DANGEROUS GOODS PANEL (DGP)

NINETEENTH MEETING

Montreal, 27 October to 7 November 2003

EXCERPT FROM THE CANADIAN STANDARD CAN/CGSB-43.150-97 "PERFORMANCE PACKAGINGS FOR TRANSPORTATION OF DANGEROUS GOODS"

(Presented by J. Code)

CAN/CGSB-43.150-97

"Performance Packagings for Transportation of Dangerous Goods"

Published by the Canadian General Standards Board (CGSB). The standard may be obtained from CGSB at (819)956-0425 or ncr.cgsb-ongc@pwgsc.ca

Combination Packaging (Emballage combiné)

A packaging consisting of one or more inner packagings contained in an outer packaging for transport.

8.5 Every <u>combination packaging</u> that meets the requirements of par. 9.7.2, shall have the following marking:



The outer packaging shall be marked with the test pressure for the inner packaging in kilopascals adjacent to the acceptable for air transport symbol to indicate inner packagings that have been tested to *** kPa internal pressure (where *** indicates the minimum internal test pressure for the inner packaging).

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- **9.7.2** The minimum internal pressure required is dependent on the actual liquid to be transported and shall be determined by one of the following methods:
- a. The total gauge pressure measured in the packaging (i.e. the vapour pressure of the filling substance and the partial pressure of the air or other inert gases minus 100 kPa) at 55 multiplied by a safety factor of 1.5. This total gauge pressure shall be determined on the basis of a maximum degree of filling such that the packaging shall not become liquid full at 55EC and a filling temperature of 15EC.
- b. 1.75 times the vapour pressure at 50 of the substance to be transported, minus 100 kPa, with a minimum test pressure of 95 kPa.
- c. 1.5 times the vapour pressure at 55 of the substance to be transported, minus 100 kPa, with a minimum test pressure of 95 kPa.

In addition, packagings intended to contain substances of Packing Group I (Grade X), excepting inner packagings of combination packagings, shall be subjected to a minimum test pressure of 250 kPa.

Inner packagings intended for air transport, as prepared for shipment, must be capable of withstanding an internal pressure resulting from a reduction in atmospheric pressure of 95 kPa or an internal pressure related to the vapour pressure determined in accordance with par. 9.7.2 a., b. or c. whichever is greater. If the vacuum method is used, the tests should be performed in accordance with ASTM D 3078 or D 4991.