

UN/SCETDG/21/INF.44

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-first session, 1-10 July 2002,
agenda item 3 (a))

Fireworks

Comments on ST/SG/AC.10/C.3/2002/1 and ST/SG/AC.10/C.3/2002/20

Transmitted by the expert from Italy

The expert from Italy has reviewed the above mentioned documents and offers the following comments:

1. The default table in ST/SG/AC.10/C.3/2002/1 and the comments provided in other documents by experts of other countries have been reviewed with experts from Ministries, Agencies and ANISP (the Italian Association of Fireworks Industries), on the basis of the experience in the field that Italian operators had acquired during many years.

2. Above all it is necessary to point out that the request concerning the attribution of heavy classifications to fireworks comes from the well-known accident that happened in a fireworks storage facility in the Netherlands on May 13th 2000.

About the matter we want to specify that Italian regulations for fireworks storage are already very rigorous. In fact the quantity – always determined as net quantity of explosive material (meaning any pyrotechnical mixture in fireworks) – that may be stored can't go beyond 20.000 kg in a depot of a factory, 80.000 kg in a sale depot. But these must be intended as top quantities because they are also limited as function of the distance from roads, built-up areas and places open to the public.

With these conditions, if we have an accidental ignition of fireworks, the effects will be limited to the structures of the storage site.

In Italy we had many accident, but always in the fireworks factories; seldom in these accidents have been involved people or structures not related with the factory.

4. Suggestion to classify fireworks by default system in 1.1G, 1.2G, 1.3G and 1.4G on the basis of their effect and dimension, without taking into account the amount and, above all, the quality of pyrotechnical mixtures hold in them, does not seem a logic way of thinking. Incidentally in Italy is not permitted to use in fireworks any explosive, but only mixture of oxidizers and fuels, with the exception of black powder.

The suggested default classification system could produce the nonsense to classify with the same level of hazard a box of shells and a box of dynamite cartridges.

And for the classification in 1.2G, we want to stress that, according to Italian rules, in the manufacture of fireworks only paper, cardboard and some polymeric materials are used, with exclusion of metallic material (wooden material can be used only for some details); that means that the development of energetic fragments it is impossible.

5. Therefore it is considered as more appropriate the proposal from the Expert from USA to classify fireworks in the hazard divisions 1.3G, 1.4G (and 1.4S if this classification is proved by tests) on the basis of the amount and the quality of pyrotechnical mixtures held in them. As pointed out by the Expert from USA, this criterion is justified by statistical data coming from the knowledge of accident happened in the past with fireworks.