



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

JAN 15 2003

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

Mr. Robert M. Smith
President
CARGOpak Corp.
3215-A Wellington Court
Raleigh, NC 27615

Reference No.: 02-0240

Dear Mr. Smith:

This responds to your letter requesting clarification of certain non-bulk packaging and testing requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You describe the following scenario: a shipper wants to offer Isopropyl alcohol, 3, UN1219, PG II, in a non-bulk combination packaging for transportation by all modes. As an inner packaging, the shipper wants to use a one-gallon plastic bottle that meets the minimum 95 kPa test pressure requirements in § 173.27(c)(2)(i) for air transport but has not been tested as part of the combination packaging. Your questions are paraphrased and answered below:

Q1. The shipper wants to purchase a fiberboard box marked UN 4G/Y9/S/02/USA/+AC1616 that apparently has been tested with a similar plastic inner package. Is this in conformance with DOT and UN standards?

A1. Variation 1 in § 178.601(g) permits certain variations in inner packagings of a tested combination package without further testing of the package, provided an equivalent level of performance is maintained. See § 178.601(g)(1)(i)(A)-(F) for the specific changes that are authorized. It would be the responsibility of the person making the changes, in this case the shipper, to ensure that the inner packaging provides an equivalent level of performance in all regards, such as compatibility, impact resistance, stack strength, etc. For air transport, the packagings must meet the applicable requirements in § 173.27.

Q2. For a one gallon IP.2 plastic inner packaging, does the term "industry standard" mean that all similar but not identical inner packagings are acceptable as part of a combination packaging without retesting the entire packaging?

A2. The term "industry standard" has no relevance within the context of UN standards. See answer to Q1.

Q3. Is a packaging that consists of a plastic bottle inner packaging, a plastic poly liner and a fiberboard outer packaging, tested and marked as in Question 1, acceptable for all modes of transportation including passenger and cargo aircraft?



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A3. The answer is yes, provided the completed package is an authorized packaging for the material to be packaged, meets quantity limits for transport by aircraft, and meets all applicable requirements for both the standard to which it is marked and for air transportation. See answer to Q1.

I trust this satisfies your inquiry.

Sincerely

A handwritten signature in cursive script that reads "Hattie L. Mitchell". The signature is written in black ink and is positioned above the typed name.

Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards



Corbin
 8178.6016
 Testing
 02-0240

9/6/2002

U.S. Department of Transportation,
 Research and Special Programs Administration,
 Office of Hazardous Materials Standards,
 400 Seventh St, S.W.,
 Washington, DC 20590
 Attn: Mr. Ed Mazzullo

Dear Mr. Mazzullo,

Could you please clarify the following?

A shipper wants to ship in non-bulk, combination packaging by all modes of transport (including passenger and cargo aircraft) Isopropyl alcohol, Flammable liquid Class 3, UN1219, PGII. As an inner packaging she wants to use her own 1 gallon plastic bottle which meets the minimum 95 kPa. test pressure requirement for air, but does not have a completely tested and certified UN specification package.

1) Can this shipper purchase from a packaging supplier just the outer box component marked with UN certification 4G/Y9/S/02/USA/+AC1616 which apparently has been tested with a similar, but not the same, plastic inner package and be in compliance with the DOT/UN standards?

2) Concerning the 1 Gallon, IP2 plastic inner package, does the term "industry standard" deem all similar but not identical inner packagings (e.g. different bottle manufacturer) be acceptable to use with outer boxes that were tested with similar inner packaging bearing UN certification markings without re-testing the entire packaging?

3) Would a complete packaging consisting of the plastic bottle inner packaging, a plastic poly liner and a fiberboard box outer packaging without sufficient absorbent to absorb the entire liquid content of the package, with the same certification markings as in 1) be acceptable for all modes of transport including passenger and cargo aircraft?

Thank you,
 sincerely

Robert M. Smith
 President