

## COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the Transport of Dangerous Goods

Twenty-seventh session  
Geneva, 4-8 July 2005  
Item 4 (c) of the provisional agenda

### PACKAGINGS (INCLUDING IBCS AND LARGE PACKAGINGS)

Comments on ST/SG/AC.10/C.3/2005/4

Strength of “Single Trip” or “Lightweight”  
Composite Intermediate Bulk Containers (IBCs)  
with metal outer framework and plastic inner receptacle

Transmitted by the expert from Canada

1. The expert from Canada recognizes the issue raised in the proposal submitted by the Expert from Australia as serious and current and agrees with the proposal for the stacking test.
2. The expert from Canada is aware that single trip IBCs, while not manufactured in Canada, are sold and used in Canada. As the competent authority, we have had numerous complaints regarding how fast these IBCs deteriorate and structurally deform. (manufacturers market the “single trip” IBCs as a system in which the inner receptacle is swapped on each trip while the frame may be re-used after inspection & cleaning, recognizing that a number of frames won’t be re-used as well. Some large manufacturers market the system as an integrated service) While manufacturers seem to recognize that single trip IBCs are really only suitable for that – a single trip – and that there is considerable difference in the durability of these lightweight IBCs with blow-moulded inner receptacles compared to the traditional re-useable IBCs with a roto-moulded inner receptacles, the Model Regulations do not prohibit their re-use and make no differentiation in the marking applied to both types.
3. A problem not addressed in the paper submitted by the expert from Australia is the drop test. This issue is addressed in a proposal from Argentina, ST/SG/AC.10/C.3/2005/8, and we support the concepts proposed in the paper from Argentina. The current pass criteria for the drop test is that there is no leak. The base and structure of an IBC may be totally destroyed in a drop test but if there is no leak of the contents the test may be deemed a "pass". The structural collapse can in fact be used to absorb the kinetic energy of the IBC on the drop test.
4. An matter for consideration for the Sub-Committee is to have different marks for reusable and non-reusable IBCs perhaps established through different tests or different pass criteria. The Model Regulations could then include a prohibition for reuse for IBCs with the non-reusable mark.

5. The expert from Canada is of the opinion that the proposals from the Experts from Australia and Argentina are taking the requirements in the Model Regulations in the right direction but that more work needs to be done. The Expert from Canada is prepared to join with the Experts from Australia and Argentina and with other experts and interested industry groups in reviewing the testing criteria and marking requirements for IBCs and in trying to develop comprehensive proposals for the Sub-Committee to consider at a future meeting. Perhaps the December meeting is somewhat ambitious, at least for a formal paper, but July 2006 would seem feasible for a formal proposal.
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