[^{X1}ANNEX I

List of substances, [^{F1}mixtures] and processes (Article 2(a)(iii))

X1 Substituted by Corrigendum to Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC) (codified version) (Official Journal of the European Union L 158 of 30 April 2004).

Textual Amendments

- **F1** Substituted by Directive 2014/27/EU of the European Parliament and of the Council of 26 February 2014 amending Council Directives 92/58/EEC, 92/85/EEC, 94/33/EC, 98/24/EC and Directive 2004/37/EC of the European Parliament and of the Council, in order to align them to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
- 1. Manufacture of auramine.
- 2. Work involving exposure to polycyclic aromatic hydrocarbons present in coal soot, coal tar or coal pitch.
- 3. Work involving exposure to dusts, fumes and sprays produced during the roasting and electro-refining of cupro-nickel mattes.
- 4. Strong acid process in the manufacture of isopropyl alcohol.
- 5. Work involving exposure to hardwood dusts⁽¹⁾.
- [^{F2}6. Work involving exposure to respirable crystalline silica dust generated by a work process.]

Textual Amendments

- **F2** Inserted by Directive (EU) 2017/2398 of the European Parliament and of the Council of 12 December 2017 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Text with EEA relevance).
- [^{F3}7. Work involving dermal exposure to mineral oils that have been used before in internal combustion engines to lubricate and cool the moving parts within the engine.

Textual Amendments

- **F3** Inserted by Directive (EU) 2019/130 of the European Parliament and of the Council of 16 January 2019 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Text with EEA relevance).
- 8. Work involving exposure to diesel engine exhaust emissions.]

ANNEX II

Practical recommendations for the health surveillance of workers (Article 14(7))

- 1. The doctor and/or authority responsible for the health surveillance of workers exposed to carcinogens or mutagens must be familiar with the exposure conditions or circumstances of each worker.
- 2. Health surveillance of workers must be carried out in accordance with the principles and practices of occupational medicine; it must include at least the following measures:
- keeping records of a worker's medical and occupational history,
- a personal interview,
- where appropriate, biological surveillance, as well as detection of early and reversible effects.

Further tests may be decided upon for each worker when he is the subject of health surveillance, in the light of the most recent knowledge available to occupational medicine.

[^{F4}ANNEX III

LIMIT VALUES AND OTHER DIRECTLY RELATED PROVISIONS (ARTICLE 16)

Textual Amendments

F4 Substituted by Directive (EU) 2019/130 of the European Parliament and of the Council of 16 January 2019 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Text with EEA relevance).

A.LIMIT VALUES FOR OCCUPATIONAL EXPOSURE

Name	EC	CAS	Limit	Limit values						onTransitional
of	No ^a	No ^b	8 hour	hours ^c			term ^d			measures
agent			mg/ m ³ e	ppm ^r	f/ml ^g	mg/ m ^{3e}	ppm ^r	f/ml ^g		
Hardwo dusts	o d -		2 ^h							Limit value 3 mg/ m ³ until 17 January 2023
Chromi (VI) compou which are carcinog within	inds		0,005							Limit value 0,010 mg/ m ³ until 17

the meaning of point (i) of Article 2(a) (as chromium)							January 2025 Limit value: 0,025 mg/ m ³ for welding or plasma cutting processes or similar work processes that generate fume until 17 January 2025
Refracto ry — ceramic fibres	—	—	0,3	—	_	 	
which are							
carcinogens within							
the meaning of							
point (i) of							
Article 2(a)							
Respirab le — crystalline silica dust	0,1 ⁱ	_	_	_		 	
Benzene200-753-771-43-2	3,25	1		_		 skin ^j	
Vinyl 200-831-75-01-4 chloride monomer	2,6	1		—		 	
Ethylene200-849-75-21-8 oxide	1,8	1	—	—		 skin ^j	
1,2- 200-879 -7 5-56-9 Epoxypropane	2,4	1	—	—		 	

Trichloro201hy167	27 9_01_6	54 7	10		164,1	30	 skin ⁱ	
					104,1	50		
Acrylam2del-173				_	_		 skin ⁱ	
2- 201-209 Nitropropane	-719-46-9	18	5	_	_		 	
o- 202-429 Toluidine	905-53-4	0,5	0,1	—	—		 skin ^j	
4,4'- 202-974 Methylenedianil		90,08		—	—		 skin ⁱ	
Epichlor@Bye#B9	±1 806-89-	81,9		_	_		 skin ^j	
Ethylene203-444 dibromide	-1506-93-	40,8	0,1	—	—		 skin ^j	
1,3- 203-450 Butadiene	-1806-99-	œ,2	1	—	—		 	
Ethylene203-458 dichloride	-1107-06-	28,2	2	—	—		 skin ^j	
Hydrazin206-114	-302-01-	20,013	0,01	_	_		 skin ^j	
Bromoet2992800	-593-60-	24,4	1	_	_	_	 	
Diesel engine exhaust emissions		0,05°						The limit value shall apply from 21 February 2023. For underground mining and tunnel construction the limit value shall apply from 21 February 2026.
Polycyclic aromatic hydrocarbons mixtures, particularly							skin ^j	

those containing benzo[a]pyrene, which are carcinogens within the meaning of this Directive						
Mineral oils that have been used before in internal combustion engines to lubricate and cool the moving parts within the engine					skin ⁱ	
[^{F5} Cadmium and its inorganic compounds	— 0,001	k	_	 		Limit value 0,004 mg/ m ³¹ until 11 July 2027
Beryllium - and inorganic beryllium compounds	- 0,000	2 ^k —		 	 dermal and respirate sensitisa	Limit value by0006 mg/ ation ^m until 11 July 2026
Arsenic — - acid	— 0,01 ^k	—		 	 -	For the copper

arse	s, l as ganic									smelting sector, the limit value shall apply from 11 July 2023
For	nald 200 0d00	1-580-00-0	0,37	0,3		0,74	0,6		dermal sensitisa	
bis (hylene-	8-1901-14-	40,01	-					skin ⁱ	1
a	EC No, i.e. Einecs, ELINCS or NLP, is the official number of the substance within the European Union, as defined in Section 1.1.1.2 in Annex VI, Part 1, of Regulation (EC) No 1272/2008.									
	CAS No: Chemi					2/2008.				
	Measured or calo					hours time-	weighted av	erage (TWA	.).	
				-			•	• •		o a 15-
	minute period unless otherwise specified.									
e	mg/m^3 = milligrams per cubic metre of air at 20 °C and 101,3 kPa (760 mm mercury pressure).									
f	ppm = parts per million by volume in air (ml/m^3) .									
g	f/ml		= fib	res per m	nillilitre.					
	Inhalable fraction present in that m		od dusts are	e mixed with	other wood	dusts, the l	imit value s	hall apply to	all wood d	usts
i	Respirable fracti	on.								
j	Substantial contr	ibution to th	ne total bod	y burden via	dermal exp	osure possib	ole.			
k	[^{F5} Inhalable fract	tion.								
	Inhalable fraction Directive, a bion									

- m The substance can cause sensitisation of the skin and of the respiratory tract.
- **n** The substance can cause sensitisation of the skin.]
- Measured as elemental carbon.

Textual Amendments

F5 Inserted by Directive (EU) 2019/983 of the European Parliament and of the Council of 5 June 2019 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Text with EEA relevance).

B. OTHER DIRECTLY RELATED PROVISIONS

p.m.]

ANNEX IV

Part A

Repealed Directive and its successive amendments

(referred to by Article 20)

Council Directive 90/394/EEC	(OJ L 196, 26.7.1990, p. 1)
Council Directive 97/42/EC	(OJ L 179, 8.7.1997, p. 4)
Council Directive 1999/38/EC	(OJ L 138, 1.6.1999, p. 66)

Part B

Deadlines for transposition into national law

(referred to by Article 20)

Directive	Deadline for transposition
90/394/EEC	31 December 1992
97/42/EC	27 June 2000
1999/38/EC	29 April 2003

ANNEX V

CORRELATION TABLE

Directive 90/394/EC	This Directive
Article 1	Article 1

Article 2(a)	Article 2 (a)
Article 2(aa)	Article 2(b)
Article 2(b)	Article 2 (c)
Articles 3 to 9	Article 3 to 9
Article 10(1)(a)	Article 10(1)(a)
Article 10(1)(b), first sentence	Article 10(1)(b)
Article 10(1)(b), second sentence	Article 10(1)(c)
Article 10(1)(c)	Article 10(1)(d)
Article 10(1)(d), first and second sentences	Article 10(1)(e)
Article 10(1)(d), third sentence	Article 10(1) (f)
Article 10(2)	Article 10 (2)
Articles 11 to 18	Articles 11 to 18
Article 19(1) first subparagraph	
Article 19(1) second subparagraph	_
Article 19(1) third subparagraph	
Article 19(2)	Article 19
	Article 20
	Article 21
Article 20	Article 22
Annex I	Annex I
Annex II	Annex II
Annex III	Annex III
	Annex IV
	Annex V]

(1) [^{X1}A list of some hardwoods is to be found in Volume 62 of the Monographs on the Evaluation of Carcinogenic Risks to Humans 'Wood Dust and Formaldehyde', published by the International Agency for Research on Cancer, Lyon, 1995.]

Editorial Information

X1 Substituted by Corrigendum to Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (Sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC) (codified version) (Official Journal of the European Union L 158 of 30 April 2004).