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**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****Fifty-seventh session**

Geneva, 29 June-8 July 2020

Item 10 (a) of the provisional agenda

**Issues relating to the Globally Harmonized System  
of Classification and Labelling of Chemicals:  
review of Chapter 2.1****Sub-Committee of Experts on the Globally Harmonized  
System of Classification and Labelling of Chemicals****Thirty-ninth session**

Geneva, 8-10 July 2020

Item 2 (b) of the provisional agenda

**Classification criteria and related hazard communication:  
review of Chapter 2.1****Allocation of precautionary statements for the new  
Chapter 2.1****Transmitted by the expert from Sweden on behalf of the informal  
correspondence group on the review of Chapter 2.1\*****Introduction**

1. In document ST/SG/AC.10/C.3/2020/20-ST/SG/AC.10/C.4/2020/5, a new Chapter 2.1 for the GHS is proposed. As a consequence of the new classification system suggested therein, the precautionary statements (P statements) currently used for explosives need to be allocated to the classifications of the new system. This document contains such proposed allocations. Furthermore, a new P statement is also proposed to state the Division for transport on the GHS label.
2. Like the new Chapter 2.1 as a whole, also the proposals for P statements contained in this document are the outcome of discussions in the Informal Correspondence Group (ICG) on the review of GHS Chapter 2.1. This document, which was circulated to the group, is therefore submitted on behalf of the ICG.
3. The allocation of P statements, as well as their wording and codification, is provided in Annex 3, Section 3, of the GHS (Rev.8). As P statements do not occur in the UN Model Regulations or in the Manual of Tests and Criteria, the proposals presented herein have no effect on these.

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\* 2020 (A/74/6 (Sect.20) and Supplementary, Subprogramme 2).

## General guiding principle

4. As a general guiding principle, the allocation of the existing P statements for explosive to the new classification system proposed herein was done so that it corresponds as closely as possible to the current application. However, some deviations from this general rule were made, for reasons further outlined below.

5. Some members of the ICG had ideas to improve the wording of some of the P statements. In order to keep the timetable as stipulated in the programme of work<sup>1</sup> this was, however, not done (but could of course be done at a later stage). Also the conditions for use are kept as they are, except for one instance (the firefighting P statements) where they are removed because they become superfluous in the new classification system (see paragraph 10 below).

## A word on Division 1.6

6. Explosives assigned to Division 1.6 have no hazard communication elements according to the existing Chapter 2.1 (see Table 2.1.2 in GHS Rev.8). As a consequence, this division also has no P statements assigned to it. In the new Chapter 2.1, explosives assigned to Division 1.6 will be treated in the same way as those assigned to Division 1.1, 1.2, 1.3 and 1.5, which means they will be classified in sub-category 2A. Consequently, the P statements assigned to sub-category 2A according to the below will also apply to explosives assigned to Division 1.6.

## Allocation of existing P statements for explosives

7. The following four P statements are currently applied to all explosives classifications<sup>2</sup>:

- P250 – Do not subject to grinding/shock/ friction/...
- P280 – Wear protective gloves/ protective clothing/eye protection/face protection /hearing protection/...
- P401 – Store in accordance with...
- P503 – Refer to manufacturer/ supplier/... for information on disposal/recovery/ recycling.

For these, the proposal is to also apply them to all classifications also in the new Chapter 2.1 classification system, and to keep the existing conditions for use as currently worded.

8. The following three P statements are currently applied to all classifications<sup>3</sup> except “unstable explosives”:

- P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P230 – Keep diluted with ....
- P240 – Ground and bond container and receiving equipment.

The members of the ICG that actively worked on the issue did not understand why these P statements should not be applied also to the classification currently termed “unstable explosives”, as they seem highly relevant also for those explosives. As a result, these P statements are suggested to be applied to all classifications in the new Chapter 2.1, i.e. also to explosives in Category 1.

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<sup>1</sup> UN/SCEGHS/36/INF.43 Rev.1

<sup>2</sup> Excluding Division 1.6 as explained in paragraph 6.

<sup>3</sup> Excluding Division 1.6 as explained in paragraph 6.

9. The following P statement is currently applied to the classification “unstable explosives” only:

- P203 - Obtain, read and follow all safety instructions before use.

Most members of the ICG that worked on this item felt it appropriate to apply this P-statement more widely, as reading and following safety instructions is important in the handling of explosives in general. Therefore, the proposal is to apply P203 to all classifications of the new Chapter 2.1 except sub-category 2C (which represents a low hazard).

10. There are a few P statements that form the two different combinations on firefighting that are currently applied to explosives:

- P370 + P380 + P375 – In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.”
- P370 + P372 + P380 + P373 – In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.

The first of these combinations is applied only to explosives assigned to Division 1.4 compatibility group S (Division 1.4S) which are in their transport packaging. This classification corresponds to a low hazard that would not hinder firefighting and has no hazardous effects outside of the package.<sup>4</sup> According to the criteria, sub-category 2C contains only explosives assigned to Division 1.4S where the behaviour constitutes a “low hazard” also in the primary packaging. Therefore, the first combination of P statements above (P370 + P380 + P375) is suggested to be applied for sub-category 2C, and the conditions for use can be removed. The second combination of P statements (P370 + P372 + P380 + P373) is suggested to be applied for all other classifications.<sup>5</sup>

11. Annex I to this document contains a table that provides an overview of how the P statements for the classifications in current Chapter 2.1 are transferred to the classification in the new Chapter 2.1.

## **P234 and a new P statement for the division**

12. P statement P234 is currently applied to all classifications<sup>6</sup> except “unstable explosives”, i.e. to all explosives assigned to a division:

- P234 – Keep only in original packaging.

The straight-forward allocation of this P-statement in the classification system of the new Chapter 2.1 would be to apply it all sub-categories within Category 2<sup>7</sup>.

13. There has been a long-standing discussion within the ICG on how to state the division on the GHS-label for explosives classified in Category 2<sup>8</sup>. Some members of the ICG feel strongly that this information needs to be included on the GHS label, as knowledge of the division is important for the application of regulations on storage and other aspects of explosive handling (e.g. permits). With the classification system proposed for a new Chapter 2.1 the GHS hazard communication will no longer be tied to the division, and thus it cannot be indirectly read from the GHS hazard communication elements anymore.

14. In the discussions around this, it was recently suggested to amend P234 into a new P statement that includes the Division, so that the division would always occur in connection with P234. However, it was observed that P234 is also applied to many other classifications

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<sup>4</sup> See Figure 2.1.3 of current Chapter 2.1 of the GHS (Rev. 8).

<sup>5</sup> This includes Division 1.4S that do not fulfil the conditions to be classified as sub-category 2C.

<sup>6</sup> Excluding Division 1.6 as explained in paragraph 6.

<sup>7</sup> P234 cannot be assigned to explosives in Category 1 as that classification comprises explosive where there generally is no “original packaging”.

<sup>8</sup> See UN/SCETDG/56/INF.8 - UN/SCEGHS/38/INF.6 for a recent account on this topic.

apart from explosives, and hence a new P statement would be needed in order not to interfere with these applications of P234.

15. Some members of the ICG are of the opinion that the division should not be placed on the GHS label for explosives assigned to Division 1.4 and classified as sub-category 2A. The reason for this is that Division 1.4 does not represent a high hazard in the transport configuration<sup>9</sup>, while sub-category 2A represents a high hazard at the level of the primary packaging. Therefore, in the view of these ICG-members, a GHS label stating “Division 1.4” on the primary packaging would be misleading. Other members of the ICG, however, do not share this concern.

16. Also, when it comes to stating the division on the GHS label for explosives classified as sub-category 2B or 2C, views are diverged within the ICG at the time of writing. Some members are of the view that the division should be given on the GHS label for these, as it gives adequate additional information also at the level of the primary packaging. Other members, on the contrary, feel that this is not needed as the GHS hazard communication elements are unique to the respective classifications and hence the division can indirectly be read from the GHS label (much as it can from current GHS labels).

17. Furthermore, for the classifications where a P statement stating the division is normally to be applied, the need for some exemptions has been identified. For example, a package that bears a warning label for transport would not need such a statement as the division is given in that transport label. There are also cases where the division for transport is not known at the time when the GHS label is applied to the primary packaging, because it can become part of different transport configurations.

18. To meet the needs described, a new P-statement that only states what the division for transport is proposed, which would potentially be numbered P236:

- P236 – Division ... in the transport configuration.

This can be combined with the current P234, which is to stay intact, to form

- P234 + P236 – Keep only in original packaging; Division ... in the transport configuration.

In this way, either P234 or the combination P234 + P236 can be assigned to explosives.

For “...” the standard conditions for use typically used in the GHS can probably be applied:

*“...Manufacturer/supplier or competent authority to state the division for transport.”*

## **Proposal**

19. Provided that the new Chapter 2.1 is adopted, it is proposed to make the amendments as described in this document to the P statements currently applied to explosives. Annex II contains the list of amendments to accomplish this.

## **Possible further proposal**

20. As regards a new P statement for stating the division on the GHS label, further work in the ICG is needed to come to a consensus on the application of such a statement. An informal document may appear with a proposal on this issue.

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<sup>9</sup> See the description of Division 1.4 in Chapter 2.1 of the UN Model Regulations

## Annex I

**Table of allocation of existing P statements for explosives**

	Current application				Proposed new application			
	Unstable explosives	1.1, 1.2, 1.3 and 1.5	1.4X*	1.4S	1	2A	2B	2C
<b>P203</b>	X				X	X	X	
<b>P210</b>		X	X	X	X	X	X	X
<b>P230</b>		X	X	X	X	X	X	X
<b>P234</b>		X	X	X		X	X	X
<b>P240</b>		X	X	X	X	X	X	X
<b>P250</b>	X	X	X	X	X	X	X	X
<b>P280</b>	X	X	X	X	X	X	X	X
<b>P370</b>	X	X	X	X	X	X	X	X
<b>P372</b>	X	X	X		X	X	X	
<b>P373</b>	X	X	X		X	X	X	
<b>P375</b>				X				X
<b>P380</b>	X	X	X	X	X	X	X	X
<b>P370 + P380 + P375</b>				X				X
<b>P370 + P372 + P380 + P373</b>	X	X	X		X	X	X	
<b>P401</b>	X	X	X	X	X	X	X	X
<b>P503</b>	X	X	X	X	X	X	X	X

\* "X" denotes a compatibility group other than S.

## Annex II

### List of amendments to GHS Annex 3, Section 2

#### Amendments to Table A3.2.2

- For P203, replace “Unstable explosive” with “1, 2A, 2B” in column 4.
- For P210, replace “Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.
- For P230, replace “Divisions 1.1, 1.2, 1.3, 1.5” with “1, 2A, 2B, 2C” in column 4.
- For P234, replace “Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “2A, 2B, 2C” in column 4.
- For P240, replace “Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.
- For P250, replace “Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.
- For P280, replace “Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.

#### Amendments to Table A3.2.3

- For P370, replace “Unstable explosive and divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C”.
- For P372, replace “Unstable explosive and Divisions 1.1, 1.2, 1.3, and 1.5” with “1, 2A, 2B” in column 4 and delete “– *except for explosives of division 1.4 (compatibility group S) in transport packaging.*” in column 5.
- For P373, replace “Unstable explosive and divisions 1.1, 1.2, 1.3 and 1.5” with “1, 2A, 2B” in column 4 and delete “– *except for explosives of division 1.4 (compatibility group S) in transport packaging.*” in column 5.
- For P375, replace “Division 1.4” with “2C” in column 4 and delete “– *for explosives of division 1.4 (compatibility group S) in transport packaging.*” in column 5.
- For P380, replace “Unstable explosive and Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.
- For P370 + P380 + P375, replace “Division 1.4” to “2C” in column 4 and delete “– *for explosives of division 1.4 (compatibility group S) in transport packaging.*” in column 5.
- For P370 + P372 + P380 + P373, replace “Unstable explosives and divisions 1.1, 1.2, 1.3, 1.5” with “1, 2A, 2B”, delete “Division 1.4” in column 4 and delete “– *except for explosives of division 1.4 (compatibility group S) in transport packaging.*” in column 5.

#### Amendments to Table A3.2.4

- For P401, replace “Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.

#### Amendments to Table A3.2.5

- For P503, replace “Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5” with “1, 2A, 2B, 2C” in column 4.

