COMMISSION

COMMISSION DIRECTIVE

of 5 October 1981

adapting to technical progress Council Directive 77/728/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of paints, varnishes, printing inks, adhesives and similar products

(81/916/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 77/728/EEC of 7 November 1977 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of paints, varnishes, printing inks, adhesives and similar products [1], and in particular Article 11 thereof,

Whereas Annex I to Directive 77/728/EEC contains a list of dangerous substances giving for each of these substances concentration limits which govern the classification of the preparations concerned;

Whereas examination of the list of dangerous substances has shown that this list needs to be adapted in the light of the latest scientific and technical knowledge or, more precisely, that it is necessary to change the concentration limits for some substances and to include other substances on the list;

Whereas Annex II to Directive 77/728/EEC contains special provisions concerning the labelling of certain preparations; whereas some risks have now been more precisely specified; whereas some of the safety advice phrases should be more clearly expressed; whereas, in the circumstances, Annex II should be amended;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee for the Adaptation to Technical Progress of the Directives on the Removal of Technical Barriers to Trade in Dangerous Substances and Preparations,

HAS ADOPTED THIS DIRECTIVE,

Article 1

Annexes I and II to Directive 77/728/EEC are hereby replaced by the Annexes to this Directive.

Article 2

The Member States shall adopt and publish before 1 July 1983 the provisions necessary to comply with this Directive and shall forthwith inform the Commission thereof. They shall apply such provisions with effect from 1 July 1983 at the latest.

Article 3

This Directive is addressed to the Member States.

Done at Brussels, 5 October 1981.

For the Commission
Karl-Heinz NARJES
Member of the Commission

[1] OJ No L 303, 28. 11. 1977, p. 23.

ANNEX I

CLASSIFICATION OF DANGEROUS SUBSTANCES

Explanatory notes

(1) The concentrations stated are percentages by weight calculated with reference to the total weight of the preparation.

(2) The concentrations stated are percentages by weight of the metallic element calculated with reference to the total weight of the preparation.

(3) The given concentrations of isocyanates are percentages by weight of free monomer calculated with reference to the total weight of the preparation.

(4) The concentrations stated are percentages by weight of chromate ions dissolved in water calculated with reference to the total weight of the preparation.

(5) For the substances identified in this way, the reference to Directive 67/548/EEC relates to aqueous solutions. However, for the purposes of this Annex, the concentration stated refers to the weight of the substance in question calculated as a percentage of the total weight of the preparation.

(6) The control of the concentration defined in this way is based on the ISO norm 6713/1980. This concentration limit may be reviewed in the light of any eventual modification of this norm.

VERY TOXIC AND TOXIC SUBSTANCES

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
		T %	Xn %
	A. **Heavy metal compounds** (2)		
033-002-00-5	Arsenic compounds, with the exception of those specified elsewhere in this Annex	> 0·2	0·1 — 0·2
080-002-00-6	Inorganic compounds of mercury with the exception of mercuric sulphide and those specified elsewhere in this Annex	> 0·5	0·1 — 0·5
080-004-00-7	Organic compounds of mercury with the exception of those specified elsewhere in this Annex	> 0·5	0·05 — 0·5
080-007-00-3	Mercury alkyls	> 0·1	0·05 — 0·1
082-002-00-1	Lead alkyls	> 0·1	0·05 — 0·1
050-005-00-7	Trimethyl tin compounds with the exception of those specified elsewhere in this Annex	> 0·1	0·05 — 0·1
050-006-00-2	Triethyl tin compounds with the exception of those specified elsewhere in this Annex	> 0·1	0·05 — 0·1
050-007-00-8	Tripropyl tin compounds with the exception of those specified elsewhere in this Annex	> 0·5	0·1 — 0·5
050-008-00-3	Tributyl tin compounds with the exception of those specified elsewhere in this Annex	> 1·0	0·25 — 1·0
050-011-00-X	Triphenyl tin compounds with the exception of those specified elsewhere in this Annex	> 1·0	0·25 — 1·0

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
		T %	Xn %
	B. **Other substances**		
603-026-00-6	1-Chloro-2,3-epoxypropane	> 0·1	0·025 — 0·1
607-108-00-2	Hydroxypropyl acrylate (mixture)	> 2·0	0·2 — 2·0
607-112-00-4	2,2-Dimethyltrimethylene diacrylate	> 5·0	0·2 — 5·0
607-117-00-1	2,3-Epoxypropyl acrylate	> 2·0	0·2 — 2·0
607-120-00-8	2,2-Oxydiethyl diacrylate	> 2·0	0·2 — 2·0
607-072-00-8	2-Hydroxyethyl acrylate	> 2·0	0·2 — 2·0
608-003-00-4	Acrylonitrile	> 1·0	0·2 — 1·0
608-010-00-2	Methacrylonitrile	> 1·0	0·2 — 1·0
612-016-00-0	*NN*-Dimethylaniline	> 5·0	1·0 — 5·0
612-054-00-8	*NN*-Diethylaniline	> 5·0	1·0 — 5·0
612-056-00-9	*NN*-Dimethyltoluidine	> 5·0	1·0 — 5·0
612-028-00-6	Phenylenediamine	> 5·0	1·0 — 5·0
015-017-00-9	Tricresyl phosphates (mixtures containing more than 1 % esterfied o-cresol)	> 1·0	0·2 — 1·0
604-002-00-8	Pentachlorophenol	> 5·0	0·5 — 5·0
604-003-00-3	Alkali salts of pentachlorophenol	> 5·0	0·5 — 5·0
605-001-01-2	Formaldehyde (5)	>30·0	—
607-003-00-1	Chloroacetic acid (5)	> 5·0	0·5 — 5·0
607-090-00-6	Thioglycolic acid (5)	> 2·0	0·2 — 2·0
604-013-00-8	2,3,4,6-Tetrachlorophenol	> 5·0	0·5 — 5·0
604-015-00-9	2,2-Methylenebis-(3,4,6-trichlorophenol)	> 2·0	0·2 — 2·0
007-010-00-4	Sodium nitrite	> 5·0	1·0 — 5·0
007-011-00-X	Potassium nitrite	> 5·0	1·0 — 5·0
009-003-00-1	Hydrofluoric acid (5)	> 0·5	—
009-012-00-0	Alkali fluorosilicates (Na, K, NH_4)	>10·0	1·0 — 10·0
615-006-00-4	2,4-Di-isocyanatotoluene (3) 2,6-Di-isocyanatotoluene (3)	> 2·0	0·5 — 2·0
615-009-00-0	4,4'-Methylene di (cyclohexyl isocyate (3)	> 2·0	0·5 — 2·0
615-010-00-6	2,2,4-Trimethylhexamethylene-1,6-di-isocyanate (3) 2,4,4-Trimethylhexamethylene-1,6-di-isocyanate (3)	> 2·0	0·5 — 2·0
615-011-00-1	Hexamethylene di-isocyanate (3)	> 2·0	0·5 — 2·0
615-008-00-5	3-Isocyanatomethyl-3,5,5-trimethylcyclohexylisocyanate (3)	> 2·0	0·5 — 2·0
603-060-00-1	1,2:3,4-Diepoxybutane	> 0·1	0·025 — 0·1
603-065-00-9	1,3-***Bis***(2,3-epoxypropoxy)benzene	> 0·1	0·025 — 0·1
603-066-00-4	1,2-Epoxy-4-epoxyethylcyclohexane	> 0·1	0·025 — 0·1
603-063-00-8	2,3-Epoxy-1-propanol	> 5·0	1·0 — 5·0

HARMFUL SUBSTANCES

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
			Xn %
	A. **Heavy metal compounds which are soluble in HCl 0·07 N** (2)		
048–001–00–5	Cadmium compounds, with the exception of cadmium sulphide (CdS), cadmium sulphoselenide (xCdS.yCdSe), mixture of cadmium sulphide with zinc sulphide (xCdS.yZnS), mixture of cadmium sulphide with mercury sulphide (xCdS.yHgS), and those specified elsewhere in this Annex		≥ 0·1
051–003–00–9	Antimony compounds, with the exception of the trioxide (Sb_2O_3), tetroxide (Sb_2O_4), pentoxide (Sv_2O_5), trisulphide (Sb_2S_3), pentasulphide (Sb_2S_5) and those specified elsewhere in this Annex		≥ 0·25
056–002–00–7	Barium salts, with the exception of barium sulphate and of salts specified elsewhere in this Annex		≥ 1·0
082–001–00–6	Lead compounds with the exception of those specified elsewhere in this Annex (6)		≥ 1·0
	B. **Heavy metal compounds** (2)		
050–009–00–9	Tripentyltin compounds with the exception of those specified elsewhere in this Annex		≥ 1·0
050–010–00–4	Trihexyltin compounds with the exception of those specified elsewhere in this Annex		≥ 1·0
050–012–00–0	Tricyclohexyltin compounds with the exception of those specified elsewhere in this Annex		≥ 1·0
050–014–00–6	Tributyltin oleate		≥ 2·0
050–015–00–1	Tributyltin linoleate		≥ 2·0
050–016–00–7	Tributyltin naphtenate		≥ 2·0
	C. **Other substances**		
607–006–00–8	Oxalic acid		≥ 5·0
607–007–00–3	Salts of oxalic acid		≥ 5·0
015–102–00–0	Tris-(2-chloroethyl) phosphate		≥ 25·0
603–038–00–1	Allyl 2,3-epoxypropyl ether		≥ 1·0
015–018–00–4	Tricresyl phosphates (Tritolyl phosphates) (mixtures containing a maximum of 1 % esterified o-cresol)		≥ 5·0
603–039–00–7	Butyl 2,3-epoxypropyl ether		≥ 1·0
615–005–01–6	Diphenylmethane-4,4'-di-isocyanate (3) Isomeres and Homologues		≥ 2·0
615–005–00–9	Diphenylmethane-4,4'-di-isocyanate (a) (3) Diphenylmethane-2,4'-di-isocyanate (b) (3) Diphenylmethane-2,2'-di-isocyanate (c) (3) Mixtures of (a), (b) and (c)		≥ 2·0
007–009–00–9	Dicyclohexylammonium nitrite		≥ 10·0
604–009–00–6	1,2,3-Trihydroxybenzene		≥ 10·0
604–010–00–1	Resorcinol		≥ 10·0
604–012–00–2	2,4,5-Trichlorophenol 2,4,6-Trichlorophenol		≥ 5·0

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
			Xn %
604-014-00-3	4-Chloro-m-cresol		⩾ 5·0
607-086-00-4	Diallyl phthalate		⩾25·0
607-115-00-0	Isobutyl acrylate		⩾10·0
607-121-00-3	8,9,10-Trinorborn-2-yl acrylate		⩾10·0
607-123-00-4	2,3-Epoxypropyl methacrylate		⩾10·0
607-127-00-6	2-Diethylaminoethyl methacrylate		⩾10·0
607-132-00-3	2-Dimethylaminoethyl methacrylate		⩾10·0
607-106-00-1	8,9-Dinorborn-5-ene-2,3-dicarboxylic anhydride		⩾10·0
009-013-00-6	Fluorosilicates, with the exception of those specified elsewhere in this Annex		⩾ 3·0
613-030-00-X	Sodium salt of dichloroisocyanuric acid Potassium salt of dichloroisocyanuric acid		⩾10·0
603-067-00-X	1,2-Epoxy-3-propane		⩾ 1·0
603-072-00-7	1,4-*Bis*-(2,3-epoxypropoxy)butane		⩾ 1·0

CORROSIVE SUBSTANCES

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
		C %	Xi %
	A. **Acids**		
009-003-00-1	Hydrofluoric acid (5)	> 0·5	0·1 — 0·5
607-001-00-0	Formic acid (5)	>25·0	10·0 — 25·0
607-002-00-6	Acetic acid (5)	>25·0	10·0 — 25·0
017-002-01-X	Hydrochloric acid (5)	>25·0	10·0 — 25·0
607-061-00-8	Acrylic acid	>25·0	2·0 — 25·0
015-011-00-6	Phosphoric acid (5)	>25·0	10·0 — 25·0
009-010-00-X	Fluoroboric acid (5)	>25·0	10·0 — 25·0
009-011-00-5	Fluorosilicic acid (5)	>25·0	10·0 — 25·0
016-020-00-8	Sulphuric acid (5)	>15·0	5·0 — 15·0
007-004-00-1	Nitric acid (5)	>20·0	5·0 — 20·0
607-089-00-0	Propionic acid (5)	>25·0	10·0 — 25·0
607-091-00-1	Trifluoroacetic acid (5)	>10·0	2·0 — 10·0
607-088-00-5	Methacrylic acid	>25·0	2·0 — 25·0
607-094-00-8	Paracetic acid (5)	>10·0	2·0 — 10·0
016-029-00-7	*p*-Toluenesulphonic acid (containing more than 5 % H_2SO_4)	>25·0	10·0 — 25·0
607-004-00-7	Trichloroacetic acid (5)	> 5·0	1·0 — 5·0

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
		C %	Xi %
	B. **Bases**		
007-001-01-2	Ammonia solution (5)	>35·0	10·0 — 35·0
019-002-00-8	Potassium hydroxide	> 5·0	1·0 — 5·0
011-002-00-6	Sodium hydroxide, anhydrous	> 5·0	1·0 — 5·0
	C. **Other substances**		
607-008-00-9	Acetic anhydride	>20·0	8·0 — 20·0
024-001-00-0	Chromium trioxide	> 5·0	0·5 — 5·0
612-006-00-6	1,2-Diaminoethane	>10·0	2·0 — 10·0
612-058-00-X	2,2'-Iminodiethylamine	>10·0	1·0 — 10·0
612-059-00-5	3,6-Diazaoctaneethylenediamine	>10·0	1·0 — 10·0
612-060-00-0	3,6,9-Triazaundecanmethylenediamine	>10·0	1·0 — 10·0
612-061-00-6	3-Aminopropyldimethylamine	>10·0	1·0 — 10·0
612-062-00-1	3-Aminopropyldiethylamine	>10·0	1·0 — 10·0
612-063-00-7	3,3'-Iminopropylamine	>10·0	1·0 — 10·0
612-064-00-2	3,6,9,12-Tetra-azatetradecamethylenediamine	>10·0	2·0 — 10·0
607-118-00-7	1-Methyltrimethylene diacrylate	>10·0	1·0 — 10·0
607-119-00-2	Tetramethylene diacrylate	>10·0	1·0 — 10·0
009-007-00-3	Sodium bifluoride	> 1·0	0·1 — 1·0
009-008-00-9	Potassium bifluoride	> 1·0	0·1 — 1·0
009-009-00-4	Ammonium bifluoride	> 1·0	0·1 — 1·0
016-008-00-2	Ammonium polysulphides	> 5·0	1·0 — 5·0
613-028-00-9	Morpholine	>10·0	1·0 — 10·0
612-065-00-8	Polyethyleneamines	>10·0	2·0 — 10·0
612-067-00-9	Isophorone diamine	>10·0	2·0 — 10·0
612-066-00-3	Dicyclohexylamine	>10·0	2·0 — 10·0
612-050-00-6	Cyclohexylamine	>10·0	2·0 — 10·0

IRRITANT SUBSTANCES

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
			Xi %
024-002-00-6	Potassium dichromate (4)		≥ 0·5
024-003-00-1	Ammonium dichromate (4)		≥ 0·5
024-004-00-7	Sodium dichromate (4)		≥ 0·5
024-006-00-8	Potassium chromate (4)		≥ 0·5

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
			Xi %
605-001-00-5	Formaldehyde		5·0 — 30·0
607-107-00-7	2-Ethylhexyl acrylate		≥ 1·0
607-109-00-8	Hexamethylene diacrylate		≥ 1·0
607-110-00-3	Pentaerythritol triacrylate		≥ 1·0
607-111-00-9	2,2-*Bis*(acryloyloxymethyl)butyl acrylate		≥ 1·0
607-113-00-X	Isobutyl methacrylate		≥ 10·0
607-114-00-5	Ethylene dimethacrylate		≥ 10·0
607-116-00-6	Cyclohexyl acrylate		≥ 10·0
607-122-00-9	Pentaerythritol tetra acrylate		≥ 1·0
607-124-00-X	2-Hydroxyethyl methacrylate		≥ 1·0
607-125-00-5	Hydroxypropyl methacrylate		≥ 10·0
607-126-00-0	2,2'-(Ethylenedioxy)diethyl diacrylate		≥ 1·0
607-128-00-1	2-Tert-butylaminoethyl methacrylate		≥ 10·0
607-133-00-9	Acrylate with the exception of those specified elsewhere in this Annex		≥ 10·0
607-134-00-4	Methacrylate with the exception of those specified elsewhere in this Annex		≥ 10·0
603-056-00-X	1,2-Epoxy-3-(tolyloxy)propane		≥ 2·0
605-016-00-7	Ethane-1,2-dione		≥ 10·0
607-009-00-4	Phthalic anhydride		≥ 5·0
015-105-00-7	Triphenyl phosphite		≥ 5·0
607-032-00-X	Ethyl acrylate		≥ 5·0
607-034-00-0	Methyl acrylate		≥ 5·0
607-096-00-9	Maleic anhydride		≥ 1·0
607-097-00-4	Benzene-1,2,4-tricarboxylic-1,2-anhydride		≥ 0·3
607-099-00-5	Cyclohex-4-ene-1,2-dicarboxylic anhydride		≥ 1·0
607-098-00-X	Benzene-1,2:4,5-tetracarboxylic dianhydride		≥ 1·0
607-100-00-9	Benzophenone-3,3'4,4'-Tetracarboxylic dianhydride		≥ 1·0
607-101-00-4	1,4,5,6,7,7-Hexachlorobicyclo(2.2.1)hept-5-ene-2,3-dicarboxylic anhydride		≥ 1·0
607-102-00-X	Cyclohexane-1,2-dicarboxylic anhydride		≥ 1·0
607-103-00-5	Succinic anhydride		≥ 1·0
607-104-00-0	Cyclopentane-1,2,3,4-tetracarboxylic dianhydride		≥ 1·0
607-105-00-6	8,9,10-Trinorborn-5-ene-2,3-dicarboxylic anhydride		≥ 1·0
014-004-00-5	Trichloro(methyl)silane		≥ 1·0
016-030-00-2	*p*-Toluenesulphonic acid (containing a maximum of 5 % H_2SO_4)		≥ 75·0
050-013-00-0	Trioctyltin compounds with the exception of those specified elsewhere in this Annex		≥ 1·0
603-068-00-5	2,3-Epoxypropyl-2-ethylcyclohexyl ether		≥ 2·0

Reference No in Directive 67/548/EEC	Substance	Concentration at which preparation takes symbol indicated (1)	
			Xi %
615-012-00-7	Isocyanate of tosyle		≥ 5·0
603-073-00-2	*Bis*[4-(2,3-epoxy propoxy) phenyl] propane		≥ 1·0
603-070-00-6	2-Amino-2-methylpropan-1-ol		≥ 10·0
603-071-00-1	2,2'-Iminodiethanol		≥ 10·0
607-035-00-6	Methyl methacrylate		≥ 10·0
603-074-00-8	Reaction product: Bisphenol A-Epichlorhydrin Epoxy resin (numbers average molecular weight ≤ 700)		≥ 1·0

ANNEX II

SPECIAL PROVISIONS CONCERNING THE LABELLING OF CERTAIN PREPARATIONS

1. **Paints and varnishes containing lead**

Labels of packages of paints and varnishes containing lead in quantities exceeding 0·5 %, expressed as weight of metal, in the total weight of the preparation, shall bear the following inscription:

'Contains lead. Must not be used on surfaces liable to be chewed or sucked by children.'

In the case of packages the contents of which are less than 125 millilitres, the inscription may be as follows:

'Warning. Contains lead.'

2. **Cyanoacrylate-based adhesives**

The immediate packaging of cyanoacrylate-based adhesives shall bear the following inscription:

'Cyanoacrylate.
Danger.
Bonds skin and eyes in seconds.
Keep out of reach of children.'

Full advice on safety shall accompany the package.

3. **Preparations containing isocyanates**

The package labels of preparations containing isocyanates (whether as monomers, oligomers, prepolymers, etc. or as mixtures thereof) shall bear the following inscriptions:

'Contains isocyanates.
See information supplied by the manufacturer.'

4. **Spray application**

In accordance with the fourth subparagraph of Article 6 (4), the package labels of preparations intended for spray application shall bear the safety advice S 23 and S 38.

5. **Preparations containing substances which may cause sensitization**

The package labels of preparations containing one or more substances that involve the special risks denoted by the standard phrases (R42, R43, R42/43), set out in Annex I to Directive 67/548/EEC must bear a reference to these risks if the concentration of such substances exceeds the limits laid down in Annex I to the present Directive.