Proposal for revision of precautionary statement P410 for gases in transportable gas cylinders under pressure

Transmitted by the experts from the United Kingdom (on behalf of the informal correspondence group on the improvement of annexes 1, 2 and 3 of the GHS), South Africa and the Responsible Packaging Management Association of Southern Africa (RPMASA)\(^1\)

**Introduction**

1. At its sixteenth session (December 2008) the Sub-Committee approved the programme of work for the biennium 2009-2010 to include revision of Annexes 1, 2 and 3 of the GHS for precautionary statements.

2. INF.14 presented at the seventeenth session by the United Kingdom on behalf of the informal correspondence group made several proposals for amendments to the precautionary statements including a proposal regarding P410 “Protect from sunlight” for gases under pressure.

3. At the eighteenth session (December 2009), RPMASA presented a proposal in UN/SCEGHS/18/INF.9, on behalf of the Southern African Compressed Gas Association (SA CGA), to consider removal of precautionary statement P410 “protect from sunlight” for gases under pressure. Consensus was not reached, so the United Kingdom as convener of the correspondence group on revision of Annexes 1, 2 and 3 agreed to include this in their deliberations. The representative from RPMASA undertook to contact members of the correspondence group on revision of Annexes 1, 2 and 3 agreed to include this in their deliberations.

\[^{1}\text{In accordance with the report of the Sub-Committee of Experts at its nineteenth session (see ST/SG/AC.10/C.4/38, paras. 35 and 36.)}\]
Sub-Committee regarding information on any incidents or accidents that may have occurred as well as to initiate tests for recording of temperatures reached on cylinders.

4. Test data was circulated to members of the corresponding group and two teleconferences were held on 11 and 25 March. Following further correspondence a proposal was made to add a comment under “conditions for use” in table A3.2.4 that P410 is “not necessary for common industrial and medical gases in transportable gas cylinders, not subject to slow decomposition”. However, consensus was not reached on this proposal, in particular the expert from the United States of America and the Compressed Gas Association (CGA) were concerned that removal of P410 in these circumstances would offer insufficient protection in relation to cylinders exposed to ambient temperatures greater than 125°F (51.6°C).

6. RPMASA gave a status report in INF.33 at the nineteenth session of the Sub-Committee. In discussion, noting that the requirements applicable to gas cylinders were different depending on the relevant national, regional or international legislation, several experts shared the view of the expert from Australia that P410 should refer to standards (for example construction standards such as packing instruction P200 from the Model Regulations on the Transport of Dangerous Goods) acceptable to competent authorities, guaranteeing that the gas cylinder was able to withstand the temperatures that might be encountered during transport, storage, handling and use. However, this did not gain universal support since not all countries use gas cylinders designed to the same specifications (in particular cylinders in use in the United States of America are designed according to standards which differ from P200), so consensus was not reached to refer to a single standard in the conditions for use of this statement.

7. The expert from the United States of America proposed in informal document INF.36 an alternative option whereby the competent authority may choose not to apply P410 for pressurised gases, in which case they may apply P412 as an alternative (“do not expose to temperatures exceeding 50°C/122°F”), and in discussion some experts favoured this option as an alternative.

8. However, it was noted in subsequent discussions that some competent authorities may not be in a position to make a specific decision not to apply P410, therefore an alternative option involving a converse, “opt in” approach may be preferable, whereby omission of P410 is permitted, but the competent authority may choose to require P410. This would preserve the element of competent authority discretion, while enabling the precautionary statement to be omitted where the competent authority has not made a specific choice not to require the statement.

9. As a result, a compromise was proposed by the representatives of the European Union and Germany (Federal Institute for Materials Research and Training (BAM)) to use a condition for use of the form, “if a condition, e.g. P200 is met it would not be necessary to apply P410 unless the competent authority required it.”

10. Most participants supported this approach and it was agreed to circulate in writing to all Committee members for consideration.

11. The expert from BAM further proposed to include provision for gases that may polymerise and cause a blocked valve by restricting the option not to apply P410 to those gases that are not subject to (slow) decomposition or polymerisation. During subsequent correspondence within the informal correspondence group on Annexes 1-3 of the GHS, provisional consensus was agreed among participants to this approach.

12. The experts from the United Kingdom, (on behalf of the correspondence group on Annexes 1-3), South Africa and RPMASA therefore hope that the condition for use given
below, which incorporates all of the above considerations, is acceptable to the Sub-Committee and satisfies the concerns of all parties.

Proposal

13. In the entry for P410 in Table A3.2.4 (GHS Annex 3, Section 2) include the following condition for use in column 5:

“- may be omitted for gases filled in transportable gas cylinders in accordance with packing instruction P200 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, unless those gases are subject to (slow) decomposition or polymerisation, or the competent authority provides otherwise”.