SCHEDULE 4

Classification provisions for preparations dangerous for supply

PART II

CONCENTRATION LIMITS TO BE USED IN APPLYING THE CONVENTIONAL METHOD OF ASSESSING HEALTH EFFECTS IN ACCORDANCE WITH PART I WHERE NO SUCH LIMITS ARE GIVEN IN THE APPROVED SUPPLY LIST

An assessment must be made of the health effects that the use of a substance or a preparation might entail. For that purpose the dangerous health effects have been subdivided into:-

- acute lethal effects;
- non-lethal irreversible effects after a single exposure;
- severe effects after repeated or prolonged exposure;
- corrosive effects;
- irritant effects;
- sensitizing effects;
- carcinogenic effects;
- mutagenic effects; and
- teratogenic effects.

The systematic assessment of all the dangerous health effects is expressed by means of concentration limits in conjunction with the classification of the substance, that is to say, the symbol and risk phrases which are assigned to each substance under consideration.

In relation to solid and liquid preparations any reference to a percentage concentration shall be treated as a reference to that concentration as a percentage by weight.

In relation to gaseous preparations any reference to a percentage concentration shall be treated as a reference to that concentration as a percentage by volume.

Acute lethal effects

Xn with R20, R21, R22

1.—(1) Solid and liquid preparations: The concentration limits specified in Table I determine the classification of solid and liquid preparations in relation to the individual concentration of the substance present whose classification is also shown.

Classification of the substance	Classification of the preparation		
	T+	Т	Xn
T+ with R26, R27, R28	conc. $\geq 7\%$	$1\% \le \text{conc.} < 7\%$	$0.1\% \le \text{conc.} < 1\%$
T with R23, R24, R25		conc. $\geq 25\%$	$3\% \le \text{conc.} < 25\%$

TABLE I

conc. $\geq 25\%$

The risk phrases denoting risk shall be assigned to the preparation in accordance with the following criteria:

- the label shall include one or more of the above-mentioned risk phrases according to the classification used,
- in general, the risk phrases selected should be those applicable to the substance(s) present in the concentration which gives rise to the most restrictive classification.

(2) **Gaseous Preparations:** The concentration limits specified in Table 1A determine the classification of gaseous preparations in relation to the individual concentration of the gases present whose classification is also shown.

TABLE IA	
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Classification of the substance (gas)	Classification of th	Classification of the gaseous preparation		
	T+	Т	Xn	
T+ with R26	conc. $\geq 1\%$	$0.2\% \le \text{conc.} < 1\%$	$0.02\% \le \text{conc.} < 0.2\%$	
T with R23		conc. \geq 5%	$0.5\% \le \text{conc.} < 5\%$	
Xn with R20			conc. \geq 5%	

Non-lethal irreversible effects after a single exposure

2.—(1) **Solid and liquid preparations:** For substances that produce non-lethal irreversible effects after a single exposure (R39, R40), the individual concentration limits specified in Table 11 determine, when appropriate, the classification of solid and liquid preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE II

Classification of the substance	Classification of the preparation		
	T+	Т	Xn
T+ with R39	conc. $\geq 10\% \text{ R39}^{(*)}$ obligatory	$1\% \le \text{conc.} < 10\% \text{ R39}^{(*)}$ obligatory	$0.1\% \leq \text{conc.} < 1\% \text{ R40}^{(*)}$ obligatory
T with R39		conc. $\geq 10\% \text{ R39}^{(*)}$ obligatory	$1\% \le \text{conc.} \le 10\% \text{ R40}^{(*)}$ obligatory
Xn with R40			conc. $\geq 10\% \text{ R40}^{(*)}$ obligatory

(*) In accordance with the approved classification and labelling guide and depending on the classification, the risk phrases R20 and R28 are also to be assigned to indicate route of administration or means of exposure.

(2) **Gaseous preparations:** For gases that produce non-lethal irreversible effects after a single exposure (R39, R40), the individual concentration limits specified in Table HA, determine, when appropriate, the classification of gaseous preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE IIA

Classification of the substance (gas)	Classification of the gaseous preparation		
	T+	Т	Xn
T+ with R39	conc. $\geq 1\% \text{ R39}^{(*)}$ obligatory	$0.2\% \leq \text{conc.} < 1\% \text{ R39}^{(*)}$ obligatory	$0.02\% \le \text{conc.} < 0.2\%$ R40 ^(*) obligatory
T with R39		conc. \geq 5% R39 ^(*) obligatory	$0.5\% \le \text{conc.} < 5\% \text{ R40}^{(*)}$ obligatory
Xn with R40			conc. \geq R40 ^(*) obligatory

Severe effects after repeated or prolonged exposure

3.—(1) **Solid and liquid preparations:** For substances that produce severe effects after repeated or prolonged exposure (R48), the individual concentration limits specified in Table III determine, when appropriate, the classification of solid and liquid preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE III

Classification of the substance	Classification of the preparation	
	Т	Xn
T with R48	conc. $\geq 10\%$ R48 ^(*) obligatory	$1\% \le \text{conc.} \le 10\% \text{ R48}^{(*)}$ obligatory
Xn with R48		conc. $\geq 10\%$ R48 ^(*) obligatory

(*) In accordance with the approved classification and labelling guide and depending on the classification, the risk phrases R20 to R28 are also to be assigned to indicate route of administration or means of exposure.

(2) **Gaseous preparations:** For gases that produce severe effects after repeated or prolonged exposure (R48), the individual concentration limits specified in Table IIIA determine, when appropriate, the classification of gaseous preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE IIIA

<i>Classification of the substance</i> (gas)	Classification of the gaseous preparation	
	Т	Xn
T with R48	conc. \geq 5% R48 ^(*) obligatory	$0.5\% \le \text{conc.} \le 5\% \text{ R48}^{(*)}$ obligatory
Xn with R48		conc. \geq 5% R48 ^(*) obligatory
(*) In accordance with the approved classification and labelling guide and depending on the classification, the risk phrases R20, R23 or R26		

(*) In accordance with the approved classification and labelling guide and depending on the classification, the risk phrases R20, R23 or R26 are also to be assigned to indicate route of administration or means of exposure.

Corrosive and irritant effects

4.—(1) **Solid and liquid preparations:** For substances that produce corrosive effects (R34, R35) or irritant effects (R36, R37, R38, R41), the individual concentration limits specified in Table IV determine, when appropriate, the classification of solid and liquid preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE IV

Classification of the substance and/or relevant standard risk phrase	Classification of the	e preparation and stan	dard risk phrase	
-	At least C with R35	At least C with R34	At least Xi with R41	At least Xi with R36, R37 or R38
At least C with R35	$conc. \ge 10\% R35$ obligatory	5% ≤ conc. < 10% R34 obligatory		1% ≤ conc. < 5% R36, R38 obligatory
At least C with R34		conc. $\geq 10\%$ R34 obligatory		5% ≤ conc. < 10% R36, R38 obligatory
At least Xi with R41			conc. \geq 10% R41 obligatory	5% ≤ conc. < 10% R36 obligatory
At least Xi with R36, R37 or R38				conc. $\geq 20\%$ R36, R37 and R38 are obligatory in the light of the concentration present if they apply to the substances under consideration

(2) **Gaseous preparations:** For gases that produce corrosive effects (R34, R35) or irritant effects (R37, R41), the individual concentration limits specified in Table IVA, determine, when appropriate, the classification of gaseous preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE IVA

Classification of the substance (gas) and/or relevant standard risk phrase	Classification of the	e gaseous preparation	and standard risk phr	ase
_	At least C with R35	At least C with R34	At least Xi with R41	At least Xi with R36, R37 or R38
At least C with R35	conc. \geq 1% R35 obligatory	0.2% ≤ conc. < 1% R34 obligatory		0.02% ≤ conc. < 0.2% R37 obligatory
At least C with R34		conc. \geq 5% R34 obligatory		0.5% ≤ conc. < 5% R37 obligatory

Classification of the substance (gas) and/or relevant standard risk phrase	Classification of the gaseous preparation and standard risk phrase			
	At least C with R35	At least C with R34	At least Xi with R41	At least Xi with R36, R37 or R38
At least Xi with R41			$conc. \ge 5\% \text{ R41}$ obligatory	0.5% ≤ conc. < 5% R36 obligatory
At least Xi with R36, R37 or R38				conc. \geq 5% R37, R36 and R38 obligatory as appropriate

Sensitizing effects

- 5.—(1) Solid and liquid preparations: Substances that produce such effects are classified:
- at least as harmful (Xn) and assigned R42 if this effect can be produced by inhalation,
- at least as irritant (Xi) and assigned R43 if this effect can be produced through contact with the skin,
- at least as harmful (Xn) and assigned R42/R43 if this effect can be produced in both these ways.

The individual concentration limits specified in Table V determine, when appropriate, the classification of solid and liquid preparations and shall determine the particular risk phrases which shall be assigned to them.

TABLE V

Classification of the substance and relevant risk phrase	Classification of the preparation and standard risk phrase	
	At least Xn and R42	At least Xi and R43
At least Xn and R42	conc. $\geq 1\%$ R42 obligatory	
At least Xi and R43		conc. $\geq 1\%$ R43 obligatory
At least Xn and R42/43	conc. \geq 1% R42/R43 obligatory	

(2) Gaseous preparations: Gases that produce such effects are classified:

— at least as harmful (Xn) and assigned R42 or R42/R43 as appropriate. The individual concentration limits specified in Table VA, determine, when appropriate, the classification of gaseous preparations and shall determine the particular risk phrases which shall be assigned to them.

<i>Classifcation of the substance (gas) and relevant risk phrase</i>	Classification of the gaseous preparation and standard risk phrase At least Xn with R42
At least Xn with R42	conc. $\geq 0.2\%$ R42 obligatory
At least Xn with R42/43	conc. $\geq 0.2\%$ R42/R43 obligatory

TABLE VA

Carcinogenic/mutagenic/teratogenic effects

6.—(1) Solid and liquid preparations: For substances that produce such effects and for which specific concentration limits do not yet appear in the approved supply list, the concentration limits laid down in Table VI shall determine, where appropriate, the classification of the preparations and the risk phrases which shall be assigned to them.

TABLE VI

Substance Symbol-letter and risk phrase	Symbol-letter and risk phrase for the preparation	
L	At least T	At least Xn
At least T with R45 or R49 denoting carcinogenic substances of Category 1 or 2	conc. $\geq 0.1\%$ R45 or R49 obligatory	
At least Xn with R40 denoting carcinogenic substances of Category 3		conc. $\geq 1\%$ R40 obligatory
At least T with R46 denoting mutagenic substances of Category 1	conc. \geq 0.1% R46 obligatory	
At least Xn with R46 denoting mutagenic substances of Category 2		conc. $\geq 0.1\%$ R46 obligatory
At least Xn with R40 denoting mutagenic substances of Category 3		conc. \geq 1% R40 obligatory
At least T with R47 denoting teratogenic substances of Category 1	conc. \geq 0.5% R47 obligatory	
At least Xn with R47 denoting teratogenic substances of Category 2		conc. \geq 5% R47 obligatory

(2) **Gaseous preparations:** For gases which produce such effects and for which specific concentration limits do not yet appear in the approved supply list the concentration limits laid down in Table VIA, shall determine, where appropriate, the classification of gaseous preparations and the risk phrases which shall be assigned to them.

TABLE VIA

Substance Symbol-letter and risk phrase	Symbol-letter and risk phrase for the gaseous preparation	
	At least T	At least Xn
At least T with R45 or R49 denoting carcinogenic substances of Category 1 or 2	conc. $\geq 0.1\%$ R45 or R49 obligatory	

Substance Symbol-letter and risk phrase	Symbol-letter and risk phrase for the gaseous preparation	
-	At least T	At least Xn
At least Xn with R40 denoting carcinogenic substances of Category 3		conc. \geq 1% R40 obligatory
At least T with R46 denoting mutagenic substances of Category 1	conc. $\geq 0.1\%$ R46 obligatory	
At least Xn with R46 denoting mutagenic substances of Category 2		conc. $\geq 0.1\%$ R46 obligatory
At least Xn with R40 denoting mutagenic substances of Category 3		conc. \geq 1% R40 obligatory
At least T with R47 denoting teratogenic substances of Category 1	conc. \geq 0.2% R47 obligatory	
At least Xn with R47 denoting teratogenic substances of Category 2		conc. \geq 1% R47 obligatory

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