



FEDERAL SUBSIDIARY LEGISLATION

OCCUPATIONAL SAFETY AND HEALTH ACT 1994 [ACT 514] P.U. (A) 131/2000 OCCUPATIONAL SAFETY AND HEALTH (USE AND STANDARDS OF EXPOSURE OF CHEMICALS HAZARDOUS TO HEALTH) REGULATIONS 2000

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Preamble

IN exercise of the powers conferred by section 66 of the Occupational Safety and Health Act 1994 [Act 514], the Minister makes the following regulations

PART I PRELIMINARY

1. Citation and commencement.

(1) These regulations may be cited as the **Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.**

(2) These Regulations shall come into operation on 4 April 2000.

2. Interpretation.

In these Regulations, unless the context otherwise requires –

"airborne concentration" in relation to a chemical means the quantity of a chemical measured in terms of its volume or its mass in a specified volume of air or the number of fibres, if the physical form of the chemical is fibrous, in specified volume of air which is carried by or through the air;

"approved" means approved in writing by the Director General;

"assessor" means an employee or any other person appointed by the employer and registered with the Director General to carry out assessments of risks to health;

"ceiling limit" means the airborne concentration that should not be exceeded during any part of the working day;

"chemicals" means chemical elements, or compounds or mixtures thereof, whether natural or synthetic, but does not include micro-organisms;

"chemicals hazardous to health" means any chemical or preparation which -

(a) is listed in Schedule I or II;

(b) possesses any of the properties categorised in Part B of Schedule I of the Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997 [P. U. (A) 143/97];

(c) comes within the definition of "pesticide" under the Pesticides Act 1974 [Act 149]; or

(d) is listed in the First Schedule of the Environmental Quality (Schedule Wastes) Regulations 1989 [P. U. (A) 139/89];

"Chemical Safety Data Sheet" means a document which contains relevant information on a chemical and is furnished in pursuance of the Occupational Safety and Health (Classification, Packaging, and Labelling of Hazardous Chemicals) Regulations 1997 [*P. U. (A) 143/97*];

"Director General" means the Director General of Occupational Safety and Health appointed under subsection 5(1) of the Act;

"engineering control equipment" means any equipment which is used to control exposure of employees to chemicals hazardous to health and includes local exhaust ventilation equipment, water spray or any other airborne chemical removal and containment equipment;

"health surveillance" means any examination and investigations which may be necessary to detect exposure levels and early biological effects and responses, and includes biological monitoring, biological effect monitoring, medical surveillance, enquiries about symptoms of occupational poisoning or occupational disease and review of records and occupational history;

"hygiene technician" means an employee or any other person appointed by the employer and registered with the Director General to carry out any inspection, examination or test on engineering control equipment installed in a place of work or to carry out chemical exposure monitoring;

"maximum exposure limit" means a fifteen-minute time-weighted average airborne concentration which is three times the eight-hour time-weighted average airborne concentration of the chemicals specified in Schedule I;

"medical surveillance" means the monitoring of a person for the purpose of identifying changes in health status due to occupational exposure to chemicals hazardous to health;

"occupational health doctor" means a medical practitioner who is registered with the Director General to conduct medical surveillance programmes of employees;

"permissible exposure limit" means a ceiling limit or an eight-hour time-weighted average airborne concentration or the maximum exposure limit;

"personal protective equipment" means any equipment which is intended to be worn or held by a person at work and which protects him against one or more risks to his health or safety and any additional accessory designed to meet that objective;

"supplier" means a person who supplies chemicals and include a formulator, a manufacturer, an importer or a distributor;

"time-weighted average" in relation to airborne concentration, means an average airborne concentration over a specified period of time;

"use" means production, processing, handling, storage, transport, disposal and treatment.

3. Application.

(1) These Regulations shall apply to all places of work which are within the jurisdiction of the Act where chemicals hazardous to health are used except chemicals which are -

(a) defined as radioactive materials under the Atomic Energy Licensing Act 1984 [*Act 304*];

(b) foodstuffs;

(c) hazardous to health solely by virtue of their explosive or flammable properties, or solely because they are at a high or low temperature or a high pressure; and

(d) pharmaceutical products.

(2) For the purpose of this regulation, "pharmaceutical product" means a drug in a pharmaceutical dosage form for use by humans as medicine.

4. Duty of employer and self-employed person.

(1) Where any duty is imposed by these Regulations on an employer in respect of his employees, he shall, so far as is practicable, be under a like duty in respect of any other person who may be affected by the work activity carried on by the employer, whether at work or not, except that the duties of the employer -

(a) under regulation 26 shall not extend to persons who are not his employees, unless those persons are on the premises and carrying out work for the employer; and

(b) under regulation 27 shall not extend to persons who are not his employees.

(2) These Regulations, except regulations 26 and 27, shall apply to a self-employed person as they apply to an employer and an employee

PART II IDENTIFICATION OF CHEMICALS HAZARDOUS TO HEALTH

5. Register of chemicals hazardous to health.

(1) An employer shall identify and record in a register all chemicals hazardous to health used in the place of work.

(2) The register shall be maintained in good order and condition and be updated from time to time and shall contain the following information:

(a) a list of all chemicals hazardous to health used;

(b) the current Chemical Safety Data Sheet for each of the chemicals hazardous to health except for pesticides which shall have information as specified in Schedule III;

(c) the average quantity used, produced or stored per month or per year whichever is applicable for each of the chemicals hazardous to health;

(d) the process and work area where the chemicals hazardous to health are used; and

(e) the name and address of the supplier of each of the chemicals hazardous to health.

(3) The register shall be accessible to all employees at the place of work who may be exposed or are likely to be exposed to chemicals hazardous to health.

(4) The requirements in subregulations (1) and (2) shall not apply if the employer has complied with the requirements of regulation 9 and subregulation 11(1) of the Environmental Quality (Scheduled Wastes) Regulations 1989 [P. U. (A) 139/89].

PART III PERMISSIBLE EXPOSURE LIMIT

6. Ceiling limit.

An employer shall ensure that the exposure of any person to any chemical hazardous to health listed in Schedule I at no time exceeds the ceiling limit specified for that chemical in that Schedule.

7. Eight-Hour time-weighted average

(1) An employer shall ensure that the exposure of any person to any chemical hazardous to health listed in Schedule I in any eight hour work shift of a work week does not exceed the eight-hour time-weighted average airborne concentration specified for that chemical in that Schedule.

(2) Notwithstanding subregulation (1), the exposure of any person to any chemical hazardous to health listed in Schedule I shall not exceed the maximum exposure limit for that chemical during the work shift.

8. Compliance with permissible exposure limit using respirator

(1) For the purpose of determining whether the employer has complied with the permissible exposure limit, the degree of protection afforded by the respirator for the periods during which the respirator is worn shall be taken into account.

(2) The period referred to in subregulation (1) shall be averaged with the exposure level of the airborne concentration during the period when respirators are not worn to determine the employee's daily time-weighted average exposure.

(3) For the purpose of this regulation, "degree of protection" means the ratio of the airborne concentration of the contaminant outside the respirator to the concentration of contaminant inside the face piece of the respirator

PART IV ASSESSMENT OF RISK TO HEALTH

9. Assessment of risk to health

(1) An employer shall not carry out any work which may expose or is likely to expose any employee to any chemical hazardous to health unless he has made a written assessment of the risks created by the chemical to the health of the employee.

(2) The assessment mentioned in subregulation (1) shall contain the following:

(a) the potential risks to an employee as a result of exposure to chemicals hazardous to health;

- (b) the method and procedures adopted in the use of the chemicals hazardous to health;
- (c) the nature of the hazard to health;
- (d) the degree of exposure to such chemicals hazardous to health;
- (e) the risk to health created by the use and the release of chemicals from work processes;
- (f) measures and procedures required to control the exposure of an employee to chemicals hazardous to health;
- (g) the measures, procedures, and equipment necessary to control any accidental emission of a chemical hazardous to health as a result of leakage, spillage, or process or equipment failure;
- (h) the necessity for employee exposure monitoring programme;
- (i) the necessity for health surveillance programme; and
- (j) the requirement for the training and retraining of employees as required under regulation 22.

(3) Where work which may expose or is likely to expose any employee to chemicals hazardous to health was commenced before the coming into operation of these Regulations, the employer shall conduct the assessment within one year from the date of coming into operation of these Regulations.

10. Review assessment

The assessment carried out under regulation 9 shall be reviewed if -

- (a) there has been a significant change in the work to which the assessment relates;
- (b) more than five years have elapsed since the last assessment; or
- (c) directed by the Director General, Deputy Director General or the Director of Occupational Safety and Health.

11. Assessment to be carried out by an assessor

The employer shall ensure that any assessment carried out pursuant to this Part is conducted by an assessor.

12. Assessment of risk to health report

(1) Any person appointed by the employer under regulation 11 to carry out any assessment shall, within one month of the completion of the assessment, furnish the employer with a report of the assessment.

(2) If the assessment carried out under subregulation (1) indicates that a place of work, plant, substance or process is likely to cause immediate danger to life or property, the person carrying out the assessment shall immediately inform the employer about the danger.

13. Assessment report

- (1) The employer shall ensure that the report of the assessment conducted pursuant to regulations 9 or 10 is maintained in good order and condition for a period of not less than thirty years.
- (2) The employer shall make available the assessment report for examination upon request by the Director General or by any employee exposed or likely to be exposed to chemicals hazardous to health

PART V ACTION TO CONTROL EXPOSURE

14. Action to control exposure

- (1) Where an assessment report indicates that action is required to eliminate or reduce the actual or potential exposure of an employee to chemicals hazardous to health, an employer shall carry out such action, which may include changes to work processes, practices, procedures, plants or engineering control equipment, within one month after receiving the assessment report from the assessor.
- (2) The employer shall ensure that all control measures implemented under subregulation (1) reduce the exposure level of employees to chemicals hazardous to health to the lowest practicable level, or for those chemicals to which have been assigned with permissible exposure limits, to below the limits.

15. Control measures

- (1) The employer shall control chemicals hazardous to health through the following control measures:
 - (a) elimination of chemicals hazardous to health from the place of work;
 - (b) substitution of less hazardous chemicals for chemicals hazardous to health;
 - (c) total enclosure of the process and handling systems;
 - (d) isolation of the work to control the emission of chemicals hazardous to health;
 - (e) modification of the process parameters;
 - (f) application of engineering control equipment;
 - (g) adoption of safe work systems and practices that eliminate or minimise the risk to health; or
 - (h) provision of approved personal protective equipment.
- (2) The employer shall ensure that all safe work systems and practices are documented and implemented.
- (3) The employer shall ensure that all safe work systems and practices are reviewed whenever there is a significant change to the process, equipment, materials or control measures installed

16. Use of approved personal protective equipment

(1) Approved personal protective equipment shall be used -

- (a) where the application of control measures specified in paragraphs 15(1) (a) to (g) would be impracticable;
- (b) as an interim measure while other preferred control measures are being designed and installed; or
- (c) where the measures taken to comply with paragraphs 15(1) (a) to (g) do not adequately control an employee's exposure to chemicals hazardous to health.

(2) Where the approved personal protective equipment is used to control exposure to chemicals hazardous to health, the employer shall establish and implement procedures on the issuance, maintenance, inspection and training in the use of the approved personal protective equipment.

(3) The approved personal protective equipment provided to employees pursuant to subregulation (1) shall –

- (a) be suitable to the type of work in which they are employed;
- (b) fit the employees;
- (c) not adversely affect the health or medical condition of the employees; and
- (d) be in sufficient supply and readily available to employees who require it.

17. Engineering control equipment

(1) Any engineering control equipment provided pursuant to subparagraph 15(1) (f) shall be -

- (a) inspected at an appropriate intervals by the employer, each interval being no longer than one month; and
- (b) examined and tested for its effectiveness by a hygiene technician at appropriate intervals, each interval being no longer than twelve months.

(2) Every engineering control equipment shall be maintained and operated at all times while any machinery or plant is in operation, and for such time thereafter as to comply with subregulation 14(2) .

18. Design, construction and commissioning of local exhaust ventilation equipment

(1) Without prejudice to the requirement of subregulation 17 (1) , any local exhaust ventilation equipment installed shall be -

- (a) designed according to an approved standard by a registered professional engineer and constructed according to the design specifications; and

(b) tested by a registered professional engineer after construction and installation to demonstrate that the equipment meets the design specifications.

(2) For the purpose of this regulation, "registered professional engineer" means an engineer registered under the Registration of Engineers Act 1967 [Act 138].

19. Record of engineering control equipment

Records of the design, construction, testing, inspection, examination and maintenance of engineering control equipment pursuant to regulations 17 and 18 shall be maintained by the employer and shall be produced for inspection when directed by the Director General.

PART VI LABELLING AND RE-LABELLING

20. Duty of employer to ensure labelling

(1) An employer shall ensure that all chemicals hazardous to health supplied or purchased by him and used in the place of work are labelled and that the labels are not removed, defaced, modified or altered.

(2) When the labels mentioned in subregulation (1) are removed, defaced, modified or altered while the chemical hazardous to health is being used at the place of work, the employer shall re-label the chemical.

21. Re-labelling

(1) When a chemical hazardous to health is transferred to another container, other than that in which it was originally supplied, and the contents of that container are not used within a normal workshift, the employer shall ensure that the container is relabelled.

(2) If the contents of the container referred to in subregulation (1) are used within a normal workshift the employer shall ensure that the container is relabelled with the chemical name or the trade name as written on the original label.

(3) If the contents of the container referred to in subregulation (1) are chemicals used in a testing chemical laboratory the container shall be relabelled in accordance with subregulation (2) , whether or not the contents are used within a normal workshift.

(4) Notwithstanding subregulations (1) , (2) and (3) , the container need not be relabelled if the chemical hazardous to health is used immediately.

(5) For the purpose of this regulation, "labelling" and "re-labelling" means labelling or relabelling –

(a) in the case of a chemical hazardous to health, in accordance with the requirements of the Occupational Safety and Health (Classification, Packaging and Labelling of Hazardous Chemicals) Regulations 1997 [P. U. (A) 143/97];

(b) in the case of a pesticide, in accordance with the requirements of the Pesticides Act 1974 [Act 149] ; or

(c) in the case of a schedule waste, in accordance with the requirements of the Environmental Quality (Schedule Wastes) Regulations 1989 [P. U. (A) 139/89].

PART VII INFORMATION, INSTRUCTION AND TRAINING

22. Information, instruction and training

(1) An employer who undertakes work which may expose or is likely to expose his employees to chemicals hazardous to health shall provide the employees with such information, instruction and training as may be necessary to enable them to know –

(a) the risk to health created by such exposure; and

(b) the precautions which should be taken.

(2) Without prejudice to the generality of subregulation (1) , the information provided shall include –

(a) information on the results of any monitoring of exposure at the place of work in accordance to regulation 26; and

(b) information on the collective results of any health surveillance programme undertaken in accordance with regulation 27 and presented in a manner which prevent them from being identified as relating to any particular person.

(3) The employer shall review and conduct the training programme –

(a) at least once in two years;

(b) if there is a change in the hazard information on the chemicals hazardous to health, safe work practices or control measures; or

(c) each time employees are assigned to new tasks or new work areas where they are exposed or likely to be exposed to chemicals hazardous to health.

(4) All training programmes shall be documented and kept for inspection by any occupational safety and health officer.

23. Information, instruction and supervision of person

Every employer shall ensure that any person and who carries out any work in connection with the employer's duties under these Regulations has the necessary information, instruction and supervision to carry out such duties.

24. Chemical Safety Data Sheet

An employer who receives a supply of chemicals hazardous to health for which the chemicals are not labelled or the Chemical Safety Data Sheets have not been provided, shall obtain the relevant information from the supplier and shall not use the chemicals until such information is obtained.

25. Provision of Chemical Safety Data Sheet in a place of work

In any place of work where a chemical hazardous to health is used, the current Chemical Safety Data Sheet for that chemical or a copy thereof shall be kept in a conspicuous place close to each location where that chemical is used, and shall be easily accessible to the employees.

PART VIII MONITORING OF EXPOSURE AT THE PLACE OF WORK

26. Monitoring of exposure

(1) Where an assessment of risk to health indicates that monitoring of exposure is required or it is requisite for ensuring the maintenance of adequate control of the exposure of employees to chemicals hazardous to health, the employers shall ensure that the exposure of employees to chemicals hazardous to health is monitored in accordance with an approved method of monitoring and analysis.

(2) If an employee is exposed or likely to be exposed to chemicals hazardous to health listed in Schedule II, the monitoring of exposure of employees determined in subregulation (1) shall be repeated at intervals of not more than six months or at such shorter intervals as determined by the assessor and the monitoring of exposure shall continue at this frequency until such time the assessor is satisfied that further monitoring of exposure is no longer required.

(3) The monitoring of exposure shall be conducted by a hygiene technician unless the monitoring is confined to checking the presence of toxic or flammable gases and the level of oxygen in a confined space before entry.

(4) The employer shall maintain in good order and condition any record or summary of the record of any monitoring carried out for the purpose of these Regulations and shall be kept available -

(a) where the record is representative of the personal exposure of a person exposed to any chemical hazardous to health, for at least thirty years; and

(b) in any other case, for at least five years.

PART IX HEALTH SURVEILLANCE

27. Health surveillance programme

(1) Where an assessment indicates that health surveillance is necessary for the protection of the health of employees exposed or likely to be exposed to chemicals hazardous to health, the employer shall carry out a health surveillance programme.

(2) The medical surveillance component of the health surveillance programme in subregulation (1) shall be carried out by an occupational health doctor.

(3) If an employee is exposed or likely to be exposed to chemicals hazardous to health listed in Schedule II, the health surveillance required under subregulation (1) shall include medical surveillance conducted at intervals of not more than twelve months or at such shorter intervals as determined by the occupational health doctor or an occupational safety and health officer who is also a medical practitioner.

(4) The employer shall ensure that the health surveillance record or a copy thereof is maintained in good order and condition and kept for a period of thirty years from the date of the last entry made in it.

(5) The employer shall make available upon request all records required to be maintained under subregulation (3) to the Director General for examination and inspection.

(6) The employer shall, after a reasonable notice being given, allow any of his employees access to the health surveillance record which relates to the employee.

PART X MEDICAL REMOVAL PROTECTION

28. Medical removal protection

(1) The employer shall not permit an employee to be engaged in and shall remove him from any work that exposes or likely to expose him to chemicals hazardous to health on each occasion that the medical finding, determination or opinion expressed by an occupational safety and health officer who is also a medical practitioner or by an occupational health doctor shows that the employee has a detected medical condition which places him at increased risk of material impairment to health from exposure to chemicals hazardous to health.

(2) The employer, after being notified by an occupational safety and health officer who is also a medical practitioner or an occupational health doctor of the fact, shall not permit a pregnant employee or breastfeeding employee to be engaged in, and shall remove the employee from work which may expose or is likely to expose the employee to chemicals hazardous to health.

(3) The employer shall return an employee to his former job -

(a) for an employee removed in accordance with subregulation (1) , when a subsequent medical determination results in a medical finding, determination or opinion which shows that the employee no longer has the detected medical condition; or

(b) for an employee removed in accordance with subregulation (2) , at the appropriate time where the employee is no longer pregnant or breastfeeding a child.

(4) For the purpose of this regulation, "medical practitioner" means a medical practitioner registered under the Medical Act 1971 [Act 50].

PART XI WARNING SIGN

29. Warning sign

(1) Where a chemical hazardous to health is used in any area in any manner that is hazardous to the health of any person who may be in that area or who may be or is likely to be at risk of being affected by the chemicals hazardous to health, the employer shall ensure that -

(a) warning signs are posted at a conspicuous place at every entrance of the area to warn persons entering the area of the hazards; and

(b) other relevant information are given to persons who may be or are likely to be at risk of being affected by the chemicals hazardous to health.

(2) The employer shall ensure that the warning signs required by these Regulations are illuminated and cleaned as necessary so that the legend is readily visible.

(3) For the purpose of subregulation (1) , the warning shall -

(a) give warning of the hazards;

(b) be written in the national language and English language; and

(c) be printed in dark red against white background.

PART XII RECORD KEEPING

30. Retention of records by employer

(1) Whenever an employer ceases to carry on business and another person succeeds him, the employer ceasing business shall hand over, and the successor employer shall retain, all records to be maintained under regulations 13, 19, 22, 26 and 27.

(2) Whenever an employer ceases to carry on business and no person succeeds him, the employer shall transmit the records required to be maintained under regulations 13, 19, 22, 26 and 27 to the Director General.

(3) At the expiration of the retention period for the records required to be maintained under regulations 13, 26 and 27 the employer shall give the Director General at least three months notice in writing that he intends to dispose of such records, and he shall transmit those records to the Director General, if requested to do so within that period.

SCHEDULE I

[Regulations 6 and 7]

LIST OF PERMISSIBLE EXPOSURE LIMITS

SCHEDULE I

(Regulations 6 and 7)

LIST OF PERMISSIBLE EXPOSURE LIMITS

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Acetaldehyde	[75-07-0]			25	45
Acetic acid	[64-19-7]	10	25		
Acetic anhydride	[108-24-7]	5	21		
Acetone	[67-64-1]	500	1187		
Aceton cyanohydrin as CN- (skin)	[75-86-5]			4.7	5
Acetonitrile	[75-05-8]	40	67		
Acetophenone	[98-66-2]	10	49		
Acetylenedichloride, see 1, 2-Dichloroethylenes					
Acetylene tetrabromide	[79-27-6]	1	14		
Acetylsalicylic acid (aspirin)	[50-78-2]	—	5		
Acrolein- (skin)	[107-02-8]	—	—	0.1	0.23
Acrylamide- (skin)	[79-06-1]	—	0.03		
Acrylic acid- (skin)	[79-10-7]	2	5.9		
Acrylonitrile- (skin)	[107-13-1]	2	4.3		
Adipic acid	[124-04-9]	—	5		
Adiponitrile- (skin)	[111-69-3]	2	8.8		
Aldrin	[309-00-2]	—	0.25		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Allyl alcohol- (skin)	[107-18-6]	0.5	1.2		
Allyl chloride	[107-05-1]	1	3		
Allyl glycidyl ether (AGE)	[106-92-3]	1	4.6		
Allyl propyl disulfide	[2179-59-1]	2	12		
α-Alumina, see Aluminium oxide					
Aluminium	[7429-90-5]				
Metal dust		—	10		
Pyro powders, as Al		—	5		
Welding fumes, as Al		—	5		
Soluble salts, as Al		—	2		
Alkyls (NOC), as Al		—	2		
Aluminium oxide	[1344-28-1]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
4-Aminodiphenyl- (skin)	[92-67-1]	—	—		
2-Aminoethanol, see Ethanolamine					
2-Aminopyridine	[504-29-0]	0.5	1.9		
3-Amino-1, 2, 4-triazole, see Amitrole					
Amitrole	[61-82-5]	—	0.2		
Antimony	[7664-41-7]	25	17		
Ammonium chloride fume	[12125-02-9]	—	10		
Ammonium	[3825-26-1]	—	0.01		
perfluorooctanoate- (skin)					
Ammonium sulfamate	[7773-06-0]	—	10		
Amosite, see Asbestos					
n-Amyl acetate	[628-63-7]	100	532		
sec-Amyl acetate	[626-38-0]	125	665		
Aniline and homologues- (skin)	[62-53-3]	2	7.6		
o-Anisidine- (skin)	[90-04-0]	0.1	0.5		
p-Anisidine- (skin)	[104-94-9]	0.1	—		
Antimony and compound, as Sb	[7440-36-0]	—	0.5		
Antimony trioxide production	[1309-64-4]	—	—		
ANTU	[86-88-4]	—	0.3		
Arsenic, elemental and inorganic compounds (except arsine), as As	[7440-38-2]	—	0.01		
Arsine	[7784-42-1]	0.05	0.16		
Asbestos, all forms except crocidolite	[1332-21-4]	—	0.1 f/ml		
Asphalt (petroleum) fumes	[8052-42-4]	—	5		
Atrazine	[1912-24-9]	—	5		
Azithiophos-methyl- (skin)	[86-50-0]	—	0.2		
Barium, and soluble compounds, as Ba	[7440-39-3]	—	0.5		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Barium sulfate	[7727-43-7]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Benomyl	[17804-35-2]	—	10		
Benz[a]anthracene	[56-55-3]	—	—		
Benzene	[71-43-2]	0.5	1.6		
Benzidine- (skin)	[92-87-5]	—	—		
Benzo[b]fluoranthene	[205-99-2]	—	—		
p-Benzoquinone, see Quinone					
Benzotrichloride- (skin)	[98-07-7]			0.1	—
Benzoyl chloride	[98-88-4]			0.5	2.8
Benzoyl peroxide	[94-36-0]	—	5		
Benzo[a]pyrene	[50-32-8]	—	—		
Benzyl acetate	[140-11-4]	10	61		
Benzyl chloride	[100-44-7]	1	5.2		
Beryllium and compounds, as Be	[7440-41-7]	—	0.002		
Biphenyl	[92-52-4]	0.2	1.3		
Bismuth telluride, as Bi ₂ Te ₃					
Undoped	[1304-82-1]	—	10		
Se-doped		—	5		
Borates, tetra, sodium salts	[1303-96-4]				
Anhydrous		—	1		
Decahydrate		—	5		
Pentahydrate		—	1		
Boron oxide	[1303-86-2]	—	10		
Boron tribromide	[10294-33-4]			1	10
Boron trifluoride	[7637-07-2]			1	2.8
Bromacil	[314-40-9]	—	10		
Bromine	[7726-95-6]	0.1	0.66		
Bromine pentafluoride	[7789-30-2]	0.1	0.72		
Bromochloromethane, see Chlorobromomethane					
Bromoform- (skin)	[75-25-2]	0.5	5.2		
1, 3-Butadiene	[106-99-0]	2	4.4		
Butane	[106-97-8]	800	1900		
Butanethiol, see Butyl mercaptan					
n-Butanol- (skin)	[71-36-3]			50	152
sec-Butanol	[78-92-2]	100	303		
tert-Butanol	[75-65-0]	100	303		
2-Butanone, see Methyl ethyl ketone (MEK)					
2-Butoxyethanol (EGBE)— (skin)	[111-76-2]	20	96.7		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
n-Butyl acetate	[123-86-4]	150	713		
sec-Butyl acetate	[105-46-4]	200	950		
tert-Butyl acetate	[540-88-5]	200	950		
n-Butyl acrylate	[141-32-2]	2	10.48		
n-Butylamine- (skin)	[109-73-9]			5	15
tert-Butyl chromates, as CrO ₃ - (skin)	[1189-85-1]			—	0.1
n-Butyl glycidyl ether (BGE)	[2426-08-6]	25	133		
n-Butyl lactate	[138-22-7]	5	30		
n-Butyl mercaptan	[109-79-5]	0.5	1.8		
o-sec Butylphenol- (skin)	[89-72-5]	5	31		
p-tert-Butyl toluene	[98-51-1]	1	6.1		
Cadmium, elemental and compounds, as Cd	[7440-43-9]	—	0.01		
Calcium carbonate	[1317-65-3]	—	10		Respirable fraction. The value is for particulate matter containing no asbestos and <1% crystalline silica.
Calcium chromate, as Cr	[13765-19-0]	—	0.001		
Calcium cyanamide	[156-62-7]	—	0.5		
Calcium hydroxide	[1305-62-0]	—	5		
Calcium oxide	[1305-78-8]	—	2		
Calcium silicate (synthetic)	[1344-95-2]	—	10		The value is for particulate matter containing no asbestos and <1% crystalline silica.
Calcium sulfate	[7778-18-9]	—	10		The value is for particulate matter containing no asbestos and <1% crystalline silica.
Camphor, synthetic	[76-22-2]	2	12		
Caprolactam	[105-60-2]				
Particulate		—	1		
Vapor		5	23		
Captadol- (skin)	[2425-06-1]	—	0.1		
Captan	[133-06-2]	—	5		
Carbaryl	[63-25-22]	—	5		
Carbofuran	[1563-66-2]	—	0.1		
Carbon black	[1333-86-4]	—	3.5		
Carbon dioxide	[124-38-9]	5000	9000		
Carbon disulfide- (skin)	[75-15-0]	10	31		
Carbon monoxide	[630-08-0]	25	29		
Carbon tetrabromide	[558-13-4]	0.1	1.4		
Carbon tetrachloride (Tetrachloromethane)- (skin)	[56-23-5]	5	31		
Carbonyl chloride, see Phosgene					
Carbonyl fluoride	[353-50-4]	2	5.4		
Catechol- (skin)	[120-80-9]	5	23		
Cellulose	[9004-34-6]	—	10		
Cesium hydroxide	[21351-79-1]	—	2		
Chlordane- (skin)	[57-74-9]	—	0.5		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Chlorinated camphene (Toxaphene)- (skin)	[8001-35-2]	—	0.5		
o-Chlorinated diphenyl oxide	[31242-93-0]	—	0.5		
Chlorine	[7782-50-5]	0.5	1.5		
Chlorine dioxide	[10049-04-4]	0.1	0.28		
Chlorine trifluoride	[7790-91-2]			0.1	0.38
Chloroacetaldehyde- (skin)	[107-20-0]			1	3.2
Chloroacetone- (skin)	[78-95-5]			1	3.8
2-Chloroacetophenone	[532-27-4]	0.05	0.32		
Chloroacetyl chloride- (skin)	[79-04-9]	0.05	0.23		
o-Chlorobenzylidene malononitrile- (skin)	[2698-41-1]			0.05	0.39
Chlorobenzene	[108-90-7]	10	46		
Chlorobromomethane	[74-97-5]	200	1060		
2-Chloro-1, 3-butadiene, see β -Chloroprene					
Chlorodifluoromethane	[74-45-6]	1000	3540		
Chlorodiphenyl (42% chlorine)- (skin)	[53469-21-9]	—	1		
Chlorodiphenyl (54% chlorine)- (skin)	[11097-69-1]	—	0.5		
1-Chloro-2, 3-epoxy propane, see Epichlorohydrin					
2-Chloroethanol, see Ethylene chlorohydrin					
Chloroethylene, see Vinyl chloride					
Chloroform	[67-63-3]	10	49		
bis (Chloromethy) ether	[542-88-1]	0.001	0.0047		
Chloromethyl methyl ether	[107-30-2]	—	—		
1-Chloro-1-nitropropane	[600-25-9]	2	10		
Chloropentafluoroethane	[76-15-3]	1000	6320		
Chloropicrin	[76-06-2]	0.1	0.67		
β -Chloroprene- (skin)	[126-99-8]	10	36		
2-Chloropropionic acid- (skin)	[598-78-7]	0.1	0.44		
o-Chlorostyrene	[2039-87-4]	50	283		
o-Chlorotoluene	[95-49-8]	50	259		
2-Chloro-6-(trichloromethyl) pyridine, see Nitapyrin					
Chlorpyrifos - (skin)	[2921-88-2]	—	0.2		
Chromite ore processing (Chromate), as Cr		—	0.05		
Chromium, metal and inorganic compounds, as Cr	[7440-47-3]				
Metal and Cr III compounds,		—	0.5		
Water-soluble Cr VI compounds, NOC		—	0.05		
Insoluble Cr VI compounds, NOC		—	0.01		
Chromyl chloride	[14977-61-8]	0.025	0.16		
Chrysene	[218-01-9]	—	—		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Chrysotile, see Asbestos					
Clopidol	[2971-90-6]	—	10		
Coal dust					
Anthracite		—	0.4	Respirable fraction.	
Bituminous		—	0.9	Respirable fraction.	
Coal tar pitch volatiles, as benzene solubles	[65996-93-2]	—	0.2		
Cobalt, elemental and inorganic compounds, as Co	[7440-48-4]	—	0.02		
Cobalt carbonyl, as Co	[10210-68-1]	—	0.1		
Cobalt hydrocarbonyl, as Co	[16842-03-8]	—	0.1		
Copper	[7440-50-8]				
Fume		—	0.2		
Dusts & mists, as Cu		—	1		
Cotton dust, raw			0.2		
Cresol, all isomers- (skin)	[1319-77-3]	5	22		
Cristobalite, see Silica- Crystalline					
Crocidolite, see Asbestos					
Crotonaldehyde- (skin)	[4170-30-3]			0.3	0.855
Cruformate	[299-86-5]	—	5		
Cumene- (skin)	[98-82-8]	50	246		
Cyanamide	[420-04-2]	—	2		
Cyanogen	[460-19-5]	10	21		
Cyanogen chloride	[506-77-4]			0.3	0.75
Cyclohexane	[110-82-7]	300	1030		
Cyclohexanol- (skin)	[108-93-0]	50	206		
Cyclohexanone- (skin)	[108-94-1]	25	100		
Cyclohexene	[110-83-8]	300	1010		
Cyclohexylamine	[108-91-8]	10	41		
Cyclonite- (skin)	[121-82-4]	—	0.5		
Cyclopentadiene	[542-92-7]	75	203		
Cyclopentane	[287-92-3]	600	1720		
Cyhexatin	[13121-70-5]	—	5		
2, 4-D	[94-75-7]	—	10		
DDT (Dichlorodiphenyltrichloroethane)	[50-29-3]	—	1		
Decaborane- (skin)	[17702-41-9]	0.05	0.25		
Demeton- (skin)	[8065-48-3]	0.01	0.11		
Diacetone alcohol	[123-42-2]	50	238		
1, 2-Diaminoethane, see Ethylenediamine					
Diatomaceous earth, see Silica Amorphous					
Diazinon- (skin)	[333-41-5]	—	0.1		
Diazomethane	[334-88-3]	0.2	0.34		
Diborane	[19287-45-7]	0.1	0.11		
1, 2-Dibromoethane, see Ethylene dibromide					
2-N-Dibutylaminoethanol- (skin)	[102-81-8]	0.5	3.5		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Dibutyl phenyl phosphate- (skin)	[2528-36-1]	0.3	3.5		
Dibutyl phosphate	[107-66-4]	1	8.6		
Dibutyl phthalate	[84-74-2]	—	5		
Dichloroacetylene	[7572-29-4]			0.1	0.39
o-Dichlorobenzene	[95-50-1]	25	150		
p-Dichlorobenzene	[106-46-7]	10	60		
3, 3'-Dichlorobenzidine- (skin)	[91-94-1]	—	—		
1, 4-Dichloro-2-butene- (skin)	[764-41-0]	0.005	0.025		
Dichlorodifluoromethane	[75-71-8]	1000	4950		
1, 3-Dichloro-5, 5-dimethyl hydantoin	[118-52-5]	—	0.2		
1, 1-Dichloroethane	[75-34-3]	100	405		
1, 2-Dichloroethane, see Ethylene dichloride					
1, 1-Dichloroethylene, see Vinylidene chloride					
1, 2-Dichloroethylene	[540-59-0]	200	793		
Dichloroethyl ether- (skin)	[111-44-4]	5	29		
Dichlorofluoromethane	[75-43-4]	10	42		
Dichloromethane	[75-09-2]	50	—		
1, 1-Dichloro-1-nitroethane	[594-72-9]	2	12		
1, 2-Dichloropropane, see Propylene dichloride					
1, 3-Dichloropropene- (skin)	[542-75-6]	1	4.5		
2, 2-Dichloropropionic acid	[75-99-0]	1	5.8		
Dichlorotetrafluoroethane	[76-14-2]	1000	6990		
Dichlorvos- (skin)	[62-73-7]	0.1	0.90		
Dicrotophos- (skin)	[141-66-2]	—	0.25		
Dicyclopentadiene	[77-73-6]	5	27		
Dicyclopentadienyl iron	[102-54-5]	—	10		
Dieldrin- (skin)	[60-57-1]	—	0.25		
Diethanolamine- (skin)	[111-42-2]	0.46	2		
Diethylamine- (skin)	[109-89-7]	5	15		
2-Diethylaminoethanol- (skin)	[100-37-8]	2	9.6		
Diethylene triamine- (skin)	[111-40-0]	1	4.2		
Diethyl ether, see Ethyl ether					
Di (2-ethylhexyl) phthalate (DEHP)	[117-81-7]	—	5		
Diethyl ketone	[96-22-0]	200	705		
Diethyl phthalate	[84-66-2]	—	5		
Difluorodibromomethane	[75-61-6]	100	858		
Diglycidyl ether (DGE)	[2238-07-5]	0.1	0.53		
Dihydroxybenzene, see Hydroquinone					
Diisobutyl ketone	[108-83-8]	25	145		
Diisopropylamine- (skin)	[108-18-9]	5	21		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Dimethoxymethane, see Methylal					
N, N-Dimethylacetamide- (skin)	[127-19-5]	10	36		
Dimethylamine	[124-40-3]	5	9.2		
Dimethylaminobenzene, see Xylidene					
Dimethylaniline (N, N-Dimethylaniline)- (skin)	[121-69-7]	5	25		
Dimethylbenzene, see Xylene					
Dimethyl carbamoyl chloride	[79-44-7]	—	—		
Dimethyl-1, 2-dibromo-2, 2-dichloroethyl phosphate, see Naled					
Dimethylethoxysilane	[14857-34-2]	0.5	—		
Dimethylformamide- (skin)	[68-12-2]	10	30		
2, 6-Dimethyl-4-heptanone, see Diisobutyl ketone					
1, 1-Dimethylhydrazine- (skin)	[57-14-7]	0.01	0.025		
Dimethylnitrosoamine, see N-Nitrosodimethylamine					
Dimethylphthalate	[131-11-3]	—	5		
Dimethyl sulfate- (skin)	[77-78-1]	0.1	0.52		
Dinitolmide	[148-01-6]	—	5		
Dinitrobenzene (all isomers)- (skin)	[528-29-0; 99-65-0; 100-25-4]	0.15	1.0		
Dinitro-o-cresol- (skin)	[534-52-1]	—	0.2		
3, 5-Dinitro-o-toluamide, see Dinitolmide					
Dinitrotoluene- (skin)	[25321-14-6]	—	0.2		
1, 4-Dioxane- (skin)	[123-91-1]	20	72.1		
Dioxathion- (skin)	[78-34-2]	—	0.2		
Diphenyl, see Biphenyl					
Diphenylamine	[122-39-4]	—	10		
Diphenylmethane diisocyanate, see Methylene bisphenyl isocyanate					
Dipropylene glycol methyl ether- (skin)	[34590-94-8]	100	606		
Dipropyl ketone	[123-19-3]	50	233		
Diquat- (skin)	[2764-72-9]	—	0.5		
		—	0.1	Respirable fraction.	
Di-sec-octyl phthalate, see Di (2-ethylhexy) phthalate					
Disulfiram	[97-77-8]	—	2		
Disulfoton- (skin)	[298-04-4]	—	0.1		
2, 6-Di-tert-butyl-p-cresol [Butylated hydroxytoluene (BHT)]	[128-37-0]	—	10		
Diuron	[330-54-1]	—	10		
Divinyl benzene	[1321-74-0]	10	53		
Emery	[1302-74-5]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Endosulfan- (skin)	[115-29-7]	—	0.1		
Endrin- (skin)	[72-20-8]	—	0.1		
Enflurane	[13838-16-9]	75	566		
Enzymes, see Subtilisins					

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Epichlorohydrin- (skin)	[108-89-8]	0.5	1.9		
EPN- (skin)	[2104-64-5]	—	0.1		
1, 2-Epoxypropane, see Propylene oxide					
2, 3-Epoxy-1-propanol, see Glycidol					
Ethanthiol, see Ethyl mercaptan					
Ethanol	[64-17-5]	1000	1880		
Ethanolamine	[141-43-5]	3	7.5		
Ethion- (skin)	[563-12-2]	—	0.4		
2-Ethoxyethanol (EGEE)- (skin)	[110-80-5]	5	18		
2-Ethoxyethyl acetate (EGEEA)- (skin)	[111-15-9]	5	27		
Ethyl acetate	[141-78-6]	400	1440		
Ethyl acrylate	[140-88-5]	5	20		
Ethyl alcohol, see Ethanol					
Ethylamine- (skin)	[75-04-7]	5	9.2		
Ethyl amyl ketone	[541-85-5]	25	131		
Ethyl benzene	[100-41-4]	100	434		
Ethyl bromide- (skin)	[74-96-4]	5	22		
Ethyl butyl ketone	[106-35-4]	50	234		
Ethyl chloride- (skin)	[75-00-3]	100	264		
Ethyl cyanoacrylate	[7085-85-0]	0.2	—		
Ethylene chlorohydrin- (skin)	[107-07-3]			1	3.3
Ethylenediamine- (skin)	[107-15-3]	10	25		
Ethylene dibromide- (skin)	[106-93-4]	—	—		
Ethylene dichloride	[107-06-2]	10	40		
Ethylene glycol, aerosol	[107-21-1]			39.4	100
Ethylene glycol dinitrate- (skin)	[628-96-6]	0.05	0.31		
Ethylene glycol methyl ether acetate, see 2-Methoxyethyl acetate					
Ethylene oxide	[75-21-8]	1	1.8		
Ethylenimine- (skin)	[151-56-4]	0.5	0.88		
Ethyl ether	[60-29-7]	400	1210		
Ethyl formate	[109-94-4]	100	303		
Ethylidene chloride, see 1,1-Dichloroethane					
Ethylidene norbornene	[16219-75-3]			5	25
Ethyl mercaptan	[75-08-1]	0.5	1.3		
N-Ethylmorpholine- (skin)	[100-74-3]	5	24		
Ethyl silicate	[78-10-4]	10	85		
Fenamiphos- (skin)	[22224-92-6]	—	0.1		
Fensulfothion	[115-90-2]	—	0.1		
Fenthion- (skin)	[55-38-9]	—	0.2		
Ferbam	[14484-64-1]	—	10		
Ferrovandium dust	[12604-58-9]	—	1		
Fibrous glass dust, see Synthetic Vitreous Fibers — Continuous filament glass fibers.					
Fluorides, as F		—	2.5		
Fluorine	[7782-41-4]	1	1.6		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Fluorotrichloromethane, see Trichlorofluoromethane					
Fonofos- (skin)	[944-22-9]	—	0.1		
Formaldehyde	[50-00-0]			0.3	0.37
Formamide- (skin)	[75-12-7]	10	18		
Formic acid	[64-18-6]	5	9.4		
Furfural- (skin)	[98-01-1]	2	7.9		
Furfuryl alcohol- (skin)	[98-00-0]	10	40		
Gasoline	[8006-61-9]	300	890		
Germanium tetrahydride	[7782-65-2]	0.2	0.63		
Glass, fibrous or dust, see Synthetic Vitreous Fibers					
Glutaraldehyde, activated and inactivated	[111-30-8]			0.05	0.21
Glycerin mist	[56-81-5]	—	10		
Glycidol	[556-52-5]	2	6.1		
Glycol monoethyl ether, see 2-Ethoxyethanol					
Grain dust (oat, wheat, barley)		—	4	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Graphite (all forms except graphite fibres)	[7782-42-5]	—	2	Respirable fraction.	
Gypsum, see Calcium sulfate					
Hafnium	[7440-58-6]	—	0.5		
Halothane	[151-67-7]	50	404		
Heptachlor- (skin)	[76-44-8]	—	0.05		
Heptachlor epoxide- (skin)	[1024-57-3]	—	0.05		
Heptane (n-Heptane)	[142-82-5]	400	1640		
2-Heptanone, see Methyl n-amyl ketone					
3-Heptanone, see Ethyl butyl ketone					
Hexachlorobenzene- (skin)	[118-74-1]	—	0.002		
Hexachlorobutadiene- (skin)	[87-68-3]	0.02	0.21		
Hexachlorocyclopentadiene	[77-47-4]	0.01	0.11		
Hexachloroethane- (skin)	[67-72-1]	1	9.7		
Hexachloronaphthalene- (skin)	[1335-87-1]	—	0.2		
Hexafluoroacetone- (skin)	[684-16-2]	0.1	0.68		
Hexamethylene diisocyanate	[822-06-0]	0.005	0.034		
Hexamethyl phosphoramide	[680-31-9]	—	—		
n-Hexane- (skin)	[110-54-3]	50	176		
Hexane, Other isomers		500	1760		
1, 6-Hexanediamine	[124-90-4]	0.5	2.3		
2-Hexanone, see Methyl n-butyl ketone					
1-Hexene	[592-41-6]	30	—		
sec-Hexyl acetate	[108-84-9]	50	295		
Hexylene glycol	[107-41-5]			25	121
Hydrazine- (skin)	[302-01-2]	0.01	0.013		
Hydrogenated terphenyls (nonirradiated)	[61788-32-7]	0.5	4.9		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Hydrogen bromide	[10035-10-6]			3	9.9
Hydrogen chloride	[7647-01-0]			5	7.5
Hydrogen cyanide and cyanide salts as CN					
Hydrogen cyanide- (skin)	[74-90-8]			4.7	5
Calcium cyanide- (skin)	[592-01-8]			—	5
Potassium cyanide- (skin)	[151-50-8]			—	5
Sodium cyanide- (skin)	[143-33-9]			—	5
Hydrogen fluoride, as F	[7664-39-3]			3	2.3
Hydrogen peroxide	[7722-84-1]	1	1.4		
Hydrogen selenide, as Se	[7783-07-5]	0.05	0.16		
Hydrogen sulfide	[7783-06-4]	10	14		
Hydroquinone	[123-31-9]	—	2		
4-Hydroxy-4-methyl-2-pentanone, see Diacetone alcohol					
2-Hydroxypropyl acrylate- (skin)	[999-61-1]	0.5	2.8		
Indene	[95-13-6]	10	48		
Indium & compounds, as In	[7440-74-6]	—	0.1		
Iodine	[7553-56-2]			0.1	1.0
Iodoform	[75-47-8]	0.6	10		
Iron oxide dust & fume (Fe ₂ O ₃), as Fe	[1309-37-1]	2	5	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Iron pentacarbonyl, as Fe	[13463-40-6]	0.1	0.23		
Iron salts, soluble, as Fe		—	1		
Isamyl acetate	[123-92-2]	100	532		
Isamyl alcohol	[123-51-3]	100	361		
Isobutyl acetate	[110-19-0]	150	713		
Isobutyl alcohol	[78-83-1]	50	152		
Isooctyl alcohol- (skin)	[26952-21-6]	50	266		
Isophorone	[78-59-1]			5	28
Isophorone diisocyanate	[4098-71-9]	0.005	0.045		
2-Isopropoxyethanol- (skin)	[109-59-1]	25	106		
Isopropyl acetate	[108-21-4]	250	1040		
Isopropyl alcohol	[67-63-0]	400	983		
Isopropylamine	[75-31-01]	5	12		
N-Isopropylaniline- (skin)	[768-52-5]	2	11		
Isopropyl ether	[108-20-3]	250	1040		
Isopropyl glycidyl ether (IGE)	[4016-14-2]	50	238		
Kaolin	[1332-58-7]	—	2	The value is for particulate matter containing no asbestos and <1% crystalline silica. Respirable fraction.	
Ketene	[463-51-4]	0.5	0.86		
Lead, elemental and inorganic compounds, as Pb ₃	[7439-92-1]	—	0.05		
Lead arsenate, as Pb ₃ (AsO ₄) ₂	[7784-40-9]	—	0.15		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Lead chromate	[7758-97-6]				
as Pb		—	0.05		
as Cr		—	0.012		
Limestone, see calcium carbonate					
Lindane- (skin)	[58-89-9]	—	0.5		
Lithium hydride	[7580-67-8]	—	0.025		
L.P.G. (Liquified petroleum gas)	[68476-85-7]	1000	1800		
Magnesite	[546-93-0]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Magnesium oxide fume	[1309-48-4]	—	10		
Malathion- (skin)	[121-75-5]	—	10		
Maleic anhydride	[108-31-6]	0.25	1.0		
Manganese, elemental and inorganic compounds, as Mn	[7439-96-5]	—	0.2		
Manganese cyclopentadienyl tricarbonyl, as Mn- (skin)	[12079-65-1]	—	0.1		
Marble, see Calcium carbonate					
Mercury, as Hg- (skin)	[7439-97-6]				
Alkyl compounds		—	0.01		
Aryl compounds		—	0.1		
Inorganic forms including metallic mercury		—	0.025		
Mesityl oxide	[141-79-7]	15	60		
Methacrylic acid	[79-41-4]	20	70		
Methanethiol, see Methyl mercaptan					
Methanol- (skin)	[67-56-1]	200	262		
Methomyl	[16752-77-5]	—	2.5		
Methoxychlor	[72-43-5]	—	10		
2-Methoxyethanol (EGME)— (skin)	[109-86-4]	5	16		
2-Methoxyethyl acetate (EGMEA)- (skin)	[110-49-6]	5	24		
4-Methoxyphenol	[150-76-5]	—	5		
Methyl acetate	[79-20-9]	200	606		
Methyl acetylene	[74-99-7]	1000	1640		
Methyl acetylene-propadiene mixture (MAPP)		1000	1640		
Methyl acrylate- (skin)	[96-33-3]	2	7		
Methylacrylonitrile- (skin)	[126-98-7]	1	2.7		
Methylal	[109-87-5]	1000	3110		
Methyl alcohol, see Methanol					
Methylamine	[74-89-5]	5	6.4		
Methyl amyl alcohol, see Methyl isobutyl carbinol					
Methyl n-amyl ketone	[110-43-0]	50	233		
N-Methyl aniline- (skin)	[100-61-8]	0.5	2.2		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Methyl bromide- (skin)	[74-83-9]	1	3.8		
Methyl-tert-butyl ether	[1634-04-4]	40	144		
Methyl n-butyl ketone— (skin)	[591-78-6]	5	20		
Methyl chloride- (skin)	[74-87-3]	50	103		
Methyl chloroform	[71-55-6]	350	1910		
Methyl 2-cyanoacrylate	[137-05-3]	0.2	4.55		
Methylcyclohexane	[108-87-2]	400	1610		
Methylcyclohexanol	[25639-42-3]	50	234		
o-Methylcyclohexanone— (skin)	[583-60-8]	50	229		
2-Methylcyclopentadienyl manganese tricarbonyl, as Mn- (skin)	[12108-13-3]	—	0.2		
Methyl demeton- (skin)	[8022-00-2]	—	0.5		
Methylene bisphenyl isocyanate (MDI)	[101-68-8]	0.005	0.051		
Methylene chloride, see Dichloromethane					
4, 4'-Methylene bis (2-chloroaniline)[MOCA; MBOCA]- (skin)	[101-14-4]	0.01	0.11		
Methylene bis (4-cyclo— hexylisocyanate)	[5124-30-1]	0.005	0.054		
4, 4'-Methylene diamine- (skin)	[101-77-9]	0.1	0.81		
Methyl ethyl ketone (MEK)	[79-93-3]	200	590		
Methyl ethyl ketone peroxide	[1338-23-4]			0.2	1.5
Methyl formate	[107-31-3]	100	246		
5-Methyl-3-heptanone, see Ethyl amyl ketone					
Methyl hydrazine- (skin)	[60-34-4]	0.01	0.019		
Methyl iodide- (skin)	[74-88-4]	2	12		
Methyl isoamyl ketone	[110-12-3]	50	234		
Methyl isobutyl carbinol— (skin)	[108-11-2]	25	104		
Methyl isobutyl ketone	[108-10-1]	50	205		
Methyl isocyanate- (skin)	[624-83-9]	0.02	0.047		
Methyl isopropyl ketone	[563-80-4]	200	705		
Methyl mercaptan	[74-93-1]	0.5	0.98		
Methyl methacrylate	[80-62-6]	100	410		
Methyl parathion- (skin)	[298-00-0]	—	0.2		
Methyl propyl ketone	[107-87-9]	200	705		
Methyl silicate	[681-84-5]	1	6		
α-Methyl styrene	[98-83-9]	50	242		
Methyl vinyl ketone- (skin)	[78-94-4]			0.2	—
Metribuzin	[20187-64-9]	—	5		
Mevinphos- (skin)	[7786-34-7]	0.01	0.09		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Mica	[12001-26-2]	—	3	The value is for particulate matter containing no asbestos and <1% crystalline silica. Respirable fraction.	
Mineral wool fibre, see Synthetic Vitreous Fibres - Glass, Rock, or Slag wool fibres					
Molybdenum, as Mo	[7439-98-7]				
Soluble compounds		—	5		
Metal and insoluble compounds		—	10		
Monochlorobenzene, see Chlorobenzene					
Monocrotophos- (skin)	[6923-22-4]	—	0.25		
Morpholine- (skin)	[110-91-8]	20	71		
Naled- (skin)	[300-76-5]	—	3		
Naphthalene	[91-20-3]	10	52		
β-Naphthylamine	[91-59-8]	—	—		
Nickel	[7440-02-0]				
Elemental/Metal		—	1.5	Inhalable fraction.	
Insoluble compounds, as Ni		—	0.2	Inhalable fraction.	
Soluble compounds, as Ni		—	0.1	Inhalable fraction.	
Nickel carbonyl, as Ni	[13463-39-3]	0.05	0.12		
Nickel subsulfide, as Ni	[12035-72-2]	—	0.1	Inhalable fraction.	
Nickel sulfide roasting, fume & dust, see Nickel subsulfide					
Nicotine- (skin)	[54-11-5]	—	0.5		
Nitrapyrin	[1929-82-4]	—	10		
Nitric acid	[7697-37-2]	2	5.2		
Nitric oxide	[10102-43-9]	25	31		
p-Nitroaniline- (skin)	[100-01-6]	—	3		
Nitrobenzene- (skin)	[98-95-3]	1	5		
p-Nitrochlorobenzene- (skin)	[100-00-5]	0.1	0.64		
4-Nitrodiphenyl- (skin)	[92-93-3]	—	—		
Nitroethane	[79-24-3]	100	307		
Nitrogen dioxide	[10102-44-0]	3	5.6		
Nitrogen trifluoride	[7783-54-2]	10	29		
Nitroglycerin (NG)- (skin)	[55-63-0]	0.05	0.46		
Nitromethane	[75-52-5]	20	50		
1-Nitropropane	[108-03-2]	25	91		
2-Nitropropane	[79-46-9]	10	36		
N-Nitrosodimethylamine- (skin)	[62-75-9]	—	—		
Nitrotoluene- (skin)	[88-72-2; 99-08-1; 99-99-0]	2	11		
Nitrotrichloromethane, see Chloropicrin					
Nitrous oxide	[10024-97-2]	50	90		
Nonane all isomers	[111-84-2]	200	1050		
Nuisance particulates, see Particulates Not Otherwise Classified (PNOC)					
Octachloronaphthalene- (skin)	[2234-13-1]	—	0.1		
Octane (all isomers)	[111-65-9]	300	1400		
Oil mist, mineral		—	5		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Osmium tetroxide, as Os	[20816-12-0]	0.0002	0.0016		
Oxalic acid	[144-62-7]	—	1		
Oxygen difluoride	[7783-41-7]			0.05	0.11
Ozone	[10028-15-6]				
Heavy work		0.05	—		
Moderate work		0.08	—		
Light work		0.10	—		
Heavy moderate, or light workloads (≤ 2 hours)		0.20	—		
Paraffin wax fume	[8002-74-2]	—	2		
Paraquat	[4685-14-7]				
Total particulate		—	0.5		
respirable fraction		—	0.1		
Parathion- (skin)	[56-38-2]	—	0.1		
Particulate polycyclic aromatic hydrocarbons (PPAH), see Coal tar pitch volatiles Particulates Not Otherwise Classified (PNOC)					
Inhalable particulate		—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica. Inhalable fraction.	
Respirable particulate		—	3	The value is for particulate matter containing no asbestos and <1% crystalline silica. Respirable fraction.	
Pentaborane	[19624-22-7]	0.005	0.013		
Pentachloronaphthalene— (skin)	[1321-64-8]	—	0.5		
Pentachloronitrobenzene	[82-68-8]	—	0.5		
Pentachlorophenol- (skin)	[87-86-5]	—	0.5		
Pentaerythritol	[115-77-5]	—	10		
Pentane (all isomers)		600	1770		
2-Pentanone, see Methyl propyl ketone					
Perchloroethylene (Tetrachloroethylene)	[127-18-4]	25	170		
Perchloromethyl mercaptan	[594-42-3]	0.1	0.76		
Perchloryl fluoride	[7616-94-6]	3	13		
Perfluoroisobutylene	[382-21-8]			0.01	0.082
Precipitated silica, see Silica-Amorphous					
Perlite	[93763-70-3]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Persulfates					
Ammonium	[7727-54-0]	—	0.1		
Potassium	[7727-21-1]	—	0.1		
Sodium	[7775-27-1]	—	0.1		
Petroleum distillates, see Gasoline, Stoddard solvent; VM&P naphtha Phenacyl chloride, see α -Chloroacetophenone					

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Phenol- (skin)	[108-95-2]	5	19		
Phenothiazine- (skin)	[92-84-2]	—	5		
N-Phenyl-beta-naphthylamine	[135-88-6]	—	—		
o-Phenylenediamine	[95-54-5]	—	0.1		
m-Phenylenediamine	[108-45-2]	—	0.1		
p-Phenylenediamine	[106-50-3]	—	0.1		
Phenyl ether, vapour	[101-84-8]	1	7		
Phenylethylene, see Styrene, monomer					
Phenyl glycidyl ether(PGE) - (skin)	[122-60-1]	0.1	0.6		
Phenylhydrazine	[100-63-0]	0.1	—		
Phenyl mercaptan	[108-98-5]	0.5	2.3		
Phenylphosphine	[638-21-1]			0.05	0.23
Phorate- (skin)	[298-02-2]	—	0.05		
Phosdrin, see Mevinphos					
Phosgene	[75-44-5]	0.1	0.40		
Phosphine	[7803-51-2]	0.3	0.42		
Phosphoric acid	[7664-38-2]	—	1		
Phosphorus (yellow)	[7723-14-0]	0.02	0.1		
Phosphorus oxychloride	[10025-87-3]	0.1	0.63		
Phosphorus pentachloride	[10026-13-8]	0.1	0.85		
Phosphorus pentasulfide	[1314-80-3]	—	1		
Phosphorus trichloride	[7719-12-2]	0.2	1.1		
Phthalic anhydride	[85-44-9]	1	6.1		
m-Phthalodinitrile	[626-17-5]	—	5		
Picloram	[1918-02-1]	—	10		
Picric acid	[88-89-1]	—	0.1		
Pindone	[83-26-1]	—	0.1		
Piperazine dihydrochloride	[142-64-3]	—	5		
2-Pivalyl-1, 3-indandione, see Pindone					
Plaster of Paris, see Calcium sulfate					
Platinum	[7440-06-4]				
Metal		—	1		
Soluble salts, as Pt		—	0.002		
Polychlorobiphenyls, see Chlorodiphenyls					
Polytetrafluoroethylene decomposition Products		—	—		
Portland cement	[65997-15-1]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Potassium hydroxide	[1310-58-3]			—	2
Propane	[74-98-6]	2500	—		
Propane sultone	[1120-71-4]	—	—		
Propargyl alcohol- (skin)	[107-19-7]	1	2.3		
β-Propiolactone	[57-57-8]	0.5	1.5		
Propionic acid	[79-09-4]	10	30		
Propoxur	[114-26-1]	—	0.5		
n-Propyl acetate	[109-60-4]	200	835		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
n-Propyl alcohol- (skin)	[71-23-8]	200	492		
Propylene dichloride	[78-87-5]	75	347		
Propylene glycol dinitrate - (skin)	[6423-43-4]	0.05	0.34		
Propylene glycol mono- methyl ether	[107-98-2]	100	369		
Propylene imine- (skin)	[75-55-8]	2	4.7		
Propylene oxide	[75-56-9]	20	48		
n-Propyl nitrate	[627-13-4]	25	107		
Propyne, see Methyl acetylene					
Pyrethrum	[8003-34-7]	—	5		
Pyridine	[110-86-1]	5	16		
Pyrocatechol, see Catechol					
Quartz, see Silica-Crystalline					
Quinone	[106-51-4]	0.1	0.44		
Resorcinol	[108-46-3]	10	45		
Rhodium	[7440-16-6]				
Metal	—	—	1		
Insoluble compounds, as Rh	—	—	1		
Soluble compounds, as Rh	—	—	0.01		
Ronnel	[299-84-3]	—	10		
Rosin core solder thermal decomposition products, as resin acids-colophony	[8050-09-7]	—	—	Sensitizer; reduce exposure to as low as possible	
Rotenone (commercial)	[83-79-4]	—	5		
Rubber Fume (Limits relate to cyclohexane soluble material)		—	0.75		
Rubber Process Dust		—	8		
Rubber solvent (Naphtha)	[8030-30-6]	400	1590		
Selenium and compounds, as Se	[7782-49-2]	—	0.2		
Selenium hexafluoride, as Se	[7783-79-1]	0.05	0.16		
Sesone	[136-78-7]	—	10		
Silane, see Silicon tetrahydride					
Silica Amorphous					
Diatomaceous earth (uncalcined)	[61790-53-2]				
Inhalable particulate		—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica. Inhalable fraction.	
Respirable particulate		—	3	The value is for particulate matter containing no asbestos and <1% crystalline silica. Respirable fraction.	
Precipitated silica	[112926-00-8]	—	10		
Silica, fume	[69012-64-2]	—	2	Respirable fraction.	

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Silica, fused	[60676-86-0]	—	0.1	Respirable fraction.	
Silica gel	[112926-00-8]	—	10		
Silica - Crystalline					
Cristobalite	[14464-46-1]	—	0.05	Respirable fraction.	
Quartz	[14808-60-7]	—	0.1	Respirable fraction.	
Tridymite	[15468-32-3]	—	0.05	Respirable fraction.	
Tripoli	[1317-95-9]	—	0.1	of contained respirable quartz. Respirable fraction.	
Silicon	[7440-21-3]	—	10		
Silicon carbide	[409-21-2]	—	10	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Silicon tetrahydride	[7803-62-5]	5	6.6		
Silver	[7440-22-4]				
Metal		—	0.1		
Soluble compounds, as Ag		—	0.01		
Soapstone					
Inhalable dust		—	6	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
Respirable dust		—	3	The value is for particulate matter containing no asbestos and <1% crystalline silica. Respirable fraction.	
Sodium azide	[26628-22-8]				
as Sodium azide				—	0.29
as Hydrazoic acid vapour				0.11	—
Sodium bisulfite	[7631-90-5]	—	5		
Sodium 2,4-dichloro-phenoxyethyl sulfate, see Sesone					
Sodium fluoracetate- (skin)	[62-74-8]	—	0.05		
Sodium hydroxide	[1310-73-2]			—	2
Sodium metabisulfite	[7681-57-4]	—	5		
Starch	[9005-25-8]	—	10		
Stearates		—	10		
Stibine	[7803-52-3]	0.1	0.51		
Stoddard solvent	[8052-41-3]	100	525		
Stroontium chromate, as Cr	[7789-06-2]	—	0.0005		
Strychnine	[57-24-9]	—	0.15		
Styrene, monomer- (skin)	[100-42-5]	20	85.2		
Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme)	[1395-21-7; 9014-01-1]			—	0.00006
Sucrose	[57-50-1]	—	10		
Sulfometuron methyl	[74222-97-2]	—	5		
Sulfotep- (skin)	[3689-24-5]	—	0.2		
Sulfur dioxide	[7446-09-5]	2	5.2		
Sulfur hexafluoride	[2551-62-4]	1000	5970		
Sulfuric acid	[7664-93-9]	—	1		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Sulfur monochloride	[10025-67-9]			1	5.5
Sulfur pentafluoride	[5714-22-7]			0.01	0.10
Sulfur tetrafluoride	[7783-60-0]			0.1	0.44
Sulfuryl fluoride	[2699-79-8]	5	21		
Sulprofos	[35400-43-2]	—	1		
Synthetic Vitreous Fibres					
Continuous filament glass fibres		—	1f/ml	Fibres longer than 5mm and with an aspect ratio equal to or greater than 3:1 as determined by the membrane filter method at 400-500X magnification (4-mm objective) phase contrast illumination.	
Glass wool fibres		—	1f/ml	"	
Rock wool fibres		—	1f/ml	"	
Slag wool fibres		—	1f/ml	"	
Special purpose glass fibres		—	1f/ml	"	
Continuous filament glass fibre		—	5	Inhalable fraction.	
Systox, see Demeton					
2, 4, 5-T	[93-76-5]	—	10		
Talc (containing no asbestos fibres)	[14807-96-6]	—	2	The value is for the respirable fraction of particulate matter for the substance listed.	
Talc (containing asbestos fibres), see Asbestos					
Tantalum, metal and oxide dust, as Ta	[7440-25-7] [1314-61-0]	—	5		
TEDP, see Sulfotep					
Tellurium and compounds, except hydrogen telluride, as Te	[13494-80-9]	—	0.1		
Tellurium hexafluoride	[7783-80-4]	0.02	0.10		
Temephos	[3383-96-8]	—	10		
Terephthalic acid	[100-21-0]	—	10		
TEPP- (skin)	[107-49-3]	0.004	0.05		
Terphenyls	[26140-60-3]			0.5	5
1, 1, 1, 2-Tetrachloro-2,2-difluoroethane	[76-11-9]	500	4170		
1, 1, 2, 2-Tetrachloro-1, 2-difluoroethane	[76-12-0]	500	4170		
1, 1, 2, 2-Tetrachloroethane- (skin)	[79-34-5]	1	6.9		
Tetrachloroethylene, see Perchloroethylene					
Tetrachloromethane, see Carbon tetrachloride					
Tetrachloronaphthalene	[1335-88-2]	—	2		
Tetraethyl lead, as Pb- (skin)	[78-00-2]	—	0.1		
Tetrahydrofuran	[109-99-9]	200	590		
Tetramethyl lead, as Pb- (skin)	[75-74-1]	—	0.15		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Tetramethyl succinonitrile — (skin)	[3333-52-6]	0.5	2.8		
Tetranitromethane	[509-14-8]	0.005	0.04		
Tetrasodium pyrophosphate	[7722-88-5]				
Anhydride		—	5		
Decahydrate		—	5		
Tetryl	[479-45-8]	—	1.5		
Thallium, elemental and soluble compounds, as TI- (skin)	[7440-28-0]	—	0.1		
4, 4'-Thiobis (6-tert-butyl -m-cresol)	[96-69-5]	—	10		
Thioglycolic acid- (skin)	[68-11-1]	1	3.8		
Thionyl chloride	[7719-09-7]			1	4.9
Thiram	[137-26-8]	—	1		
Tin	[7440-31-5]				
Metal		—	2		
Oxide & inorganic compounds, except Tin hydride, as Sn		—	2		
Organic compounds, as Sn- (skin)		—	0.1		
Titanium dioxide	[13463-67-7]	—	10		
o-Tolidine- (skin)	[119-93-7]	—	—		
Toluene- (skin)	[108-88-3]	50	188		
Toluene-2,4-diisocyanate (TDI)	[584-84-9]	0.005	0.036		
o-Toluidine- (skin)	[95-53-4]	2	8.8		
m-Toluidine- (skin)	[108-44-1]	2	8.8		
p-Toluidine- (skin)	[106-49-0]	2	8.8		
Toluol, see Toluene					
Toxaphene, see Chlorinated camphene					
Tributyl phosphate	[126-73-8]	0.2	2.2		
Trichloroacetic acid	[76-03-9]	1	6.7		
1, 2, 4-Trichloro benzene	[120-82-1]			5	37
1, 1, 1-Trichloroethane, see Methyl chloroform					
1, 1, 2-Trichloroethane- (skin)	[79-00-5]	10	55		
Trichloroethylene	[79-01-6]	50	269		
Trichlorofluoromethane	[75-69-4]			1000	5620
Trichloromethane, see Chloroform					
Trichloronaphthalene- (skin)	[1321-65-9]	—	5		
Trichloronitromethane, see Chloropicrin					
1, 2, 3-Trichloropropane- (skin)	[96-18-4]	10	60		
1, 1, 2-Trichloro-1, 2, 2- trifluoroethane	[76-13-1]	1000	7670		
Tricyclohexyltin hydroxide, see Cyhexatin					
Tridymite, see Silica-Crystalline					
Triethanolamine	[102-71-6]	—	5		
Triethylamine- (skin)	[121-44-8]	1	4.1		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
Trifluorobromomethane	[75-63-8]	1000	6090		
1, 3, 5-Triglycidyl-s-triazinetriene	[2451-62-9]	—	0.05		
Trimellitic anhydride	[552-30-7]			—	0.04
Trimethylamine	[75-50-3]	5	12		
Trimethyl benzene (mixed Isomers)	[25551-13-7]	25	123		
Trimethyl phosphite	[121-45-9]	2	10		
2, 4, 6-Trinitrophenol, <i>see</i> Picric acid					
2, 4, 6-Trinitrophenylmethylnitramine, <i>see</i> Tetryl					
2, 4, 6-Trinitrotoluene(TNT) — (skin)	[118-96-7]	—	0.1		
Triorthocresyl phosphate (skin)	[78-30-8]	—	0.1		
Triphenyl amine	[603-34-9]	—	5		
Triphenyl phosphate	[115-86-6]	—	3		
Tripoli, <i>see</i> Silica-Crystalline					
Tungsten, as W	[7440-33-7]				
Metal and insoluble compounds		—	5		
Soluble compounds		—	1		
Turpentine	[8006-64-2]	100	556		
n-Valeraldehyde	[110-62-3]	50	176		
Vanadium pentoxide as V ₂ O ₅ ; respirable dust or fume	[1314-62-1]	—	0.05		
Vegetable oil mist		—	10		
Vinyl acetate	[108-05-4]	10	35		
Vinyl benzene, <i>see</i> Styrene					
Vinyl bromide	[593-60-2]	0.5	22		
Vinyl chloride	[75-01-4]	1	2.6		
Vinyl cyanide, <i>see</i> Acrylonitrile					
4-Vinyl cyclohexene	[100-40-3]	0.1	0.4		
Vinyl cyclohexene dioxide (skin)	[106-87-6]	0.1	0.57		
Vinyl fluoride	[75-02-5]	1	—		
Vinylidene chloride	[75-35-4]	5	20		
Vinylidene fluoride	[75-38-7]	500	—		
Vinyl toluene	[25013-15-4]	50	242		
VM & P Naphtha	[8032-32-4]	300	1370		
Warfarin	[81-81-2]	—	0.1		
Welding fumes (NOC)		—	5		
Wood dust					
(hard woods)		—	1		
Soft wood		—	5		
Xylene (o-, m-, p-isomers)	1130-20-7; 95-47-6; 108-38-3; 106-42-3]	100	434		

CHEMICAL	[CAS]	Eight-hour time-weighted average airborne concentration		Ceiling limit airborne concentration	
		ppm	mg/m ³	ppm	mg/m ³
m-Xylene α,α' -diamine- (skin)	[1477-50-0]			—	0.1
Xylidine (mixed isomers)- (skin)	[1300-73-8]	0.5	2.5		
Yttrium metal & compounds, as Y	[7440-65-5]	—	1		
Zinc chloride fume	[7646-85-7]	—	1		
Zinc chromates, as Cr	[13530-65-9; 11103-86-9; 37300-23-5]	—	0.01		
Zinc oxide	[1314-13-2]				
Fume		—	5		
Dust		—	10		
Zirconium and compounds, as Zr	[7440-67-7]	—	5		

Note:

- CAS — chemical abstracts service registry number assigned by the Chemical Abstracts Service, Columbus, Ohio, USA as the unique identifier for a chemical substance.
- fibre — fibre of more than 5 micrometer in length and less than 3 micrometer in width and having a length to width ratio of not less than 3 to 1 when viewed in a phase contrast optical microscope at 400 to 500 magnifications.
- f/ml — fibres per millilitre of air.
- inhalable — a fraction of airborne particulates that are captured by a particle size-selective instrument having the following collection efficiency:

particle aerodynamic diameter (micrometer)	inhalable particulate mass (%)
0	100
1	97
2	94
5	87
10	77
20	65
30	58
40	54.5
50	52.5
100	50

mg/m³ — milligrams per cubic meter of air at 25° Celsius and one atmosphere pressure.

ppm — parts of vapour or gas per million parts of contaminated air by volume.

respirable — a fraction of airborne particulates that are captured by a particle size-selective instrument having the following collection efficiency:

particle aerodynamic diameter (micrometer)	respirable particulate mass (%)
0	100
1	97
2	91
3	74
4	50
5	30
6	17
7	9
8	5
10	1

skin — refer to the potential contribution to the overall exposure by the cutaneous route including mucous membranes and eye, either by air-borne, or more particularly, by direct contact with the substance.

SCHEDULE II

[Subregulation 27(3)]

Chemicals for which medical surveillance is appropriate

1. 4-Aminodiphenyl
2. Arsenic and any of its compound
3. Asbestos (all forms except crocidolite)
4. Auramine, Magenta
5. Benzidine
6. Beryllium
7. Cadmium and any of its compound
8. Carbon disulphide
9. Disulphur dichloride
10. Benzene including benzol
11. Carbon tetrachloride
12. Trichloroethylene
13. n - Hexane
14. bis (Chloromethyl) ether
15. Chromic acid
16. Chromium, metal and inorganic compounds, e.g. Water-soluble Cr VI compounds, Insoluble Cr VI compounds
17. Free crystalline silica
18. Isocyanates
19. Lead (including organic lead compounds)
20. Manganese
21. Mercury
22. Mineral oil including paraffin
23. b-Naphthylamine

24. 1-Naphthylamine and its salts
25. Orthotolidine and its salts
26. Dianisidine and its salts
27. Dichlorobenzidine and its salts
28. 4-Nitrodiphenyl
29. Nitro or amino derivatives of phenol and of benzene or its homologues
30. Nitrous fumes. Chromate or dichromate of potassium, sodium, ammonium or zinc
31. Pesticides
32. Pitch
33. Tar, bitumen or creosote
34. Vinyl chloride monomer (VCM)

SCHEDULE III

[Paragraph 5(2) (b)]

Information on Pesticides

1. A statement of the common name of the pesticide, if available, its trade and chemical name, and structural formula, and of the name and concentration of every active ingredient of the pesticide.
2. The name and concentration of every other ingredient of the pesticide.
3. The toxicological information on every ingredient of the pesticide and on the pesticide as a whole.
4. The instructions for, and the precautionary measures to be taken in connexion with the use of the pesticide.
5. The name, address and telephone number of the supplier and manufacture of the pesticide.

Made 29 March 2000.

[KSM. PUU(S) 6/11 Jld. 1; PN(PU²) 541/IV]

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Minister of Human Resources