

## 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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### LISTING, CLASSIFICATION AND PACKING

Comments on document ST/SG/AC.10/C.3/2004/49 (Japan and the United States of America)

Transmitted by the expert from Belgium

#### **Introduction**

Belgium agrees with the creation of new entries for fuel cell cartridges and fuel cell powered devices. However, it is of the opinion that the texts, as proposed in document ST/SG/AC.10/C.3/2004/49, can be improved as indicated below.

#### **Proposals**

1. An assignment to Class 9 on the basis that the fuel cell cartridges are designed and constructed to function as articles not merely as fuel containers is contrary to what has been normal practice in similar cases (*e.g. batteries of UN 3292, 3028, 2794, 2795, 2800, devices, small, hydrocarbon gas powered of UN 3150, fire extinguisher charges of UN 1774, 1044, gas cartridges of UN 2037, lighters and lighter refills of UN 1057, matches of UN 2254, 1944, 1331, 1945, oxygen generator, chemical of UN 3356, refrigerating machines of UN 3358, 2857, the very many articles in Class 1, etc.*). The fuel cells present only one single danger, linked to the flammable liquid they contain, and their classification should reflect this danger. Otherwise, precious information would be lost to all parties involved in the transport.

It is therefore proposed to classify the two new entries in Class 3, and not in Class 9.

2. The proposed capacity limit of 200 ml of methanol or methanol/water solution per cartridge is based on the need of today's laptop computers. Belgium is of the opinion that it would be wise to build in a certain buffer capacity, because of the well-known rapid evolution of computer technology. This is preferable to an increase of this capacity limit in one of the following biennia.

It is therefore proposed to change the "200 ml" in paragraph (a) of the new Special Provision SP ZZZ to "300 ml".

3. The following editorial change is proposed in SP ZZZ (b) : replace "the type" by "a type".

4. Equipment that does not have the fuel cell cartridges installed is without power source and a short circuit will have no consequences whatsoever. Whether fuel cell cartridges are packed with the equipment or not does not alter this fact. (See also point 7 of this proposal).

If the proposal in point 7 is not accepted, it is proposed to delete the words “or packed with fuel cell cartridges” in SP ZZZ (c).

5. There is no need for SP ZZZ (d). These shipments of small quantities of cartridges, transported for testing, fulfil the provisions of chapter 3.4 (dangerous goods packed in limited quantities) and can be transported as such without any real difficulty.

It is therefore proposed to delete SP ZZZ (d).

6. It is not clear what is meant by “Packagings shall conform to the packing group II performance level and are authorised, provided the general provisions of 4.1.1 and 4.1.3 are met.”. Are this UN-packagings, in conformity with chapter 6.1 ? If yes, are all types of packagings allowed (taking into account that they contain articles, not liquids) or only the packaging types for liquids ?

It is proposed to specify with more precision the packagings that are allowed.

7. The additional requirement of P90X is already dealt with in SP ZZZ (c). The text of this additional requirement is more complete than SP ZZZ (c), but is in need of some editorial corrections (it is very confusing to have fuel cells transported with fuel cell cartridges installed).

It is proposed to replace the text of the additional requirement by “Fuel cells or equipment with fuel cell cartridges installed shall be protected during transport against short circuit and inadvertent operation.” If this text is kept as additional requirement in P90X, paragraph SP ZZZ (c) is superfluous and should be deleted. This text could also replace the existing SP ZZZ (c) with deletion of the additional requirement in P90X.

8. The definition of “Type” in 38.4.2.2 is of no practical use, taking account of the fact that in the text of 38.4.3 this word is never used on its own, but always as “type of fuel cell cartridge”.

It is proposed to delete the definition of “Type” in 38.4.2.2.

9. The fuel cell cartridges and the equipment with fuel cell cartridges installed are to be transported in packagings conforming to the packing group II performance level. In the eyes of the Belgian expert, this reduces the utility of a vibration test very much and makes the crushing test completely superfluous.

It is proposed to delete 38.4.3.3 and 38.4.3.5.

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