

Commission Directive (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU (Text with EEA relevance)

COMMISSION DIRECTIVE (EU) 2017/164

of 31 January 2017

establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work⁽¹⁾ ('Directive 98/24/EC'), and in particular Article 3(2),

Whereas:

- (1) Pursuant to Directive 98/24/EC, the Commission is to propose Union objectives in the form of indicative occupational exposure limit values (IOELVs) to be set at Union level, in order to protect workers from risks arising from exposure to hazardous chemicals.
- (2) Article 3(2) of Directive 98/24/EC empowers the Commission to establish or revise IOELVs, taking into account the availability of measurement techniques by means of measures adopted in accordance with the procedure laid down in Article 17 of Council Directive 89/391/EEC⁽²⁾.
- (3) The Commission is assisted in this task by the Scientific Committee on Occupational Exposure Limits for Chemical Agents (SCOEL), set up by Commission Decision 2014/113/EU⁽³⁾.
- (4) In accordance with Directive 98/24/EC, 'occupational exposure limit value' means, unless otherwise specified, the limit of the time-weighted average of the concentration of a chemical agent in the air within the breathing zone of a worker in relation to a specified reference period.
- (5) IOELVs are health-based occupational exposure limit values that are derived by SCOEL from the most recent scientific data available and adopted by the Commission taking into account the availability of measurement techniques. They are threshold levels of exposure below which, in general, no detrimental effects are expected for any given chemical agent after short-term or daily exposure over a working lifetime. They constitute Union objectives and are designed to assist employers in determining and

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assessing risks and in implementing preventive and protective measures in accordance with Directive 98/24/EC.

- (6) In accordance with SCOEL recommendations, IOELVs are established in relation to a reference period of 8 hours time-weighted average (long-term exposure limit values) and, for certain chemical agents, to shorter reference periods, in general 15 minutes time-weighted average (short-term exposure limit values), to take account of the effects arising from short-term exposure.
- (7) For any chemical agent for which an IOELV has been set at Union level, Member States are required to establish a national occupational exposure limit value. In doing so, they are required to take into account the Union limit value, determining the nature of the national limit value in accordance with national legislation and practice.
- (8) IOELVs are an important part of the general arrangements for the protection of workers against the health risks arising from exposure to hazardous chemicals.
- (9) In accordance with Article 3 of Directive 98/24/EC, SCOEL has assessed the relationship between the health effects of the chemical agents listed in the 31 entries in the Annex to this Directive and the level of occupational exposure and recommended for all those chemical agents, the establishment of IOELVs for the inhalation route of exposure in relation to a reference period of 8 hours time-weighted average. It is therefore appropriate to establish long-term exposure limit values for all those agents in the Annex to this Directive.
- (10) For some of those chemical agents, SCOEL also recommended the establishment of such limit values in relation to shorter reference periods and/or of skin notations.
- (11) Four of those chemical agents — nitrogen monoxide, calcium dihydroxide, lithium hydride and acetic acid — are currently listed in the Annex to Commission Directive 91/322/EEC⁽⁴⁾.
- (12) One of those chemical agents, 1,4-dichlorobenzene, is currently listed in the Annex to Commission Directive 2000/39/EC⁽⁵⁾.
- (13) Another, bisphenol A, is currently listed in the Annex to Commission Directive 2009/161/EU⁽⁶⁾.
- (14) SCOEL has recommended for those agents the establishment of new IOELVs. It is therefore appropriate to include revised limit values for those six chemical agents in the Annex to this Directive and to delete the entries for those chemical agents from the Annexes to Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.
- (15) For 1 of the chemical agents listed in the 31 entries in the Annex to this Directive, acrylic acid, SCOEL recommended a short-term exposure limit value in relation to a reference period of 1 minute. It is therefore appropriate to establish such a short-term exposure limit value for this chemical agent in the Annex to this Directive.
- (16) For certain substances, it is necessary to take into account the possibility of penetration through the skin in order to ensure the best possible level of protection. Among the chemical agents listed in the 31 entries in the Annex to this Directive, SCOEL identified

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the possibility of significant uptake through the skin for glycerol trinitrate, carbon tetrachloride, hydrogen cyanide, methylene chloride, nitroethane, 1,4-dichlorobenzene, methyl formate, tetrachloroethylene, sodium cyanide and potassium cyanide. It is therefore appropriate to set in the Annex to this Directive notations indicating the possibility of significant uptake through the skin for these chemical agents, in addition to the IOELVs.

- (17) The Advisory Committee on Health and Safety at Work⁽⁷⁾, consulted in accordance with Article 3(2) of Directive 98/24/EC, recognised that there were concerns regarding the technical feasibility of the proposed IOELVs for nitrogen monoxide and nitrogen dioxide in underground mining and tunnelling, and for carbon monoxide in underground mining. The committee also acknowledged that there are currently challenges relating to the availability of measurement methodologies that could be used to demonstrate compliance with the proposed limit value for nitrogen dioxide in underground mining and tunnelling environments. It is therefore appropriate to allow the Member States to make use of a transitional period in respect of the implementation in underground mining and tunnelling of the limit values set for nitrogen monoxide, nitrogen dioxide and carbon monoxide in the Annex to this Directive, and for the Commission to review the aforementioned issues before the end of the transitional period. During that transitional period, Member States may continue to apply the existing limit values, instead of applying those established in the Annex to this Directive.
- (18) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents⁽⁸⁾, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments.
- (19) With regard to this Directive, the Commission considers the transmission of such documents in the form of a table showing the correlation between the national measures and this Directive to be justified, given that for some agents national occupational exposure limit values already exist in national legislation, and given the variety and the technical nature of the legal instruments at national level for the establishment of occupational exposure limit values.
- (20) The Advisory Committee on Safety and Health at Work gave its opinions on 27 November 2014 and 21 May 2015.
- (21) The measures provided for in this Directive are in accordance with the opinion of the Technical Progress Committee established under Article 17 of Council Directive 89/391/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

A fourth list of Union indicative occupational exposure limit values is hereby established for the chemical agents listed in the Annex.

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Article 2

Member States shall establish national occupational exposure limit values for the chemical agents listed in the Annex, taking into account the Union limit values.

Article 3

In the Annex to Directive 91/322/EEC, the references to acetic acid, calcium dihydroxide, lithium hydride and nitrogen monoxide are deleted with effect from 21 August 2018, subject to Article 6(2)(a).

Article 4

In the Annex to Directive 2000/39/EC, the reference to 1,4-dichlorobenzene is deleted with effect from 21 August 2018.

Article 5

In the Annex to Directive 2009/161/EU, the reference to bisphenol A is deleted with effect from 21 August 2018.

Article 6

1 In underground mining and tunnelling, Member States may benefit from a transitional period ending at the latest on 21 August 2023, as regards the limit values for nitrogen monoxide, nitrogen dioxide and carbon monoxide.

2 During the transitional period referred to in paragraph 1, Member States may continue to apply the following, instead of applying the limit values established in the Annex:

- a in respect of nitrogen monoxide: the existing limit values established in accordance with the Annex to Directive 91/322/EEC;
- b in respect of nitrogen dioxide and carbon monoxide: national limit values in force on 1 February 2017.

Article 7

1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 21 August 2018 at the latest.

They shall forthwith communicate to the Commission the text of those provisions and shall accompany their notification with one or more explanatory documents in the form of tables showing the correlation between the provisions and this Directive.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2 Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 8

This Directive shall enter into force on the 20th day following that of its publication in the *Official Journal of the European Union*.

Article 9

This Directive is addressed to the Member States.

Done at Brussels, 31 January 2017.

For the Commission

The President

Jean-Claude JUNCKER

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ANNEX

EC No ^a	CAS No ^b	NAME OF THE CHEMICAL AGENT	LIMIT VALUES				Notation ^c
			8 hours ^d		Short-term ^e		
			mg/m ^{3f}	ppm ^g	mg/m ^{3f}	ppm ^g	
—	—	Manganese and inorganic manganese compounds (as manganese)	0,2 ^h 0,05 ⁱ	—	—	—	—
200-240-8	55-63-0	Glycerol trinitrate	0,095	0,01	0,19	0,02	skin
200-262-8	56-23-5	Carbon tetrachloride; Tetrachloromethane	6,4	1	32	5	skin
200-521-5	61-82-5	Amitrole	0,2	—	—	—	—
200-580-7	64-19-7	Acetic acid	25	10	50	20	—
200-821-6	74-90-8	Hydrogen cyanide (as cyanide)	1	0,9	5	4,5	skin
200-838-9	75-09-2	Methylene chloride; Dichloromethane	353	100	706	200	skin
200-864-0	75-35-4	Vinylidene chloride;	8	2	20	5	—

a EC No : European Community (EC) number, the numerical identifier for substances within the European Union.

b CAS No : Chemical Abstract Service Registry Number.

c A *skin notation* assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin.

d Measured or calculated in relation to a reference period of 8 hours time-weighted average (TWA).

e Short-term exposure limit (STEL). A limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

f mg/m³ : milligrams per cubic metre of air. For chemicals in gas or vapour phase the limit value is expressed at 20 °C and 101,3 kPa.

g ppm : parts per million by volume in air (ml/m³).

h Inhalable fraction.

i Respirable fraction.

j Short-term exposure limit value in relation to a reference period of 1 minute.

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		1,1-Dichloroethylene					
201-083-8	78-10-4	Tetraethyl orthosilicate	44	5	—	—	—
201-177-9	79-10-7	Acrylic acid; Prop-2-enoic acid	29	10	59 ^j	20 ^j	—
201-188-9	79-24-3	Nitroethane	62	20	312	100	skin
201-245-8	80-05-7	Bisphenol A; 4,4'-Isopropylidenediphenol	2 ^h	—	—	—	—
202-981-2	101-84-8	Diphenyl ether	7	1	14	2	—
203-234-3	104-76-7	2-ethylhexan-1-ol	5,4	1	—	—	—
203-400-5	106-46-7	1,4-Dichlorobenzene; <i>p</i> -Dichlorobenzene	12	2	60	10	skin
203-453-4	107-02-8	Acrolein; Acrylaldehyde; Prop-2-enal	0,05	0,02	0,12	0,05	—
203-481-7	107-31-3	Methyl formate	125	50	250	100	skin
203-788-6	110-65-6	But-2-yne-1,4-diol	0,5	—	—	—	—

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204-825-9	127-18-4	Tetrachloroethylene	20	275	40	skin	
205-500-4	141-78-6	Ethyl acetate	734	200	1 468	400	—
205-599-4	143-33-9	Sodium cyanide (as cyanide)	1	—	5	—	skin
205-792-3	151-50-8	Potassium cyanide (as cyanide)	1	—	5	—	skin
207-069-8	431-03-8	Diacetyl; Butanedione	0,07	0,02	0,36	0,1	—
211-128-3	630-08-0	Carbon monoxide	23	20	117	100	—
215-137-3	1305-62-0	Calcium dihydroxide	1 ⁱ	—	4 ⁱ	—	—
215-138-9	1305-78-8	Calcium oxide	1 ⁱ	—	4 ⁱ	—	—
231-195-2	7446-09-5	Sulphur dioxide	1,3	0,5	2,7	1	—
231-484-3	7580-67-8	Lithium hydride	—	—	0,02 ^h	—	—
233-271-0	10102-43-9	Nitrogen monoxide	2,5	2	—	—	—
233-272-6	10102-44-0	Nitrogen dioxide	0,96	0,5	1,91	1	—
262-967-7	61788-32-7	Terphenyl, hydrogenated	19	2	48	5	—

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e Short-term exposure limit (STEL). A limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

f mg/m³ : milligrams per cubic metre of air. For chemicals in gas or vapour phase the limit value is expressed at 20 °C and 101,3 kPa.

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- (1) [OJ L 131, 5.5.1998, p. 11.](#)
- (2) Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work ([OJ L 183, 29.6.1989, p. 1.](#)).
- (3) Commission Decision 2014/113/EU of 3 March 2014 on setting up a Scientific Committee on Occupational Exposure Limits for Chemical Agents and repealing Decision 95/320/EC ([OJ L 62, 4.3.2014, p. 18.](#)).
- (4) Commission Directive 91/322/EEC of 29 May 1991 on establishing indicative limit values by implementing Council Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work ([OJ L 177, 5.7.1991, p. 22.](#)).
- (5) Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work ([OJ L 142, 16.6.2000, p. 47.](#)).
- (6) Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC ([OJ L 338, 19.12.2009, p. 87.](#)).
- (7) Council Decision 2003/C 218/01 of 22 July 2003 setting up an Advisory Committee on Safety and Health at Work ([OJ C 218, 13.9.2003, p. 1.](#)).
- (8) [OJ C 369, 17.12.2011, p. 14.](#)