
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

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Item 3 (c) of the agenda

OUTSTANDING ISSUES OR PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Environmentally hazardous substances

Comments on ST/SG/AC.10/C3/2004/88 +Add 1,2,3 (France)

Transmitted by the International Confederation of Drum Manufacturers (ICDM)

France presents a proposal for a newly invented vibration test at the twenty-sixth session.

The Industry has the following reservations regarding the proposal:

1) Already at the 22nd Session the Industry, in response to a United States of America's proposal (see ST/SG/AC.10/C.3/2002/77), stated in INF 36 Paper: "The representatives from industry regret that again there were no proofs for the necessity to introduce a vibration test" In addition requests for incident analysis or actual field performance to support the need for such a test have not been forthcoming.

Now, four sessions later, France proposes another vibration test although no more evidence of the need for such a test has been submitted.

2) Even though no justification has been provided for specifying this particular vibration test we are surprised that in alinea 9 the proposal should exempt several types of packages because (quote), "no issue was identified".

It would appear the Expert is being very selective without a solid justification .

3) Large steel drums have been used in their billions for over a hundred years for transporting dangerous goods and are well known to be one of the safest packaging in the world.

The test proposed now would be tantamount to destroying 100 % of steel drums tested by France, showing that the test requirement does not represent actual transport conditions.

4) Also in annex 88/Add 3, it is concluded to test only packages for liquid and large packaging as only those failed. There is no scientific justification for such a statement based on a handful of products tested, when thousands of design type models exist on the market.

Additionally there is no description of the packaging tested (it could have been a very heavy plastics drum and a very light metal one, or the other way round).

5) The second test run in 2004/88/Add3 is done with one ton load fixed on the top of the drums; this was done only with steel drums and without reference to any standard vibration testing. Therefore the validity of the results is questionable.

6) The test is inspired by two standards ISO 13355 and ASTM D 4169. The duration of the test is 30 minutes in ISO and in ASTM it is 180 minutes. The test report indicates that the ISO test is more severe than ASTM. Nevertheless the proposed test duration, which is using the ISO frequency spectrum, is 120 minutes for Packing Group 1. There is no justification given for increasing the duration of the test by four times that specified in the ISO standard.

7) In order to verify a specified vibration test we would expect the following:

- A full documented specification of the packaging tested.
- From the consignment a full UN performance test is carried out on the packagings **with satisfactory results**, before the vibration testing is carried out on other packagings from the same batch.
- Conditions of testing are specified precisely including the manner of locating/positioning the packaging on the vibration table.

8) The proposed test is complex and costly (testing at a frequency of 200Hz cannot be done using mechanical vibration equipment), requiring very expensive equipment. In addition it would require considerable investment in many countries.

Assessment

With the absence of field failure evidence, no justification has been provided to demonstrate that this vibration test would prevent unknown types of failure. There is also no justification for the choice of a very costly and sophisticated test. In conclusion we would like to suggest that the proposal described in ST/SG/AC.10/C.3/2004/88 should be rejected.

Consideration could be given as to whether this topic should be kept or removed as a work item since no progress has been made in the last four years.
