

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 Globally Harmonized
System of Classification and Labelling of Chemicals

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Item 3 (h) of the provisional agenda

**Classification criteria and related hazard communication:
other issues**

Revisions to proposed amendments to Chapter 2.3 to convert decision logics into text language

Transmitted by the expert from the United States of America

Introduction

1. This paper builds on the amendments to Chapter 2.3 as proposed in ST/SG/AC.10/C.4/2018/9 “Proposed amendments to chapter 2.3 to convert decision logics into text language.”
2. This paper proposes that the criteria listed in Table 2.3.1 be:
 - (a) Expressed as symbols (e.g., “ \leq ” and “ \geq ”), instead of as written text. This provides a clear distinction of the relevant cut-offs. In addition, expressing the criteria as symbols is consistent with how the criteria are provided in other GHS chapters (e.g., Chapters 2.6, 2.7, 3.1 – 3.10).
 - (b) Identified in a bulleted/numbered format. This would provide consistency in the GHS, as it follows the same structure as other chapters that have alternate criteria within a single category (e.g., Chapters 2.8, 2.11, 2.15, 2.17).

Proposal

3. The proposed amendments to Table 2.3.1 are presented in Annex I of this document. Text to be deleted is provided in **red** bold strikethrough and new text is provided in **red** bold underline.
4. Annex II provides a clean version of the proposed amendments.

Annex I

Table 2.3.1 Criteria for aerosols

Category	Criteria
<u>1</u>	<p><u>1) Any aerosol that contains ≥ at least 85% flammable components (by mass) and has a heat of combustion of ≥ at least 30 kJ/g; or</u></p> <p><u>2) Any aerosol that dispenses a spray that, in the ignition distance test, has an ignition distance of ≥ at least 75 cm; or</u></p> <p><u>3) Any aerosol that dispenses a foam that, in the foam flammability test, has</u></p> <p>a) <u>a flame height of ≥ at least 20 cm and a flame duration of ≥ at least 2 s, or</u></p> <p>b) <u>a flame height of ≥ at least 4 cm and a flame duration of ≥ at least 7 s.</u></p>
<u>2</u>	<p><u>1) Any aerosol that dispenses a spray that, based on the results of the ignition distance test, does not meet the criteria for Category 1, and which has</u></p> <p>a) <u>a heat of combustion of ≥ at least 20 kJ/g, or</u></p> <p>b) <u>a heat of combustion of < less than 20 kJ/g along with an ignition distance of ≥ at least 15 cm, or</u></p> <p>c) <u>a heat of combustion of < less than 20 kJ/g and an ignition distance of < less than 15 cm along with either, in the enclosed space ignition test,</u></p> <p>o <u>a time equivalent of ≤ 300 s/m³ or less, or</u></p> <p>o <u>a deflagration density of ≤ 300 g/m³ or less;</u></p> <p><u>or</u></p> <p><u>2) Any aerosol that dispenses a foam that, based on the results of the aerosol foam flammability test, does not meet the criteria for Category 1, and which has a flame height of ≥ at least 4 cm and a flame duration of ≥ at least 2 s.</u></p>
<u>3</u>	<p><u>1) Any aerosol that contains ≤ 1% or less flammable components (by mass) and that has a heat of combustion < below 20 kJ/g; or</u></p> <p><u>2) Any aerosol that contains > more than 1% (by mass) flammable components or which has a heat of combustion of ≥ at least 20 kJ/g but which, based on the results of the ignition distance test, the enclosed space ignition test or the aerosol foam flammability test, does not meet the criteria for Category 1 or Category 2.</u></p>

Annex II

Table 2.3.1: Criteria for aerosols

Category	Criteria
1	<ol style="list-style-type: none"> 1) Any aerosol that contains $\geq 85\%$ flammable components (by mass) and has a heat of combustion of ≥ 30 kJ/g; or 2) Any aerosol that dispenses a spray that, in the ignition distance test, has an ignition distance of ≥ 75 cm; or 3) Any aerosol that dispenses a foam that, in the foam flammability test, has <ol style="list-style-type: none"> c) a flame height of ≥ 20 cm and a flame duration of ≥ 2 s, or d) a flame height of ≥ 4 cm and a flame duration of ≥ 7 s
2	<ol style="list-style-type: none"> 1) Any aerosol that dispenses a spray that, based on the results of the ignition distance test, does not meet the criteria for Category 1, and which has <ol style="list-style-type: none"> d) a heat of combustion of ≥ 20 kJ/g, or e) a heat of combustion of < 20 kJ/g along with an ignition distance of ≥ 15 cm, or f) a heat of combustion of < 20 kJ/g and an ignition distance of < 15 cm along with either, in the enclosed space ignition test, <ol style="list-style-type: none"> o a time equivalent of ≤ 300 s/m³, or o a deflagration density of ≤ 300 g/m³; or 2) Any aerosol that dispenses a foam that, based on the results of the aerosol foam flammability test, does not meet the criteria for Category 1, and which has a flame height of ≥ 4 cm and a flame duration of ≥ 2 s.
3	<ol style="list-style-type: none"> 1) Any aerosol that contains $\leq 1\%$ flammable components (by mass) and that has a heat of combustion < 20 kJ/g; or 2) Any aerosol that contains $> 1\%$ (by mass) flammable components or which has a heat of combustion of ≥ 20 kJ/g but which, based on the results of the ignition distance test, the enclosed space ignition test or the aerosol foam flammability test, does not meet the criteria for Category 1 or Category 2.