

**From:** [DerKinderen, Dirk \(PHMSA\)](#)  
**To:** [Hazmat Interps](#)  
**Subject:** FW: Question about regulation interpretation  
**Date:** Monday, May 12, 2025 12:08:27  
**Attachments:** [image.png](#)  
[IATA 2.6 Dangerous Goods in Excepted Quantities.pdf](#)

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Please process as an interp request.

Thanks,  
Dirk Der Kinderen  
Chief, Standards Development Branch  
PHMSA  
202-366-4460 (desk)  
202-365-4684 (cell)

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**From:** Streck, Stuart (PHMSA) <stuart.streck@dot.gov>  
**Sent:** Monday, May 12, 2025 11:39 AM  
**To:** DerKinderen, Dirk (PHMSA) <Dirk.DerKinderen@dot.gov>  
**Cc:** Nichols, Marc (PHMSA) <Marc.Nichols@dot.gov>; Taylor, Robert (PHMSA) <robert.taylor1@dot.gov>  
**Subject:** FW: Question about regulation interpretation

Dirk,

Last week Rob Taylor and I represented PHMSA at a CBP biological workshop hosted by the University of Michigan. I met with Mr. Ben Hess during one of the breaks with his interesting question, but I was unable to assist him on the spot. Per my request, he has submitted he question for consideration through an LOI.

Thank you for your assistance!

Respectfully,

**Stuart Streck**

Senior Investigator  
Systems Integrity Safety Program Coordinator, Office of Hazardous Materials Safety

US Department of Transportation  
**Pipeline and Hazardous Materials Safety Administration**  
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**From:** Benjamin Hess <[bmhess@umich.edu](mailto:bmhess@umich.edu)>

**Sent:** Friday, May 9, 2025 10:26 AM

**To:** Taylor, Robert (PHMSA) <[robert.taylor1@dot.gov](mailto:robert.taylor1@dot.gov)>; Streck, Stuart (PHMSA) <[stuart.streck@dot.gov](mailto:stuart.streck@dot.gov)>

**Subject:** Question about regulation interpretation

You don't often get email from [bmbhess@umich.edu](mailto:bmbhess@umich.edu). [Learn why this is important](#)

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Robert and Stuart,

Good morning. I spoke briefly with Stuart at the CBP Importation of Biologicals Workshop on Tuesday at the University of Michigan, and I would like assistance on interpretation for a specific regulation.

We use the following regulations, which are the standards for domestic and international shipping of non-infectious zoological specimens.

- **International Air Transport Association (IATA) Special Provision A180:**
    - <https://www.icao.int/safety/DangerousGoods/WG20/DGPWG.20.WP.018.2.en.pdf>
    - Allows hand-carrying
  - **U.S. Department of Transportation regulations 49 CFR 173.4 - small quantity regulations**
    - **49 CFR 173.4b - De minimis exceptions**
      - (allows hand-carrying per 49 CFR 175.10)
    - <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C/part-173/subpart-A/section-173.4b>
      - Regulations mimic those of IATA SP A180
  - These regulations list the following chemicals
    - Ethanol, Ethyl Alcohol (Class 3, UN1170, Packing Group II)
    - Formalin (Class 3, UN 1198, Packing Group III)
      - regulated by air transportation, when greater than or equal to 10%
    - Alcohols, n.o.s. (not otherwise specified), Denatured Alcohol, Alcohols other than ethanol or isopropanol (Class 3, UN 1987, Packing Group II)
    - Isopropanol, Isopropyl Alcohol (Class 3, UN 1219, Packing Group II)
- I was asked if methanol could be transported in hand-carry or checked luggage in the same way. Methanol is often an approved chemical to render material non-infectious, and we have a

researcher that is using this more often.

- **Methanol - UN 1230, Hazard Class 3 (flammable liquids) and 6.1 (toxic), packing group II**

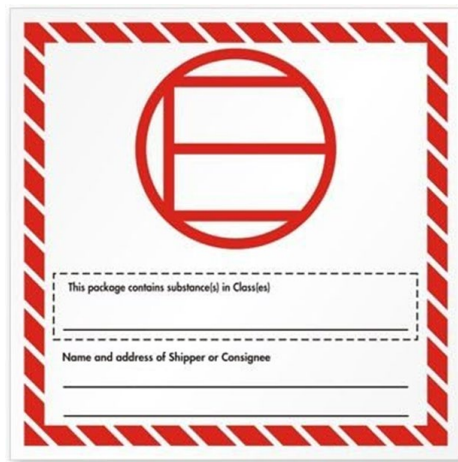
- Methanol (UN 1230) may fall under the Alcohols, n.o.s. (UN 1987) category listed within IATA SP A180 with the same hazard class 3 and packing group II. It is an alcohol other than ethanol or isopropyl, BUT IT IS SPECIFIED WITH A UN NUMBER.
  - THIS IS SUBJECT TO INTERPRETATION???
  - Unless there is clear authorization from IATA, I do not recommend this is carried under IATA SP A180. I recommend that this is checked as cargo or shipped under the IATA Excepted Quantities
- Methanol will be used as a preservative for the shipment of cow (*Bos taurus*; Bovidae Family) fecal samples for future scientific research (i.e., liquid chromatography mass spectrometry)
- Alcohols, n.o.s., Denatured Alcohol, Alcohols other than ethanol or isopropanol (Class 3, UN 1987, Packing Group II)

I consulted with various individuals, and our U-M EHS Hazardous Materials Specialist about this. In general, the use of methanol meets the "spirit" of the regulations where it is used as an alcohol to preserve and treat zoological material; however, it is NOT LISTED IN THE CHEMICAL LIST.

- In the end, I recommended that this material was shipped according to Excepted quantities regulations.

- **49 CFR 173.4a – Excepted quantities**

- <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C/part-173/subpart-A/section-173.4a>
- I have attached a PDF of the IATA 2.6 Dangerous Goods in Excepted Quantities, which would match the DOT regulations.
- The researchers would have been in compliance with roughly 30 tubes containing a maximum of 15 ml of methanol for 450 total ml of methanol.
  - All samples will be triple-packaged according to International Air Transport Association (IATA) Dangerous Goods Regulations (DGR) Excepted Quantities (EQ): double, sealed bags with absorbing material in the second bag and moist absorbing material in the first one, and a strong outer package; no more than 30 ml of free liquid solution in each inner packaging and no more than 500 ml (packing group II regulation) in the entire outer package. According to DGR-EQ, this may not be carried in checked or carry-on baggage per IATA and Federal Aviation Administration (FAA), but may be checked as cargo or shipped. If shipped, the shipping label must indicate "Dangerous Goods in Excepted Quantities" on the Air Waybill.
  - The Excepted Quantity label would have been included.



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The researchers ultimately decided to use a courier service to ensure compliance with a larger set of imported specimens, but **I would like to find out if this is possible to hand-carry methanol preserved samples under IATA SP A180 (or 49 CFR 173.4b) in the future.** Thank you very much for your assistance. If I can provide any additional information, please let me know.

Sincerely,

Ben

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**Benjamin M. Hess | EEB Museums Registrar | EEB Museums Safety Representative to the RMC**

University of Michigan | LSA Ecology & Evolutionary Biology | Research Museums Center

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