

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

JUL 28 2010

Mr. Mark A. Connolly Akzo Nobel Chemicals, Inc. 525 W. Van Buren Street Chicago, IL 60607-3823

Ref. No. 10-0094

Dear Mr. Connolly:

This responds to your May 25, 2009 letter concerning authorized packaging under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask for clarification of authorization to use a foreign-made UN portable tank with non-bulk capacity.

According to your letter, your company would like to transport hazardous material (i.e., UN3394, Packing Group (PG) I material) in a foreign-made UN portable tank with a capacity of 200 liters. The portable tank will be designed and manufactured using the same process for a bulk capacity portable tank conforming to Section VIII of the ASME code and portable tank instruction T22, and will be U stamped. You request clarification that the HMR authorize the import and export to and from the United States by vessel as well as the domestic filling and transportation of these foreign-made UN portable tanks.

Your understanding is correct that a foreign-made UN portable tank offered and transported by vessel in accordance with the International Maritime Dangerous Goods (IMDG) Code may be imported and exported to and from the United States, subject to certain conditions and limitations. See §§ 171.22 and 171.25. Your understanding is also correct that a foreign-made UN portable tank may be filled and transported domestically. The HMR authorize the import and use of a foreign-made UN portable tank manufactured in accordance with national or international regulations based on the United Nations Recommendations on the Transportation of Dangerous Goods, subject to conditions and limitations. See § 173.24(d).

Note that as a condition for use of the IMDG Code, UN portable tanks (regardless of capacity) must conform to applicable bulk special provisions assigned in the § 172.101 hazardous materials table (HMT) to the hazardous material to be transported in the UN portable tank. See § 171.25(c)(1). With regard to import and use of foreign-made UN portable tanks under § 173.24(d), although not similarly instructed as with use of the IMDG Code, it is the opinion of this Office that UN portable tanks (regardless of capacity) must also conform to applicable bulk special provisions assigned to the hazardous material to be transported.

According to your letter, the UN portable tank would be constructed in conformance with portable tank instruction T22 and filled in conformance with portable tank special provisions

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

TP2 and TP7. The hazardous material description "Organometallic substance, liquid, pyrophoric, water-reactive, UN3394, PG I," is assigned bulk special provisions T21, TP2, and TP7 in the § 172.101 HMT. Although T22 is not assigned to the material, the HMR authorize the use of a UN portable tank conforming to an alternative tank instruction under conditions listed in § 172.102(c)(7)(v). For example, the alternative UN portable tank must be constructed to a wall thickness greater than or equivalent to the wall thickness of the portable tank instruction assigned to the hazardous material. Thus, the foreign-made UN portable tank conforming to the bulk special provisions described in your letter is authorized for use under the HMR.

I hope this information is helpful. If you have further questions, please contact this office.

Sincerely,

Charles E. Betts

Chief, Standards Development

Office of Hazardous Materials Standards



May 25, 2009

Associate Administrator for Hazardous Materials Safety PHMSA
U.S. DOT
Attention: PHH-32
1200 New Jersey Avenue
SE East Building, 2nd Floor
Washington, DC 20590

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Subject:

Request for Clarification of DOT regulations Applicable to the Import and Export of UN 3394 materials in 200 Liter capacity Foreign Built 200 Liter capacity UN Portable Tanks meeting T 22 Portable Tank Instruction

Dear Sir or Madam,

Akzo Nobel Polymer Chemicals LLC (ANPC), a worldwide producer of High Purity Metalorganics to the semiconductor and solar industry. Currently we offer these liquid UN3394, 4.2, (4.3), PGI products in electro-polished stainless steel DOT 4B specification cylinders per 49CFR 173.181.

The solar industry is in a period of rapid change and in order to remain competitive with our foreign competitors it is crucial that we quickly modify our supply chain in response to these changes. We have determined that we must have the flexibility to transport this material in packages larger than the nonbulk packages authorized in 49CFR173.181, but smaller than the bulk packages noted in 49CFR173.244. This unique product sells for \$2,740 per liter. ANPC nor our customers can afford the business risk of potential loss in transport of 450 liters (\$1,233,000). Our target package capacity is approximately 200 - 250 liters.

Our current DOT 4B specification cylinder suppliers cannot readily manufacture this large of a cylinder without significant increase in costs and time to retrofit their equipment.

We have received a bid from a European portable tank manufacturer to build a 200 Liter capacity Foreign Built UN Portable Tanks meeting T 22 Portable Tank Instruction. Each will be designed and manufactured using the same process as a larger 450 liter capacity portable tank in accordance with Section VIII of the ASME code and also be U stamped.

We request your review of this activity and the DOT requirements impacting:

- our import and export of UN 3394,4.2, (4.3), PG I material in these particular tanks; and
- the potential for U.S. domestic transport-

NOTE: Hazard communications will be in accordance with bulk packaging requirments.

Question

The UN Recommendations and the IMDG code do not have minimum capacity requirements for portable tanks. Does the DOT authorize the import into the U.S. and export from the U.S. via international water of hazardous materials (example: UN 3394, 4.2, (4.3), PGI) in 200 Liter capacity foreign Built UN Portable Tank meeting T 22 Portable Tank instruction; and filled in accordance with TP2 and TP7?

AkzoNobel Interpretation:

Yes, in accordance with 49 CFR 171.22(g)(5), and 171.25(c) the DOT regulations authorize the import and export of UN portable tanks meeting the requirements of 173.24 and this foreign manufactured UN portable tank meets the requirements of 173.24(d)(2).

Question

Does the DOT authorize the filling and U.S. domestic transport of hazardous materials (example: UN 3394, 4.2, (4.3), PGI) in a 200 Liter capacity foreign Built UN Portable Tank meeting T 22 Portable Tank Instruction; and filled in accordance with TP2 and TP7?

AkzoNobel Interpretation:

Yes, if DOT issues at their discretion, a clarification, competent authority approval, or special permit which authorizes design and manufacture of a portable tank meeting the requirements of a UN portable tank with the exception that the capacity is <450 liters.

Currently, 49CFR 173.24(d)(2) authorizes the use of a Foreign manufactured UN portable tank. The challenge is the U.S. definitions of bulk packaging. Based upon the example material, (UN 3394, 4.2, (4.3), PG I), 49CFR 173.244 authorizes a UN portable tank meeting the requirements of T 21 portable tank instructions. Within 49CFR171.8 a "portable tank" is defined as a "bulk packaging" and a "bulk packaging" is define for our purposes as having a maximum capacity >450 liters as a receptacle for liquids.

Issuance by the DOT of a clarification, competent authority approval or special permit would enable the smaller capacity portable tank to filled and offered for transport via, road, rail and water domestically and internationally.

Your prompt review and feedback on this issue is appreciated.

Please contact me if you need further information or have any questions on this matter.

Sincerely,

Mark A. Connolly

Manager, Transportation Regulations and Security

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