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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

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Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

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Item 4 (b) of the provisional agenda
Hazard communication:
improvement of annexes 1 to 3 and further
rationalization of precautionary statements

Proposed changes to Sections 2 to 4 of Annex 3

Transmitted by the expert from the United Kingdom on behalf of the informal working group on improving Annexes 1, 2 and 3 of the GHS

This informal document sets out the changes proposed in working document ST/SG/AC.10/C.4/2018/32. New text is shown in red, and deleted text is shown in strikethrough.

ANNEX 3

Section 2

CODIFICATION AND USE OF PRECAUTIONARY STATEMENTS

A3.2.1 Introduction

- A3.2.1.1 A precautionary statement is a phrase (and/or pictogram) which describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposures to a hazardous product, or its improper storage or handling of a hazardous product (see 1.4.10.5.2 (c)).
- A3.2.1.2 For the purposes of the GHS, there are five types of precautionary statements: **general, prevention, response** (in case of accidental spillage or exposure, emergency response and first-aid), **storage** and **disposal**. For guidance on the use of GHS precautionary statements, including advice on the selection of the appropriate statements for each GHS hazard class and category, see section 3 to this annex.
- A3.2.1.3 This section contains the recommended codes for each of the precautionary statement included in this annex.
- A3.3.1.12.1.3 This section provides guidance on the selection and use of precautionary statements for each GHS hazard class and category.consistent with the GHS, including advice on the selection of appropriate statements for each GHS hazard class and category. It will be subject to further refinement and development over time though the overall approach set out below will remain.
- A3.3.1.22.1.4 Precautionary statements should, as an important part of hazard communication, appear on GHS labels, generally along with the GHS hazard communication elements (pictograms, signal words and hazard statements). Additional supplemental information, such as directions for use, may also be provided at the discretion of the manufacturer/supplier and/or competent authority (see Chapter 1.2 and Chapter 1.4, para. 1.4.6.3). For some specific chemicals, supplementary first aid, treatment measures or specific antidotes or cleansing materials may be required. Poisons Centres and/or medical practitioners or specialist advice should be sought in such situations and included on labels.
- A3.3.1.32.1.5 The starting point for assigning precautionary statements is the hazard classification of the substance or mixture. The system of classifying hazards in the GHS is based on the intrinsic properties of the substances or mixtures involved (see 1.3.2.2.1). In some systems, however, labelling may not be required for chronic hazards on consumer product if information shows that the respective risks can be excluded under conditions of normal handling, normal use or foreseeable misuse (see Annex 5). If certain hazard statements are not required then the corresponding precautionary statements are also not necessary (see A5.1.1).
- A3.3.1.42.1.6 The guidance for assigning the statementsphrases in this section has been developed to provide the essential minimum phrases linking precautionary statements withthat are linked to relevant GHS hazard classification criteria and type of hazard.
- A3.3.1.52.1.7 Existing pPrecautionary statements from existing classification systems were have been used to the maximum extent as the basis for the development of this sectionSection. These existing systems have included the IPCS International Chemical Safety Card (ICSC) Compilers Guide, the American National Standards (ANSI Z129.1), the EU classification and labelling directives, the Emergency Response Guidebook (ERG 2004), and the Pesticide Label Review Manual of the Environmental Protection Agency (EPA) of the United States of America.
- A3.3.1.62.1.8 The understanding and following of precautionary label information, specific safety guidelines, and the safety data sheet for each substance or mixture product before use are part of occupational health and safety procedures. Consistent use of precautionary statements will reinforce safe handling procedures and will enable the key concepts and approaches to be emphasized in workplace training and education activities.
- A3.3.1.72.1.9 In order to correctly implement precautionary measures concerning prevention, response, storage and disposal, it is also necessary to have information on the composition of the substance or mixture at hand, so that information shown on the container, label and safety data sheet can be taken into account when asking for further specialist advice.

A3.3.1.82.1.10 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)). It should be noted, however, that the protective effect of pictograms is limited and the examples in this annex do not cover all precautionary aspects to be addressed. While pictograms can be useful, they can be misinterpreted and are not a substitute for training.

A3.2.2 Codification of precautionary statements

- A3.2.2.1 Precautionary statements are assigned a unique alphanumerical code which consists of one letter and three numbers as follows:
 - (a) a letter "P" (for "precautionary statement")
 - (b) one number designating the type of precautionary statement as follows:
 - "1" for general precautionary statements;
 - "2" for prevention precautionary statements;
 - "3" for response precautionary statements;
 - "4" for storage precautionary statements;
 - "5" for disposal precautionary statements;
 - (c) two numbers (corresponding to the sequential numbering of precautionary statements)
- A3.2.2.2 The precautionary statement codes are intended to be used for reference purposes. They are not part of the precautionary statement text and should not be used to replace it.
- A3.2.2.3 The codes to be used for designating precautionary statements are listed, in numerical order, in Table A3.2.1 for general precautionary statements, Table A3.2.2 for prevention precautionary statements, Table A3.2.3 for response precautionary statements, Table A3.2.4 for storage precautionary statements and Table A3.2.5 for disposal precautionary statements.

A3.2.3 Structure of the precautionary statement codification tables

- A3.2.3.1 Each precautionary statement table is divided into 5 columns containing the following information:
 - Column (1) The precautionary statement code;
 - Column (2) The precautionary statement text;
 - Column (3) The hazard class and the route of exposure, where relevant, for which the use of a precautionary statement is recommended together with a reference to the chapter of the GHS where information about the hazard class may be found.
 - Column (4) The hazard category or categories within a hazard class for which the use of a precautionary statement is applicable.
 - Column (5) Where applicable, conditions relating to the use of a precautionary statement;

A3.2.4 Use of precautionary statements

- A3.2.3.24.1 Tables A3.2.1 to A3.2.5 The tables show the core part of the precautionary statements in bold printin column (2). This is the text, except as otherwise specified, that should appear on the label. Derogations from the recommended labelling statements are at the discretion of competent authorities (see A3.2.5).
- A3.2.3.34.2 When a forward slash or diagonal mark [/]-"/" appears in a precautionary statement textin column (2), it indicates that a choice has to be made between the phrases they separate. In such cases, the manufacturer or supplier can choose, or the competent authorities may prescribe one or more appropriate phrase(s). For example P280 "Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/..." could read "wear eye protection" or "wear eye and face protection".
- A3.2.3.44.3 When three full stops [...]"..." appears in a precautionary statement textin column (2), they indicate that all applicable conditions are not listed. For example in P241 "Use explosion-proof

[electrical/ventilating/lighting/...] equipment", the use of "..." indicates that other equipment may need to be specified. Further details of the information to be provided may be found in column (5) of the tables. In such cases the manufacturer or supplier can choose, or the competent authorities may prescribe the other conditions to be specified.

A3.2.3.74.4 Where square brackets [...] appear around some text in a precautionary statement, this indicates that the text in square brackets is not appropriate in every case and should be used only in certain circumstances. In these cases, conditions for use explaining when the text should be used are given in column (5) of the tables. For example, P284 states: "[In case of inadequate ventilation] wear respiratory protection." This statement is given with the condition for use "— text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use". The application of the condition for use should be interpreted as follows: If additional information is provided with the chemical explaining what type of ventilation would be adequate for safe use, the text in square brackets may be used. In this case, the statement would read: "In case of inadequate ventilation wear respiratory protection." However, if the chemical is supplied without such information, the text in square brackets should not be used, and the precautionary statement should read: "Wear respiratory protection."

A3.2.3.54.5 In cases where additional information is required or information has to be specified, this is indicated by a relevant entry in column (5) in plain text.

A3.2.3.64.6 When text in italics is used in the tables column (5), this indicates specific conditions applying to the use or allocation of the precautionary statement. This may relate to conditions attaching to either the general use of a precautionary statement or its use for a particular hazard class and/or hazard category. For example, for P241, "Use explosion-proof [electrical/ventilating/lighting/...]equipment", only applies for flammable solids "if dust clouds can occur". Text in italics that starts with "-if" or "-specify" is an explanatory conditional note for the application of the precautionary statements and is not intended to appear on the label.

A3.3.22.5 Flexibility in the use of precautionary statements

A3.3.2.12.5.1 Omission of precautionary statements where the advice is not relevant

A3.2.5.1.1 Subject to any requirements of competent authorities, those responsible for labelling may decide to omit other precautionary statements for a hazard class and category where the information is clearly not appropriate or is adequately addressed by other information on the label, taking into account the nature of the user (e.g. consumer, employers and workers), the quantity supplied, and the intended and foreseeable circumstances of use. Where a decision is made to omit a precautionary statement the manufacturer or supplier of the substance or mixture should be able to demonstrate that the precautionary statement is not appropriate for the intended and foreseeable use, including potential emergency situations.

A3.3.2.22.5.2 Combination or consolidation of precautionary statements

A3.2.3.82.5.2.1 To facilitate translation into the languages of users, precautionary statements have been broken down into individual sentences or parts of sentences in the tables in this section (see Tables A3.2.1 to A3.2.5). In a number of instances the text that appears on a GHS label requires that these be added back together. This is indicated in this annex by codes conjoined with a plus sign "+". For example P305 + P351 + P338 indicates that the text to appear on the label is "IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing". These combinedadditive precautionary statements can also be found at the end of each of the precautionary statement tables in this section. Translation of only the single precautionary statements is required, as this will enable the compilation of the combinedadditive precautionary statements.

A3.3.2.2.12.5.2.2 To provide fFlexibility in the application of individual, combinations or consolidations of precautionary phrases, combinations or consolidations of statements are is encouraged to save label space and improve readability. The tables in this Section and the matrix in Section 3 of Annex 3The in Section 2 of Annex 3 include a number of combined precautionary statements. However, these are only examples and those responsible for labelling should further combine and consolidate phrases where this contributes to clarity and comprehensibility of label information.

A3.3.2.2.22.5.2.3 Combination of precautionary statements can also be useful for different types of hazard where the precautionary behaviour is similar. Examples are P370 + P372+ P380 + P373 "In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives" and P210 + P403 "Keep away from heat, hot surfaces, sparks, and open flames and other ignition sources. No smoking. sStore in a cool well well-ventilated place".

A3.3.2.32.5.3 Variations of text not affecting the safety message

A3.3.2.3.12.5.3.1 Subject to any requirements of competent authorities, the precautionary statements that appear on labels or in safety data sheets may incorporate minor textual variations from those set out in the GHS where these variations assist in communicating safety information and the safety advice is not diluted or compromised. These may include spelling variations, synonyms or other equivalent terms appropriate to the region where the product is supplied and used.

A3.3.2.3.22.5.3.2 In all cases, clear plain language is essential to convey information on precautionary behaviour. Furthermore, to ensure clarity of safety messages any variations should be applied consistently on the label and in the safety data sheet.

A3.3.2.42.5.4 Application of precautionary statements concerning medical response

A3.3.2.4.12.5.4.1 Where a substance or mixture is classified for a number of health hazards, this may trigger multiple precautionary statements relating to medical response i.e. calling a poison center/doctor/... (series P310-P312) and getting medical advice/attention (series P313-315). Usually, the label need only include one precautionary statement reflecting the response at the highest level with the greatest urgency, which should always be combined with at least one route of exposure or symptom ("IF" statement).

NOTE: This does not apply to P314 "**Get medical advice/attention if you feel unwell**" nor P315 "**Get immediate medical/advice attention**" which are not combined with a separate "IF" statement and should appear without prioritisation.

A3.3.2.4.22.5.4.2 In general, the following principles should be applied:

- (a) Where the classification of a substance or mixture triggers several different precautionary statements a system of prioritisation should be applied. P310 "Immediately call a POISON CENTER/doctor/...", should be prioritised over P311-P313; P311 "Call a POISON CENTER/doctor/..." over P312 and P313; and where only P312 "Call a POISON CENTER/doctor/...if you feel unwell" and P313 "Get medical advice/attention" are triggered, P311 "Call a POISON CENTER/doctor/..." should be used;
- (b) Routes of exposure, including P308 "**IF exposed or concerned**", may be combined when triggered with a medical response statement. If the response statement is triggered with three or more routes of exposure then P308 may be used instead. However, relevant "IF" statements describing symptoms (e.g. P332, P333, P337, P342) should be included in full. If a route of exposure is triggered multiple times it should only be included once.

For example:

- if P301 and P305 "IF SWALLOWED:" and "IF IN EYES:" are triggered with P313 "Get medical advice/attention" and P312 "Call a POISON CENTER/doctor/...if you feel unwell", then P301 + P305 + P311 "IF SWALLOWED OR IN EYES: Call a POISON CENTER/doctor/..." should appear.
- if P304, P302, P301 and P333 "IF INHALED:", "IF ON SKIN:", "IF SWALLOWED:" and "If skin irritation or rash occurs:", are triggered with P310 "Immediately call a POISON CENTER/doctor/...", and P311 "Call a POISON CENTER/doctor/...", then P308 + P332 + P310 "IF exposed or concerned or if skin irritation or rash occurs: Immediately call a POISON CENTER/doctor/..." should appear.
- if P305 and P302 "IF IN EYES:" and "IF ON SKIN" are triggered with P310 "Immediately call a POISON CENTER/doctor/...", P313 "Get medical advice/attention", and P314 "Get medical advice/attention if you feel unwell", then P305 + P302 + P310 "IF IN EYES OR ON SKIN: Immediately call a POISON CENTER/doctor/..." and P314 "Get medical advice/attention if you feel unwell" should appear separately.

A3.3.32.6 General precautionary measures

A3.3.3.12.6.1 General precautionary measures should be adopted for all substances and mixtures which are classified as hazardous to human health or the environment. To this end, the needs of, and the information sources available to two groups of users should be taken into account: consumers and employers/workers.

A3.3.3.22.6.2 In addition to the appropriate precautionary statements in the matrix, taking into account the guidance in this section, the general precautionary statements laid out in Table A3.2.1 are appropriate for consumers and should also appear on GHS labels.

Table A3.2.1: Codification of gGeneral precautionary statements

Table A3.2.2: Codification of pPrevention precautionary statements

Table A3.2.3: Codification of rResponse precautionary statements

Table A3.2.4: Codification of sStorage precautionary statements

Table A3.2.5: Codification of dDisposal precautionary statements

[No changes within the tables themselves]

Section 3

MATRIX OF PRECAUTIONARY STATEMENTS BY HAZARD CLASS / CATEGORY USE OF PRECAUTIONARY STATEMENTS

A3.3.1 Introduction

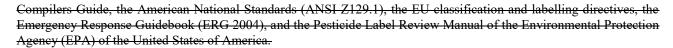
A3.3.1.1 This section provides guidance on the use of precautionary statements consistent with the GHS, including advice on the selection of appropriate statements for each GHS hazard class and category. It will be subject to further refinement and development over time though the overall approach set out below will remain.

A3.3.1.2 Precautionary statements should, as an important part of hazard communication, appear on GHS labels, generally along with the GHS hazard communication elements (pictograms, signal words and hazard statements). Additional supplemental information, such as directions for use, may also be provided at the discretion of the manufacturer/supplier and/or competent authority (see Chapter 1.2 and Chapter 1.4, para. 1.4.6.3). For some specific chemicals, supplementary first aid, treatment measures or specific antidotes or cleansing materials may be required. Poisons Centres and/or medical practitioners or specialist advice should be sought in such situations and included on labels.

A3.3.1.3 The starting point for assigning precautionary statements is the hazard classification of the substance or mixture. The system of classifying hazards in the GHS is based on the intrinsic properties of the substances or mixtures involved (see 1.3.2.2.1). In some systems, however, labelling may not be required for chronic hazards on consumer product if information shows that the respective risks can be excluded under conditions of normal handling, normal use or foreseeable misuse (see Annex 5). If certain hazard statements are not required then the corresponding precautionary statements are also not necessary (see A5.1.1).

A3.3.1.4 The guidance for assigning the phrases in this section has been developed to provide the essential minimum phrases linking precautionary statements with relevant GHS hazard classification criteria and type of hazard.

A3.3.1.5 Existing precautionary statements have been used to the maximum extent as the basis for the development of this section. These existing systems have included the IPCS International Chemical Safety Card (ICSC)



- A3.3.1.6 The understanding and following of precautionary label information, specific safety guidelines, and the safety data sheet for each product before use are part of occupational health and safety procedures. Consistent use of precautionary statements will reinforce safe handling procedures and will enable the key concepts and approaches to be emphasized in workplace training and education activities.
- A3.3.1.7 In order to correctly implement precautionary measures concerning prevention, response, storage and disposal, it is also necessary to have information on the composition of products at hand, so that information shown on the container, label and safety data sheet can be taken into account when asking for further specialist advice.
- A3.3.1.8 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)). It should be noted, however, that the protective effect of pictograms is limited and the examples in this annex do not cover all precautionary aspects to be addressed. While pictograms can be useful, they can be misinterpreted and are not a substitute for training.

A3.3.2 Flexibility in the use of precautionary statements

A3.3.2.1 Omission of precautionary statements where the advice is not relevant

Subject to any requirements of competent authorities, those responsible for labelling may decide to omit other precautionary statements for a hazard class and category where the information is clearly not appropriate or is adequately addressed by other information on the label, taking into account the nature of the user (e.g. consumer, employers and workers), the quantity supplied, and the intended and foreseeable circumstances of use. Where a decision is made to omit a precautionary statement the supplier of the substance or mixture should be able to demonstrate that the precautionary statement is not appropriate for the intended and foreseeable use, including potential emergency situations.

A3.3.2.2 Combination or consolidation of precautionary statements

- A3.3.2.2.1 To provide flexibility in the application of precautionary phrases, combinations or consolidations of statements are encouraged to save label space and improve readability. The matrix and the Tables in Section 2 of Annex 3 include a number of combined precautionary statements. However, these are only examples and those responsible for labelling should further combine and consolidate phrases where this contributes to clarity and comprehensibility of label information.
- A3.3.2.2.2 Combination of precautionary statements can also be useful for different types of hazard where the precautionary behaviour is similar. Examples are P370 + P372+ P380 "In case of fire: Explosion risk. Evacuate area" and P210 + P403 "Keep away from heat, sparks and open flame and store in a cool well ventilated place".

A3.3.2.3 Variations of text not affecting the safety message

- A3.3.2.3.1 Subject to any requirements of competent authorities, the precautionary statements that appear on labels or in safety data sheets may incorporate minor textual variations from those set out in the GHS where these variations assist in communicating safety information and the safety advice is not diluted or compromised. These may include spelling variations, synonyms or other equivalent terms appropriate to the region where the product is supplied and used.
- A3.3.2.3.2 In all cases, clear plain language is essential to convey information on precautionary behaviour. Furthermore, to ensure clarity of safety messages any variations should be applied consistently on the label and in the safety data sheet.

A3.3.2.4 Application of precautionary statements concerning medical response

A3.3.2.4.1 Where a substance or mixture is classified for a number of health hazards, this may trigger multiple precautionary statements relating to medical response i.e. calling a poison center/doctor/... (series P310 P312) and getting medical advice/attention (series P313 315). Usually, the label need only include one precautionary statement reflecting the response at the highest level with the greatest urgency, which should always be combined with at least one route of exposure or symptom ("IF" statement).

NOTE: This does not apply to P314 "Get medical advice/attention if you feel unwell" nor P315 "Get immediate medical/advice attention" which are not combined with a separate "IF" statement and should appear without prioritisation.

A3.3.2.4.2 In general, the following principles should be applied:

- (a) Where the classification of a substance or mixture triggers several different precautionary statements a system of prioritisation should be applied. P310 "Immediately call a POISON CENTER/doctor/...", should be prioritised over P311 P313; P311 "Call a POISON CENTER/doctor/..." over P312 and P313; and where only P312 "Call a POISON CENTER/doctor/...if you feel unwell" and P313 "Get medical advice/attention" are triggered, P311 "Call a POISON CENTER/doctor/..." should be used;
- (b) Routes of exposure, including P308 "IF exposed or concerned", may be combined when triggered with a medical response statement. If the response statement is triggered with three or more routes of exposure then P308 may be used instead. However, relevant "IF" statements describing symptoms (e.g. P332, P333, P337, P342) should be included in full. If a route of exposure is triggered multiple times it should only be included once.

For example:

- if P301 and P305 "IF SWALLOWED:" and "IF IN EYES:" are triggered with P313 "Get medical advice/attention" and P312 "Call a POISON CENTER/doctor/...if you feel unwell", then P301 + P305 + P311 "IF SWALLOWED OR IN EYES: Call a POISON CENTER/doctor/..." should appear.
- if P304, P302, P301 and P333 "IF INHALED:", "IF ON SKIN:", "IF SWALLOWED:" and "If skin irritation or rash occurs:", are triggered with P310 "Immediately call a POISON CENTER/doctor/...", and P311 "Call a POISON CENTER/doctor/...", then P308 + P332 + P310 "IF exposed or concerned or if skin irritation or rash occurs: Immediately call a POISON CENTER/doctor/..." should appear.
- if P305 and P302 "IF IN EYES:" and "IF ON SKIN" are triggered with P310 "Immediately call a POISON CENTER/doctor/...", P313 "Get medical advice/attention", and P314 "Get medical advice/attention if you feel unwell", then P305 + P302 + P310 "IF IN EYES OR ON SKIN: Immediately call a POISON CENTER/doctor/..." and P314 "Get medical advice/attention if you feel unwell" should appear separately.

A3.3.3 General precautionary measures

- A3.3.3.1 General precautionary measures should be adopted for all substances and mixtures which are classified as hazardous to human health or the environment. To this end, the needs of, and the information sources available to two groups of users should be taken into account: consumers and employers/workers.
- A3.3.3.2 In addition to the appropriate precautionary statements in the matrix, taking into account the guidance in this section, the general precautionary statements laid out in Table A3.2.1 are appropriate for consumers and should also appear on GHS labels.

A3.3.4 Matrix of precautionary statements by hazard class/category

- A3.3.4.11.1 This section sets out a matrix listing the recommended precautionary statements for each hazard class and hazard category of the GHS by type of precautionary statement (see A3.2.2.1 A3.2.1.2 and A3.2.2.1) except for general precautionary statements that do not have specific hazard class or categories. The matrix guides the selection of appropriate precautionary statements, and includes elements for all categories of precautionary action. All specific elements relating to particular hazard classes should be used. In addition, general precautionary statements not linked to a certain hazard class or category should also be used where relevant (see A3.3.3 A3.2.6).
- A3.3.4.21.2 The tables making up the matrix show the core part of the precautionary statements in bold print. This is the text, except as otherwise specified, that should appear on the label. However, it is not necessary to insist on identical sets of words in all situations.

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the application o	f the precautionary		ot intended to appear		,
Λ3.3.4.4	When a forward s	lash or diagonal ma	rk [/] appears in a pre	cautionary statement	text. it indicates that a

Text in italies that starts with " if" or " specify" is intended to be an explanatory conditional note for

A3.3.4.4 When a forward stash or diagonal mark [/] appears in a precautionary statement text, it indicates that a choice needs to be made between the phrases they separate. In such cases, the manufacturer or supplier can choose or competent authorities may prescribe one or more appropriate phrase(s). For example, "Wear protective gloves/protective clothing/eye protection/face protection" could read "Wear eye protection" or "Wear eye and face protection".

A3.3.4.5 When three full stops [...] appear in a precautionary statement text, they indicate that all applicable conditions are not listed. In such cases the manufacturer or supplier can choose, or the competent authorities may prescribe the other conditions to be specified. For example, in the statement "Use explosion-proof [electrical/ventilating/lighting/...] equipment", the use of "..." indicates that other equipment may need to be specified.

A3.3.4.61.3 In the majority of cases, the recommended precautionary statements are independent, e.g. the phrases for explosive hazard do not modify those related to certain health hazards and products that are classified for both hazard classes should bear appropriate precautionary statements for both.

[No changes in the matrix that follows]

Section 4

CODIFICATION OF HAZARD PICTOGRAMS

[No further changes in this section]