



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

JUN 1 2001

Mr. E. A. Altemos  
HMT Associates, L.L.C.  
1850 K Street, N.W.  
Washington, D.C. 20006-3500

Ref. No. 01-0086

Dear Mr. Altemos:

This responds to your March 20, 2001 letter concerning the packaging requirements for solid sodium chlorite, UN 1496, a Division 5.1 material under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) and the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Technical Instructions). You state that the sodium chlorite is located inside a rigid plastic cartridge which is packaged in a 4G packaging. The inner 4G packaging is further packed in a 1G fibre drum for shipment as a single package. Specifically, you request confirmation that a 1G fibre drum with a 4G inner packaging may be considered as a single package for purposes of application of cargo aircraft package quantity limitations for domestic and international air transport.

The answer is yes. A 1G fibre drum that is an authorized single packaging for a hazardous material may contain inner receptacles which are compatible with the lading as long as the inner receptacles would not adversely impact the level of performance of the packaging. The packaging would remain marked as a single packaging. Therefore, for purposes of determining the package quantity limitation for air, a 1G fiberboard drum with an inner 4G packaging, may be considered a single package.

I hope this answers your inquiry.

Sincerely,

Edward T. Mazzullo  
Director, Office of Hazardous  
Materials Standards



010086

173.212(w)

HMT ASSOCIATES, L.L.C.

1850 K STREET, N.W.  
SUITE 200  
WASHINGTON, D.C. 20006-3500

(202) 463-3511

FACSIMILE (202) 463-3512

Boothe  
§173.212(c)  
Packaging

Ref. No. 01-0086

E.A. ALTEMOS  
PATRICIA A. QUINN  
GORDON ROUSSEAU

WRITER'S DIRECT DIAL NUMBER  
(202) 463-3511, Ext. 11

March 20, 2001

Mr. Edward T. Mazzullo  
Director, Office of Hazardous  
Materials Standards (DHM-10)  
Research and Special Programs  
Administration  
Department of Transportation  
Washington, D.C. 20590-0001

Dear Mr. Mazzullo:

This is to request confirmation that a particular method of packaging may be considered a "single packaging" under the provisions of the DOT Hazardous Materials Regulations ("HMR"; 49 CFR Parts 171-180), including for purposes of application of cargo aircraft package quantity limitations for domestic and international air transport. Of relevance in this connection, is an interpretation previously issued by your office in the context of both the requirements of the HMR and the International Civil Aviation Organization (ICAO) *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (ICAO Technical Instructions), in which it is provided that an authorized single packaging containing a hazardous material in inner receptacles may remain marked and, presumably, be transported as a single packaging.

The hazardous material concerned is a rigid plastic cartridge with a diameter of approximately three inches which contains solid sodium chlorite (UN 1496, Division 5.1, Packing Group II). Each cartridge, which is an article designed to be used by insertion directly into a piece of equipment, contains approximately 2.8 pounds of sodium chlorite. This exceeds the maximum inner packaging quantity authorized for transport in a combination packaging by passenger aircraft under both the HMR and ICAO Technical Instructions, and also exceeds the inner packaging quantity limit authorized for transport in a combination packaging by cargo-only aircraft under the ICAO Technical Instructions. However, sodium chlorite is authorized to be transported by cargo-

HMT ASSOCIATES, L.L.C.

Mr. Edward T. Mazzullo  
March 20, 2001  
Page 2

only aircraft under both the HMR and the ICAO Technical Instructions in single packagings subject to a maximum net quantity per package of 25 kg.

For surface transport within the United States, several cartridges will be transported in UN standard 4G *single packagings*, as authorized by § 173.212(c) of the HMR. For transport by cargo-only aircraft, this container would be inserted in a UN standard 1G fibre drum, and held in place with appropriate securing and cushioning materials. The 1G fibre drum would be tested, marked and certified as required for a single packaging used to transport sodium chlorite, and the fibreboard inner receptacle containing the cartridges would not affect the level of performance of the single packaging. Please confirm our understanding of the previously issued interpretation that, under these circumstances, the 1G fibre drum may be considered a single packaging for purposes of transport under the provisions of the HMR and the ICAO Technical Instructions.

In addition, please advise whether, under the circumstances described, you would consider it necessary to remove or obliterate any hazard labels, and/or packaging markings (e.g., proper shipping name, UN packaging certification markings, etc.) that appear on the 4G package before placing that receptacle into the 1G fibre drum, in order that the fibre drum may be viewed as a "package" for purposes of transport under the provisions of the HMR and ICAO Technical Instructions.

I look forward to a reply at your earliest convenience. In the meantime, please do not hesitate to contact me if you have questions or require additional information regarding this matter.

Sincerely,



E. A. Altemos

Enclosure