



**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****Sixty-fifth session**

Geneva, 25 November-3 December 2024

Item 3 of the provisional agenda

Listing, classification and packing**Adding fire test procedures for UN 3164 in section 31 of the
*Manual of Tests and Criteria*****Submitted by the expert from China*****I. Introduction**

1. The entry UN 3164, ARTICLES, PRESSURIZED, PNEUMATIC or HYDRAULIC (containing non-flammable gas), has two special provisions (SP) 283 and 371, which both involves a fire test. However, the expert from China felt that current provisions for the two tests are not appropriate and found it necessary to add a new sub-section in section 31 of the *Manual of Tests and Criteria* to address the procedures of fire tests mentioned in the two special provisions.

2. No specific guidance has been provided for the fire test in SP283 in the *Model Regulations*. However, factors including stacking mode of the samples, total volume, continuous combustion time and method of heating can all impact the results of fire test. In the absence of a harmonised test method, the exemption given in SP283 cannot actually be applied in some jurisdictions. Even if some competent authorities have their own approved test methods, global acceptance of test results is very hard to achieve. This, to some degree, has impeded the free transport of these products worldwide.

3. In addition, for the fire test in SP371, the provisions of paragraphs 16.6.1.2 (except sub-paragraph (g)), 16.6.1.3.1 to 16.6.1.3.4, 16.6.1.3.6, 16.6.1.3.7 (b) and 16.6.1.3.8 of the *Manual of Tests and Criteria* shall be applied. These provisions are from Part I of the *Manual of Tests and Criteria*, "Classification procedures, test methods and criteria relating to explosives". Although projection can happen for both explosives and articles mentioned in SP371 (e.g. confetti shooters) when involved in a fire, it is problematic to utilize the procedures here directly, considering the chemistry behind the two kinds of projection. For explosives, the projection is caused by a sudden gas production from the chemical reaction of the explosive substances when heating in confinement. But, articles in SP371, it is the release of gas in the small receptacle that triggers the projection, rather than any chemical

* A/78/6 (Sect. 20), table 20.5.



reactions. We do not oppose the idea of using the current method to test articles in SP371, but the bonfire test for explosives should not be referred directly here.

II. Proposal

4. The experts from China believe that a new sub-section should be added in section 31 of the *Manual of Tests and Criteria*, which is for aerosols only now but can be broadened to cover all classification procedures related to Class 2 entries, to address the procedures of fire tests mentioned in SP283 and 371. In case that the Sub-Committee agrees with this suggestion and is willing to put effort into this work in the next biennium, a new sub-item “Review of the fire test for UN 3164” can be added to agenda item 6.

III. Sustainable Development Goals

5. A new sub-section for the two types of products covered by UN 3164 specifically can make the regulations more logical and can assist the global harmonisation of dangerous goods classification criteria, which will help achieve target 16.6 of Sustainable Development, to “develop effective, accountable and transparent institutions at all levels”.
