

## 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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### PACKAGING

Miscellaneous proposals

Waterproof packagings

Transmitted by the expert from the People's Republic of China

### BACKGROUND

B3, B4 of the packaging instruction of IBC<sub>s</sub> in Chapter 4.1 of Model Regulations on the Transport of Goods set the requirements of water resistant of packaging. The interpretation of water resistant in chapter 6.1 is: **to prevent the entry moisture of the bag shall be made waterproof** (see 6.1.4.16.4). It is also referred to water resistant in Chapter 6.5, e. g. **13M2 paper, malt wall water resistant**, but not explain the meaning of water resistant. There is no definition of water resistant vessel in chapter 1.2. All these bring about the questions bellow.

1. To adopt the packaging instruction of IBC<sub>s</sub> B3, B4, if you can't understand clearly the meaning of water resistant, you can't use the packaging correctly and may cause safety accidents or legal disputes. For example, in August 2002 at Chinese Qingdao port, the owner of goods used flexible IBC<sub>s</sub> (13H2) for the packaging of DICHLOROISOCYANURIC ACID SALTS (UN No. 2465). Encountering with sudden heavy rain, the container intake water and exploded caused losses of several hundred thousands U.S. dollars. The goods owner and the harbour company took legal proceedings in Court about the responsibility of cargo damages. The cargo owner thought he used correct container (13H2) for the packaging of DICHLOROISOCYANURIC ACID SALTS (UN No.2465). Encountering with sudden heavy rain, the container intake water and exploded caused losses of several hundred thousands U. S. dollars. The goods owner and the harbor company took legal proceedings in court about the responsibility of cargo damages. The cargo owner thought he used correct container (13H2) according to the stipulations of Regulations. However, the harbor company considered that the packaging instruction IBC08 of Regulations Chapter 4.1 stipulated in B4 that the reseal should be waterproof and shouldn't intake water even if the container was immersed in water. The harbor company thought that the reason of DICHLOROISOCYANURIC ACID SALTS reacted with water and exploded was that the cargo owner did not use waterproof containers. Obviously, there is a great difference between the two parts about the meaning of waterproof.

2. The interpretation of water – proof for SL3, 5H3 and 5M2 in Chapter 6.1 is **to prevent the entry of moisture**. But for the cargos needing water resistant packaging (e. g. UN1942, UN2001, UN2020, UN3341, UN3342, etc), the bags in packaging instruction P002 should also include 5H4 while plastic film bags 5H4 in 6.1.4.17 don't explain the meaning of **water resistant**. The interpretation of **water resistant** can only be

conjectured from 5L3, 5H3 and 5M2. Because the interpretation of **water resistant** is in Chapter 6.1 other than Chapter 1.2 Definitions, the interpretation may not be common and authoritative. This often causes the difference in the meaning of **water resistant**, some think its meaning is prevent moisture from entering, some think it's rain-proof, some even think it can prevent water from entering when the packaging is immersed in water.

Because of the questions above, we propose to add the definition of **waterproof packagings** in Chapter 1.2 (the packagings for liquid must pass relevant leakproofness and hydraulic tests, so they cannot be misunderstanding with **water resistant**) just like the definition for **siftproof packagings**(see Chapter 1.2); Otherwise, interpretate the meaning of **water resistant** for IBC<sub>s</sub> 13H4, 13L3 and BM2 in Chapter 6.5 as that in Chapter 6.1 for 5H3, 5L3 and 5M2. Thus, we can avoid the safety accidents and legal disputes caused by the different understanding of **water resistant**.

## PROPOSAL

1. Add the definition of waterproof packagings (for solid) in Chapter 1.2:

*"Waterproof Packagings (for solid): are packagings for solid material can prevent the entry of moisture during transportation."*

2. Add the interpretation of water resistant in the specific requirements of flexible IBC<sub>s</sub> in 6.5.3.2:

"6.5.3.2×: Flexible IBC<sub>s</sub>, water resistant, 13H4, 13L4 and 13M2: to prevent the entry of moisture the flexible IBC<sub>s</sub> shall be made waterproof, for example by the use of:

- (a) Separate inner liners of water resistant paper (e.g. waxed kraft paper, tarred paper or plastics-coated kraft paper); or
  - (b) Plastics film bonded to the inner surface of the bag; or
  - (c) One or more inner liners made of plastics material."
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