



**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****Thirty-fifth session**

Geneva, 4-6 July 2018

Item 4 (b) of the provisional agenda

Hazard communication:**improvement of annexes 1 to 3 and further
rationalization of precautionary statements****Proposal for precautionary pictograms equivalent to the
precautionary statement P102 “*Keep out of reach of children*”****Transmitted by the United Kingdom on behalf of the informal working
group on the improvement of annexes 1-3 of the GHS*****Background**

1. The work plan 2017-2018 for the informal working group on the improvement of annexes 1-3 of the GHS included a proposal related to the development of a precautionary pictogram (Workstream 3). A proposal tabled by AISE was discussed at the last meetings of the informal working group in conjunction with the thirty-third and thirty-fourth sessions of the Sub-Committee on the GHS (July and December 2017).
2. Several scientific studies have confirmed that visual representations or pictograms can be recognized more quickly and intrinsically trigger more spontaneous interest than written warnings¹. Boelhouwer² concluded that “inclusion of GHS hazard pictograms and precautionary pictograms to SDS and labels may benefit the user”.

* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, para. 98 and ST/SG/AC.10/44, para. 14).

¹ Dorris & Purswell, (1978)

² Boelhouwer (2013)

3. About 14% of the world's population cannot read³. Several emerging economies in Africa have literacy rates below 50%. In Europe 16% of people have literacy difficulties⁴ (about 55 million adults). Similarly, in United States of America around 14% of adults have a “below basic” literacy level⁵.
4. The use of simple and intuitive precautionary pictograms can be an effective means to convey essential safe use information on hazardous chemicals.
5. Most of the cases involving accidental child exposures to chemicals are associated with hazardous or potentially hazardous substances/mixtures not being properly stored out of children's reach.
6. The objective of this proposal is to seek a common way - at the global level - to help reduce the number of incidents where young children come into contact with chemicals, through the adoption of one simple and intuitive precautionary pictogram to convey the message “keep out of reach of children” (Precautionary Statement P102). This can be achieved by including this precautionary pictogram in Section 5 of Annex 3 of GHS.

Discussion

7. Section 2 of Annex 3 provides a codification of precautionary statements which describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposures due to improper storage.
8. Section A3.2.1.1 of Annex 3 indicates that a precautionary statement is a phrase and/or pictogram and Section A3.3.1.8 of Annex 3 mentions that “*To protect people with different reading abilities, it might be useful to include both precautionary pictograms and precautionary statements in order to convey information in more than one way (see 1.4.4.1 (a)). (...)*”.
9. Table A3.2.1 of Annex 3 introduces a general precautionary statement to be used on consumer products: *P102 Keep out of reach of children*.
10. In informal document INF.6 of the thirty-second session RPMASA proposed to delete from Annex 3, Section 5 in the sixth revision of the GHS the precautionary pictograms from the South African Bureau of Standards SABS 0265:1999, including a pictogram corresponding to a similar precautionary statement: “*Keep locked up and out of reach of children*” as the standard no longer existed.
11. Considering the high number of accidental exposures involving young children, it is appropriate to give the right emphasis to the “keep away from children” precautionary advice and to harmonize a related precautionary pictogram.
12. The activities of the informal working group on Improvement of Annexes 1 to 3 aim to further rationalize the precautionary statements that have to appear on labels.
13. The following general principles were agreed by the informal working group in the selection of the most appropriate precautionary pictogram:
 - The meaning “Keep out of reach of children” shall be conveyed clearly” also in the absence of associated words;

³ UNESCO (2016)

⁴ People with literacy difficulties can read at best simple texts, retrieve simple facts; they are not able to deal with longer or more complex texts – such as a GHS label – and interpret beyond what is explicitly stated (European Literacy Policy Network)

⁵ US Department of Education (2013)

- It shall have been validated through an internationally recognized methodology or equivalent (e.g. Annex 6 GHS comprehensibility testing methodology, ISO 9186 on Method for testing Comprehensibility, etc.);
- It shall not contradict or cast doubt on the validity of standardized hazard information (e.g. avoid graphical elements that belong to hazard pictograms such as the shape of a square set at a point, hazard symbols etc.);
- It shall not have limitations in terms of use (copyrights, conditions of use etc.).

14. There are existing examples of pictograms/icons that can effectively convey the message of the precautionary statement P102 for consumer products covered by GHS.

15. Five examples of pictograms which can convey the same message as the general Precautionary statement P102 (“keep out of reach of children”) were assessed by the working group and of these two were considered the most appropriate:

- Safe Use Icon ‘Keep away from children’ (AISE);
- Safe use icon developed by the Japan Soap and Detergent Association (JSDA).



AISE pictogram



JSDA pictogram

16. In 2017, GHS-compliant comprehensibility tests were carried out on the AISE Safe Use Icon “Keep away from children” (an ISO 9186 test had already been successfully passed in 2004). This test was conducted according to Annex VI of GHS (2224 people interviewed in 8 countries across the globe: Sweden, Spain, France, Poland, Brazil, South Africa, United States and China). The study demonstrated that this icon was adequately understood by a vast majority (88.6%) of the respondents, and that critical confusion about the icon was only sporadic (<1%). As a benchmark, ANSI Z535 3 defines success as comprehension above 85% and critical confusion below 5%.

17. The JSDA safe use icon was tested in accordance with the Japanese standard JIS S 0102: “Testing procedure for graphical warning symbols for consumers”. No information is available on the equivalence of this standard with Annex VI of GHS comprehension by the general public; however, this test is deemed to be equivalent to ISO 9186. The testing was carried out in Japan with a total number of 120 people. The icon passed the JIS S 0102 success criteria (comprehension >85%) with 96% correct understanding and only 1.7% of critical confusion.

18. Both pictograms (AISE and JSDA) satisfy the general principles outlined in paragraph 13 and were considered by the working group as precautionary pictograms suitable to convey the message “Keep out of reach of children”. Therefore, the working group recommends both precautionary pictograms be listed as examples of precautionary statements in Annex 3 Section 5 of the GHS.

19. Finally, in order to rationalize and simplify the use of general precautionary statements (Table A.3.2.1. Annex 3), Members of the working group had a first discussion on the use of these precautionary pictograms as an alternative to the general precautionary statement P102, but no decision was reached. The working group will continue to discuss the conditions of use of the proposed precautionary pictograms as an alternative to written precautionary statements.

Proposal

20. The Sub-Committee is invited to agree the proposed addition of precautionary pictograms to the GHS (Annex 3 Section 5 after paragraph A3.5.1.) and the consequential amendments as provided in the Annex.

Annex

Text to be inserted in Annex 3 Section 5 after paragraph 3.5.1.

“A3.5.2 Precautionary pictograms “Keep out of reach of children”

The following examples convey the meaning of precautionary statement P102 “Keep out of reach of children” and may be used to convey information in more than one way according to sections 1.4.4.1 (a) and A.3.3.1.8.

A3.5.2.1 AISE precautionary pictogram “Keep out of reach of children”

The pictogram was developed by the International Association for Soaps, Detergents and Maintenance Products (AISE) and has been in use since 2004 in Europe and other jurisdictions for household care products.

Comprehensibility tests were carried out on the AISE Precautionary pictogram ‘Keep out of reach of children’. The studies conducted in several countries according to Annex VI GHS demonstrated that this icon was adequately understood by 88.6% of the respondents, and that critical confusion about the icon was only sporadic (<1%).



A3.5.2.2 JSDA precautionary pictogram “Keep out of reach of children”

The pictogram was developed by the Japan Soap and Detergent Association (JSDA) for voluntarily use on the label/packaging of consumer detergents products in Japan.

The JSDA safe use icon was tested in accordance with the Japanese standard JIS S 0102: “Testing procedure for graphical warning symbols for consumers”. The icon passed the JIS S 0102 success criteria (comprehension >85%) with 96% correct understanding and only 1.7% of critical confusion”.

