,

Please see the below interpretation request. Let us know if you need anything.

Sincerely,
Janaye

From: Erin Gaul <EGaul@labelmaster.com>
Sent: Tuesday, October 1, 2024 10:21 AM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Cc: Cardez, Eugenio (PHMSA) <Eugenio.cardez@dot.gov>
Subject: LOI for Sturdy packaging

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 day.

I am looking for a letter of interpretation for **sturdy packaging** as it applies to limited quantities in ecommerce. Essentially in a nutshell a “box” vs. a “bag” as it applies to the “package offered into transportation”

Very often retailers request distribution houses to place limited quantity products directly into plastic poly bags without sufficient protection around the glass, plastic, or ceramic vessel. Even if the primary bottle is surrounded by a flimsy retail package, placing that into a plastic poly bag will not endure the riggers of rough ecommerce transportation.

While the various glass bottles of cologne (and other flammable liquids) are placed inside a corrugated primary consumer packaging, and for the same reason you would simply just not ship the box of cologne with a consignment label on it (other than customer dissatisfaction as to how it ‘looks’) that first box does not provide enough protection for the glass vessel that contains flammable liquid. Consumer retail packaging quality varies among manufacturers

and with no consistent quality management system in place for all manufactures (globally) one may produce a firm shell around the bottle, and other's will not. There is no consistency between manufacturers.

Transportation through eCommerce chain of custody routes can be rigorous. Their lightweight nature will cause handlers to throw them from sorting conveyance to floor to truck several times before making it to the package's final destination.

49CFR is clear in 173.150 that while UN Spec. packaging is not required, materials must be offered for transportation in **strong outer packaging** that complies with Subpart B and in combination packages.

Additionally, we must conform with 173.24a (1) Inner packaging closures in a combination package containing liquid hazardous materials must be packed so that closures on inner packagings are upright. Also, we see in (3) Inner packagings of combination packages must be so packed, secured, and cushioned to prevent their breakage or leakage and to control their shifting within the outer packaging under conditions normal to transportation.

Unfortunately, the poly mailer does not provide sufficient protection as prescribed in the general requirements of Subpart B nor in 173.24a.

Further consideration,

The definition in 49 CFR 171.8 clearly states that a strong outer packaging must be "sturdy." That, on its face, rationally excludes a soft outer packaging. A soft outer package cannot meet that requirement. Just because the regulations do not specifically say "You can't use a soft outer package" doesn't mean that they are permitted. The regulations (49 CFR 173.150 et al) stipulate "strong outer packaging." A strong outer package, per 49 CFR 171.8, must be sturdy (among other requirements). Any soft packagings are, on their face, not sturdy, and thus non-compliant.

A simple thought experiment reinforces this. Imagine a scenario in which a warehouse employee accidentally steps on the proposed "plastic poly envelope package" in question. Will a plastic poly envelope resist crushing and the resultant escape of the package's contents from their inner container? The answer is obviously "no." Will a non-specification fiberboard box resist such crushing, at least to the point of protecting the contents? The answer is "very probably."

The regulations are written from the assumption that stakeholders will use them in a manner that logically reflects the requirements of their contents. In other words, the regulators wrote them from the perspective that people will exercise common sense in their execution. Making an assumption that a soft outer package can be considered "sturdy" when that is obviously not the case contravenes common sense and is therefore non-compliant in this scenario.

If Postal injection methods are utilized (post office delivers in final mile) the package must ALSO comply with Publication 52 which even more strict. Packages must be leakproof even by ground. Again, the package presented would fail this qualification.

Another note, from past experience, any poly bag that displays the LQ diamond will definitely

draw unwanted attention from the carriers and regulators who frequent the carrier terminals looking for nonconformant packages.

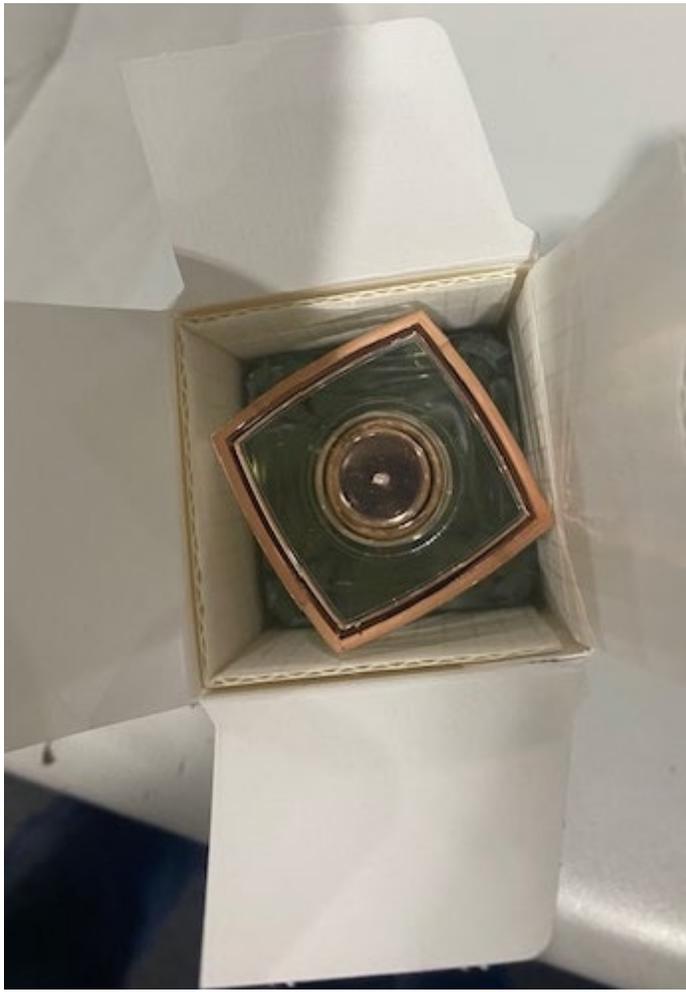
The distribution center does not feel utilizing a poly bag is sufficient protection, will be found at fault for offering a flammable liquid in LQ (or other LQ item) in deficient packaging (non-sturdy) when the product breaks and leaks in transport. It is for this reason they need your help in defending their decision to utilize a non UN Spec. box for all liquids in Limited Quantities throughout their ecommerce divisions. The retailers want to cut costs by utilizing a poly bag vs. a box.

Pictures below show a bottle inside a fluted insert within a thin retail package. Please understand, some manufacturers may not utilize a fluted insert around the bottle. Process management in large ecommerce warehouses do not take into account 'some' retail packages are better than others. Letting the packer decide to utilize a box or a bag is a terrible option as they ship 100,000 ++ packages a day and the WMS must either point the packer to use a bag or a box.

Pictures of below:







lucky me

Warm sandalwood, sweet praline and bergamot mingle for a one-of-a-kind fragrance as unexpected as a four leaf clover.

CAUTION: FLAMMABLE



ATTENTION: INFLAMMABLE

DO NOT USE NEAR HEAT OR FLAME. AVOID
SPRAYING IN EYES. NE PAS UTILISER PRÈS
D'UNE SOURCE DE CHALEUR OU DE
FEU. ÉVITER TOUT CONTACT AVEC LES YEUX.

Ingredients/Ingrédients: Alcohol Denat.,
Fragrance (Parfum), Water (Aqua/Eau),
Ethylhexyl Methoxycinnamate, Ethylhexyl
Salicylate, Butyl Methoxydibenzoylmethane,
Alpha-Isomethyl Ionone, Citronellol, Coumarin,
Limonene, Linalool, Blue 1 (CI 42090), Ext. Violet
2 (CI 60730), Yellow 5 (CI 19140)

Dist: ByPar maures Duluth, MN 55802
Toronto, ON M5H 2T4
Made in USA/Fabriqué aux États Unis







Please explain my next steps or if you need more information.
We are asking for support in utilizing a box vs. a poly bag for these shipments.

Erin Gaul
DGSA, CDGP
Sr. Consultant Labelmaster Services Inc.
On behalf of Geodis, Americas / Warehousing & Freight Forwarding
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Freeburg, IL 62243

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