



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

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

OCT 27 2000

Mr. Miki Birnbaum
ZAG Industries
19 Hamelacha Street
New Industrial Zone
Rosh Hayim 48091
ISRAEL

Ref. No. 00-0271

Dear Mr. Birbaum:

This is in response to your September 27, 2000 letter requesting clarification on the requirements for outside packagings for cylinders under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask if there are testing requirements applicable to outside packagings for the shipment of certain cylinders.

Section 173.301(k) requires that DOT Specification 2P, 2Q, 3E, 3HT, 4BA spherical type, 4D, 4DA, 4DS, 9, 39, 40, and 41 cylinders are shipped in a strong outside packaging that adequately provides protection for the cylinder. Unless the cylinders are equipped with a protective neck collar or neck ring, the outside packaging must provide protection from accidental functioning and damage. A strong outside package is defined by § 171.8 to be the outermost enclosure which provides protection against the unintentional release of its contents under conditions normally encountered in transportation. There are no specific testing requirements for strong outside packagings.

I hope this satisfies your request.

Sincerely,

Delmer F. Billings
Chief, Standards Development
Office of Hazardous Materials Standards



000271

173.301

Nelson
173.301(k)
Compressed Gases
00-0271

Date: 10 September, 2000

To: DOT

From: Miki Birnbaum - ZAG

Ref: Testing plastic boxes for shipping small CO₂ containers

Dear Sir/Lady

I am attaching some details and photos of the CO₂ containers and the foldable shipping box.

Please advise your recommended testing procedure and transportation requirements for the **plastic boxes** in which holds 3x6=18 containers and will be displayed in the store and transported (full) to the sale points and back (empty) to the filling plant (transportation by trucks).

Containers

The containers are high pressure and drop proven for home use.

Material:	Aluminum
Dia.:	60 mm
Length:	365 mm
Weigh (full)	1.25 Kg
Weight (empty)	0.66 Kg

Plastic box

Length:	400 mm
Width:	200 mm
Height:	400 mm
Weight (empty)	5 Kg
Loaded weight	27.5 Kg

Many thanks in advance

Miki Birnbaum – Engineer