

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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PACKAGINGS (INCLUDING IBCs AND LARGE PACKAGINGS)

Packaging

Paper bag marking

Transmitted by the Expert from China

Background

In recent years, a new kind of "paper bag" has emerged. It is made of net-cloth which is prestressed and superheated stuck to paper on both sides (for several times). The net-cloths and adhesive are water-soluble organic compounds. When burned or buried, they will not pollute the air, the soil and the water resource. They are packages conforming to environmental protection, and having passed smoothly the tests specified in 6.1.5 of the Recommendation on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rer.11). For these reasons, they are being used more and more widely to pack dangerous goods, especially in countries that have more strict environmental protection standards and have laws on packages. China has been using this kind of "paper bag" for export dangerous goods such as dyes and intermediates. There are more than a million bags in recent years being used mostly for export dangerous goods lined in UN 1592(class 6.1), 3341(class 4.2) and 1507(class 5.1), etc. But it is very difficult to define the marking of this kind of "paper bag". It should not be the marking of textile bags (5L2, 5L3) or simply the marking of paper bags (5M1, 5M2).

It cannot be defined as the marking of textile bags (5L2, 5L3) because: It is defined in both clause 6.1.4.15.2 and clause 6.1.4.15.3 of the Recommendation on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev.11) that paper is stuck on the inner surface of the bag. However, there are also papers stuck on the outer surface of the net-cloth of this kind of "paper-bag". What is more important is that the net-cloths of this kind of "paper-bag" do not function as packages, but act as fortified reinforcement between two plies of paper to improve the strength of the paper. It is the paper that function as packages. We cannot defined this kind of "paper-bag" as textile bags just as you cannot call reinforced concrete cement flags "reinforced flags".

It cannot be simply defined as the marking of paper bags (5M1, 5M2) because: It is defined in the Recommendation on the Transport of Dangerous Goods (ST/SG/AC.10/1/Rev.11) that paper bags are made of more than three plies of paper (see Clause 6.1.4.18.1). However, this kind of "paper-bags" is actually made of only two plies of paper.

From the above, we can see that if we change the "at least three plies" in clause 6.1.4.18.1(ST/SG/AC.10/1/Rev.11) to "at least two plies", this kind of "paper-bag" could really be called "paper-bag". And, from the view of paper making technology, "ply" is an indistinct concept, because paper is made from multi-plies of paper pulp. This change is feasible, and this kind of "paper-bag" can then be marked as 5M1 or 5M2 (if the inner liners is water resistant).

Proposal

Before amendment:

6.1.4.18.1 Bags shall be made of a suitable kraft paper or of an equivalent paper with at least three plies. The strength of the paper and the construction of the bags shall be appropriate to the capacity of the bag and to its intended use. Joins and closures shall be sift-proof.

After amendment:

6.1.4.18.1 Bags shall be made of a suitable kraft paper or of an equivalent paper with at least two plies. The strength of the paper and the construction of the bags shall be appropriate to the capacity of the bag and to its intended use. Joins and closures shall be sift-proof.
