**WORKPLACE EXPOSURE STANDARDS**

**FOR AIRBORNE CONTAMINANTS**

**DATE OF EFFECT: 22 DECEMBER 2011**



Creative Commons

With the exception of the Safe Work Australia logo, this document is licensed by Safe Work Australia under a Creative Commons 3.0 Australia Licence. To view a copy of this licence, visit http://creativecommons.org/licenses/by/3.0/au/deed.en

In essence, you are free to copy, communicate and adapt the work, as long as you attribute the work to Safe Work Australia and abide by the other licensing terms. The report should be attributed as the Workplace Exposure Standards for Airborne Contaminants.

Enquiries regarding the licence and any use of the report are welcome at:

Copyright Officer

Communications, IT and Knowledge Management

Safe Work Australia

GPO Box 641 Canberra ACT 2601

Email: copyrightrequests@safeworkaustralia.gov.au

ISBN 978-0-642-33341-4 [Online PDF]

ISBN 978-0-642-33342-1 [Online RTF]

Table of Contents

[1. Introduction 4](#_Toc312335632)

[1.1 Key duties under the WHS Act 4](#_Toc312335633)

[1.2 Key duties under the WHS Regulations 4](#_Toc312335634)

[1.3 Further guidance 4](#_Toc312335635)

[2. interpretation of exposure standards 6](#_Toc312335636)

[2.1 The meaning of key terms 6](#_Toc312335637)

[2.2 Adjustment of exposure standards 6](#_Toc312335638)

[2.3 Other factors affecting risk 6](#_Toc312335639)

[2.4 Exposure standards and the operation of excursion limits 7](#_Toc312335640)

[2.5 Monitoring exposure 8](#_Toc312335641)

[2.6 Keeping exposure as low as reasonably practicable 8](#_Toc312335642)

[3. LIST OF EXPOSURE STANDARDS 9](#_Toc312335643)

[3.1 Column headings and abbreviations 9](#_Toc312335644)

[3.2 Notes 11](#_Toc312335645)

[3.3 Units for exposure standards 11](#_Toc312335646)

[3.4 Carcinogens 11](#_Toc312335647)

[appendix A – List of exposure standards 13](#_Toc312335648)

# Introduction

This document contains a list of workplace exposure standards for airborne contaminants (exposure standards) and how to comply with duties prescribed under the Work Health and Safety (WHS) Act and the WHS Regulations.

## Key duties under the WHS Act

Section 19 of the WHS Act places a general duty on any person conducting a business or undertaking to protect the health and safety of workers so far as is reasonably practicable. It also requires a person conducting a business or undertaking to ensure, so far as is reasonably practicable, the provision and maintenance of a work environment without risks to health and safety.

## Key duties under the WHS Regulations

The WHS Regulations prescribe specific duties in relation to exposure standards.

Regulation 49 requires a person conducting a business or undertaking at a workplace to ensure that no person at the workplace is exposed to a substance or mixture in an airborne concentration that exceeds the exposure standard for the substance or mixture.

Regulation 50 requires a person conducting a business or undertaking at a workplace to ensure that atmospheric monitoring is carried out to determine the airborne concentration of a substance or mixture at the workplace to which an exposure standard applies if:

* the person is not certain on reasonable grounds whether or not the airborne concentration of the substance or mixture at the workplace exceeds the relevant exposure standard, or
* monitoring is necessary to determine whether there is a risk to health.

The person must also ensure that the results of the atmospheric monitoring are recorded and kept for 30 years after the date the record is made and are readily accessible to persons at the workplace who may be exposed to the mixture or substance.

***Asbestos***

In addition to this, the WHS Regulations have specific requirements relating to the risk of exposure to airborne asbestos.

Regulation 420 requires a person conducting a business or undertaking at a workplace to ensure, so far as is reasonably practicable, that exposure of a person at the workplace to airborne asbestos is eliminated or minimised. This is not required in an area that is enclosed to prevent the release of respirable asbestos fibres and negative pressure is used in accordance with Regulation 477.

If it is not reasonably practicable to eliminate exposure to airborne asbestos at the workplace, the person must ensure that the exposure is minimised so far as is reasonably practicable.

The person must ensure that the exposure standard for asbestos is not exceeded at the workplace.

## Further guidance

Exposure standards do not represent a fine dividing line between a healthy and unhealthy work environment. Natural biological variation and the range of individual susceptibilities mean that a small number of people might experience adverse health effects below the exposure standard. Section 19 of the WHS Act, in conjunction with Section 17, requires that exposure to substances in the workplace is kept as low as reasonably practicable.

For further information about the application of exposure standards, see *Guidance on the interpretation of workplace exposure standards for airborne contaminants[[1]](#footnote-1)*.

# interpretation of exposure standards

## The meaning of key terms

***Airborne contaminant*** means a potentially harmful substance that is either naturally absent from air or is present in an unnaturally high concentration, and to which workers may be exposed in their working environment.

***Breathing zone*** means a hemisphere of 300 mm radius extending in front of a person’s face and measured from the midpoint of an imaginary line joining the ears.

***Exposure standard*** represents the airborne concentration of a particular substance or mixture that must not be exceeded. The exposure standard can be of three forms:

a) 8-hour time- weighted average,

b) peak limitation; and

c) short term exposure limit.

***Peak limitation*** means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

***Short term exposure limit (STEL)*** means the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes.

***8-hour Time-weighted average (TWA)*** means the average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

## Adjustment of exposure standards

In order to comply with the general duties under the WHS Act and specific duties in the WHS Regulations, the following issues must be taken into account when interpreting exposure standards.

***Adjustment of 8-hour Time Weighted Average exposure standards***

Where workers have a working day longer than eight hours or work more than 40 hours a week, the person conducting the business or undertaking must determine whether the TWA exposure standard needs to be adjusted to compensate for the greater exposure during the longer work shift, and the decreased recovery time between shifts.

Peak limitation or Short Term Exposure Limit exposure standards must not be adjusted. 8-Hour TWA exposure standards must not be adjusted (increased) for shorter work shifts.

## Other factors affecting risk

Not all chemical substances behave the same and therefore some present higher risks to workers than others. Factors that result in increased risks to workers must be considered when managing risks in the workplace in order to comply with duties under the WHS Act and Regulations to ensure the health and safety of workers.

Known factors that can increase risks to workers include:

***Skin absorption***

Some substances readily penetrate intact skin and are absorbed into the body. In some instances, skin absorption may be a significant source of exposure. These substances are given the notation ’Sk' in column (5) of ***Appendix A***.

***Sensitisation***

Some substances are known to cause sensitisation and present greater risks to sensitised workers. These substances are given the notation ’Sen' in column (5) of ***Appendix A***. Sensitised workers may subsequently react to levels of the substance below the exposure standard and should not be further exposed to the substance.

***Mixtures of substances***

The combined effect of exposure to multiple substances, either simultaneously or sequentially, giving rise to an increased risk to health must be considered, including:

Independent effects

Where toxicological evidence clearly indicates that two or more contaminants have totally distinct mechanisms of effect on the body. In this case, each substance may be separately evaluated against the relevant exposure standard.

Additive effects

Where the combined effect of exposure to two or more contaminants that have the same target organ or the same mechanism of action give rise to a total effect upon the body that equals the sum of effects from the individual substances.

Synergism

Where both chemicals individually have an effect and where the total effect is greater than an additive effect.

Potentiation

Where a chemical enhances the effect of another chemical, or a biochemical or physiological effect, for example exposure to ototoxins can result in damage to hearing or balance functions of the inner ear.

## Exposure standards and the operation of excursion limits

***8-Hour Time-Weighted Average (TWA)***

During periods of daily exposure to an airborne contaminant, exposure above this value is permitted for short periods, provided they are compensated for by equivalent exposures below the exposure standard during the working day. If there is a STEL and a TWA exposure standard, the STEL must also be observed.

***Short Term Exposure Limit (STEL)***

The STEL is a 15 minute time weighted average (TWA) exposure limit which must not be exceeded at any time during an 8-hour working day, even if the exposure during the full day is less than the eight-hour TWA exposure standard. Exposures at the STEL must not be longer than 15 minutes and must not be repeated more than four times per day. There must be at least 60 minutes between successive exposures at the STEL.

***Peak Limitation***

Peak or peak limitation exposure standards are set for some substances, exposure to which can induce acute effects after relatively brief exposure to high concentrations. Excursions above the peak limitation exposure standard are not permitted at any time.

Although it is recognised that there are analytical limitations to the measurement of some substances, to comply with ’peak limitation' exposure standards, exposure must be determined over the shortest analytically practicable period of time. However this period must not exceed 15 minutes.

## Monitoring exposure

Under Section 19 of the WHS Act, a person conducting a business or undertaking must ensure, so far as is reasonably practicable, that the conditions at the workplace are monitored for the purpose of preventing illness or injury of workers. The WHS Regulations also prescribe duties on the person conducting a business or undertaking to undertake monitoring for airborne contaminants in certain situations.

Where monitoring of airborne contaminants is used to estimate a person’s exposure, the monitoring must be undertaken in the breathing zone of the person.

## Keeping exposure as low as reasonably practicable

Section 17 of the WHS Act requires risks to be eliminated so far as is reasonably practicable, and otherwise, to minimise those risks so far as is reasonably practicable.

To comply with this duty under the WHS Act, you must ensure that exposure to any hazardous chemical, or any substance with an exposure standard, is kept as low as reasonably practicable.

# LIST OF EXPOSURE STANDARDS

The list of exposure standards is shown at Appendix A. Information relating to the list is included in this section.

## Column headings and abbreviations

|  |  |  |
| --- | --- | --- |
| **Column** | **Item** |  |
| (1) | **Chemical name**The description of the airborne contaminant |  |
| (2) | **CAS No.**Chemical Abstracts Service Registry Number |  |
| (3) | **TWA**Time weighted average Where the words 'peak limitation' appear in this column, the value is the peak limitation exposure standard. | **ppm**Parts of vapour or gas per million parts of contaminated air by volume**mg/m³**Milligrams of substance per cubic metre of air. Refer to Section 3.3 for more information on the units for exposure standards. When an entry is in this column only, the value is exact: when listed with a ppm value, it is approximate.**f/mL**Fibres per millilitre of air as determined by the membrane filter method[[2]](#footnote-2) |
| (4) | **STEL**Short term exposure limit. | **ppm and mg/m³**(see above) |
| (5) | **Carcinogen category** | **1**Established human carcinogen**2**Probable human carcinogen**3**Substances suspected of having carcinogenic potential |
| (6) | **Notices**Indicates whether the contaminant can be absorbed through the skin and/or is a sensitiser. | **Sk**Absorption through the skin may be a significant source of exposure**Sen**Sensitiser |

## Notes

(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

(b) Fibres longer than 5 m, width less than 3 m and with an aspect ratio of not less than 3:1, as measured by the membrane filter method, at 400-650X magnification phase contrast illumination.

(c) Lint free dust as measured by the vertical elutriator for cotton dust sampler described in the *Transactions of the National Conference on Cotton Dust* *and Health* *1970*, North Carolina University Press, Chapel Hill, pp. 33-43, 1971.

(d) For the two substances marked with this footnote (Benomyl, and Sodium azide), the exposure standards are established as gravimetric (mg/m³) values and converted into volumetric values.

(e) Containing no asbestos and < 1% crystalline silica.

(f) Exposure standard is under review.

## Units for exposure standards

The airborne concentrations of gases, vapours and particulate contaminants are expressed gravimetrically as milligrams of substance per cubic metre of air, (mg/m3). For gases and vapours the concentration is also, with a few exceptions, indicated in parts per million (ppm) by volume. Where both gravimetric and volumetric values are given, the volumetric (ppm) value is exact and should be used as it is not affected by changes in temperature and pressure.

Because the gravimetric units of mg/m3 are affected by temperature and pressure variations, all exposure standards are expressed relative to standard conditions of 25º Celcius and 1 atmosphere pressure (101.3 kPa).

The following conversion formula can be used to convert from ppm to mg/m3.



* where 24.4 is the molar volume in litres at 25° Celcius and 101.3 kPa.

TWA values for gravimetric (mg/m3) exposure standards are for the inhalable fraction unless noted as respirable dust.

## Carcinogens

Chemical substances which have been identified as suspected or established carcinogens, or

substances associated with industrial processes which have been identified as suspected or established carcinogens, have been highlighted in the list of adopted exposure standards. The Commission of the European Communities (EEC) system of classification of carcinogenic substances is used to indicate the strength of the causal association between these substances and the development of cancer. A detailed description of the criteria used in this classification system is available in *A Guide to the Classification of Carcinogens, Mutagens and Teratogens under the Sixth Amendment[[3]](#footnote-3)* which is based on the interpretation, for human exposure at the workplace, of the findings of the International Agency for Research on Cancer on carcinogenesis. The three categories, are described below.

(a) Category 1

Established human carcinogens are those substances known to be carcinogenic to humans.

There is sufficient evidence to establish a causal association between human exposure to these substances and the development of cancer.

(b) Category 2

Probable human carcinogens are those substances for which there is sufficient evidence to

provide a strong presumption that human exposure might result in the development of cancer.

This evidence is generally based on appropriate long term animal studies, limited epidemiological evidence or other relevant information.

(c) Category 3

Substances suspected of having carcinogenic potential are those substances which have

possible carcinogenic effects on humans but in respect of which the available information is not adequate for making a satisfactory assessment. There is some evidence from appropriate animal

or epidemiological studies, but this is insufficient to place the substance in Category 2.

# appendix A – List of exposure standards

| **(1)** |  | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Chemical name** | **Synonym** | **CAS No.** | **TWA****(ppm)** | **TWA****(mg/m3)** | **STEL****(ppm)** | **STEL****(mg/m3)** | **Carcinogen Category** | **Notices** | **Notes** |
| Acetaldehyde  |   | 75-07-0 | 20 | 36 | 50 | 91 | - | -  |   |
| Acetic acid |   | 64-19-7 | 10 | 25 | 15 | 37 | - | -  |   |
| Acetic anhydride |   | 108-24-7 | 5 Peak limitation | 21 Peak limitation | - | - | - | -  |   |
| Acetone |   | 67-64-1 | 500 | 1185 | 1000 | 2375 | - | -  |   |
| Acetonitrile |   | 75-05-8 | 40 | 67 | 60 | 101 | - | Sk  |   |
| Acetylsalicylic acid | Aspirin | 50-78-2 | - | 5 | - | - | - | -  |   |
| Acrolein | Acrylaldehyde | 107-02-8 | 0.1 | 0.23 | 0.3 | 0.69 | - | -  |   |
| Acrylamide |   | 79-06-1 | - | 0.03 | - | - | 2 | Sk |   |
| Acrylic acid |   | 79-10-7 | 2 | 5.9 | - | - | - | Sk  |   |
| Acrylonitrile | Vinyl cyanide | 107-13-1 | 2 | 4.3 | - | - | 2 | Sk |   |
| Aldrin |   | 309-00-2 | - | 0.25 | - | - | 3 | Sk |   |
| Allyl alcohol |   | 107-18-6 | 2 | 4.8 | 4 | 9.5 | - | Sk  |   |
| Allyl chloride | 3-Chloro-1-propene | 107-05-1 | 1 | 3 | 2 | 6 | - | -  |   |
| Allyl glycidyl ether (AGE) | AGEAllyl 2,3-epoxypropyl ether | 106-92-3 | 5 | 23 | 10 | 47 | - | Sk;Sen  |   |
| Allyl propyl disulfide |   | 2179-59-1 | 2 | 12 | 3 | 18 | - | -  |   |
| alpha-Alumina (Al2O3) |   | 1344-28-1 | See Aluminium oxide  |  |
| Aluminium (metal dust) |   | 7429-90-5 | - | 10 | - | - | - | -  |   |
| Aluminium (welding fumes) (as Al) |   | 7429-90-5 | - | 5 | - | - | - | -  |   |
| Aluminium oxide  |   | 1344-28-1 | - | 10  | - | - | - | -  | (a) |
| Aluminium, alkyls (NOC) (as Al) |   | 7429-90-5 | - | 2 | - | - | - | -  |   |
| Aluminium, pyro powders (as Al) |   | 7429-90-5 | - | 5 | - | - | - | -  |   |
| Aluminium, soluble salts (as Al) |   | 7429-90-5 | - | 2 | - | - | - | -  |   |
| 2-Aminopyridine | 2-Pyridylamine | 504-29-0 | 0.5 | 2 | - | - | - | -  |   |
| Amitrole | 3-Amino-1,2,4-triazole | 61-82-5 | - | 0.2 | - | - | 3 | - |   |
| Ammonia |   | 7664-41-7 | 25 | 17 | 35 | 24 | - | -  |   |
| Ammonium chloride (fume) |   | 12125-02-9 | - | 10 | - | 20 | - | -  |   |
| Ammonium perfluorooctanoate  |   | 3825-26-1 | - | 0.1 | - | - | - | -  |   |
| Ammonium Persulfate | Ammonium Persulphate | 7727-54-0 | - | 0.01 Peak Limitation | - | - | - | -  |   |
| Ammonium sulphamate | Ammate | 7773-06-0 | - | 10 | - | - | - | -  |   |
| Amosite  |   | 12172-73-5 | 0.1 f/mL  | - | - | - | - | -  | See Asbestos (b) |
| n-Amyl acetate | Pentyl acetate | 628-63-7 | 50 | 270 | 100 | 541 | - | -  |   |
| sec-Amyl acetate | 1-Methylbutyl acetate | 626-38-0 | 50 | 270 | 100 | 541 | - | -  |   |
| Aniline & homologues |   | 62-53-3 | 2 | 7.6 | - | - | - | Sk  |   |
| Anisidine (o-, p- isomers) | Methoxyaniline | 29191-52-4 | 0.1 | 0.5 | - | - | - | Sk  |   |
| Antimony & compounds (as Sb) |   | 7440-36-0 | - | 0.5 | - | - | - | -  |   |
| Antimony trioxide, handling and use (as Sb) |   | 1309-64-4 | - | 0.5 | - | - | 2 | - |   |
| ANTU | 1-Naphthylthiourea | 86-88-4 | - | 0.3 | - | - | - | -  |   |
| Arsenic & soluble compounds (as As) |   | 7440-38-2 | - | 0.05 | - | - | 1 | -  |   |
| Arsine |   | 7784-42-1 | 0.05 | 0.16 | - | - | - | -  |   |
| Asbestos  |   | 1332-21-4 |   |   |   |   | - |   | (b) |
| Amosite  |   | 12172-73-5 | 0.1 f/mL  | - | - | - | 1 | - | (b) |
| Chrysotile  |   | 12001-29-5 | 0.1 f/mL | - | - | - | 1 | -  | (b) |
| Crocidolite  |   | 12001-28-4 | 0.1 f/mL  | - | - | - | 1 | - | (b) |
| Other forms  |   |   | 0.1 f/mL | - | - | - | 1 | - | (b)  |
| Any mixture of these, or where the composition is unknown  |   |   | 0.1 f/mL | - | - | - | 1 | -  | (b) |
| Atrazine |   | 1912-24-9 | - | 5 | - | - | - | -  |   |
| Azinphos-methyl | Guthion | 86-50-0 | - | 0.2 | - | - | - | Sk  |   |
| Barium sulphate  |   | 7727-43-7 | - | 10 | - | - | - | -  | (a) |
| Barium, soluble compounds (as Ba) |   | 7440-39-3 | - | 0.5 | - | - | - | -  |   |
| Benomyl  | Benlate | 17804-35-2 | 0.84 | 10 | - | - | - | -  |  (d) |
| Benzene |   | 71-43-2 | 1 | 3.2 | - | - | 1 | - |   |
| Benzoyl peroxide | Dibenzoyl peroxide | 94-36-0 | - | 5 | - | - | - | -  |   |
| Benzyl chloride | alpha-Chlorotoluene | 100-44-7 | 1 | 5.2 | - | - | - | -  |   |
| Beryllium & compounds |   | 7440-41-7 | - | 0.002 | - | - | 2 | - |   |
| Biphenyl | DiphenylPhenylbenzene | 92-52-4 | 0.2 | 1.3 | - | - | - | -  |   |
| Bismuth telluride | Dibismuth tritelluride | 1304-82-1 | - | 10 | - | - | - | -  |   |
| Bismuth telluride, Se-doped |   | 1304-82-1 | - | 5 | - | - | - | -  |   |
| Bitumen fumes | Asphalt (petroleum) | 8052-42-4 | - | 5 | - | - | - | -  |   |
| Borates, tetra, sodium salts (anhydrous) | Disodium tetraborate anhydrous | 1330-43-4 | - | 1 | - | - | - | -  |   |
| Borates, tetra, sodium salts (decahydrate) | Disodium tetraborate decahydrateBorax | 1303-96-4 | - | 5 | - | - | - | -  |   |
| Borates, tetra, sodium salts (pentahydrate) | Disodium tetraborate pentahydrate | 12179-04-3 | - | 1 | - | - | - | -  |   |
| Boron oxide | Diboron trioxide | 1303-86-2 | - | 10 | - | - | - | -  |   |
| Boron tribromide |   | 10294-33-4 | 1 Peak limitation | 10 Peak limitation | - | - | - | -  |   |
| Boron trifluoride |   | 7637-07-2 | 1 Peak limitation | 2.8 Peak limitation | - | - | - | -  |   |
| Bromacil |   | 314-40-9 | 1 | 11 | - | - | - | -  |   |
| Bromine |   | 7726-95-6 | 0.1 | 0.66 | 0.3 | 2 | - | -  |   |
| Bromine pentafluoride |   | 7789-30-2 | 0.1 | 0.72 | - | - | - | -  |   |
| Bromoform | Tribromomethane | 75-25-2 | 0.5 | 5.2 | - | - | - | Sk  |   |
| 1,3-Butadiene  |   | 106-99-0 | 10 | 22 | - | - | 2 | -  |   |
| Butane |   | 106-97-8 | 800 | 1900 | - | - | - | -  |   |
| 2-Butoxyethanol | Butyl cellosolveButyl glycolEthylene glycolMonobutyl ether glycolMonobutyl ether | 111-76-2 | 20 | 96.9 | 50 | 242 | - | Sk  |   |
| 2-Butoxyethyl acetate |   | 112-07-2 | 20 | 133 | 50 | 333 | - | Sk  |   |
| n-Butyl acetate |   | 123-86-4 | 150 | 713 | 200 | 950 | - | -  |   |
| sec-Butyl acetate |   | 105-46-4 | 200 | 950 | - | - | - | -  |   |
| tert-Butyl acetate |   | 540-88-5 | 200 | 950 | - | - | - | -  |   |
| n-Butyl acrylate | Acrylic acid, n-butyl estern-Butyl 2-propenoate | 141-32-2 | 1 | 5 | 5 | 26 | - | -  |   |
| n-Butyl alcohol | n-Butanol | 71-36-3 | 50 Peak limitation | 152 Peak limitation | - | - | - | Sk  |   |
| sec-Butyl alcohol | sec-ButanolButan-2-ol | 78-92-2 | 100 | 303 | - | - | - | -  |   |
| tert-Butyl alcohol | tert-Butanol2-Methylpropan-2-ol | 75-65-0 | 100 | 303 | 150 | 455 | - | -  |   |
| tert-Butyl chromate (as CrO3) |   | 1189-85-1 | - | 0.1 Peak limitation | - | - | - | Sk  |   |
| n-Butyl glycidyl ether (BGE) | 1-Butoxy-2,3-epoxypropaneButyl-2,3-epoxypropyl etherBGE | 2426-08-6 | 25 | 133 | - | - | - | Sen  |   |
| n-Butyl lactate |   | 138-22-7 | 5 | 30 | - | - | - | -  |   |
| Butyl mercaptan | Butanethiol | 109-79-5 | 0.5 | 1.8 | - | - | - | -  |   |
| Butylamine |   | 109-73-9 | 5 Peak limitation | 15 Peak limitation | - | - | - | Sk  |   |
| o-sec-Butylphenol |   | 89-72-5 | 5 | 31 | - | - | - | Sk  |   |
| p-tert-Butyltoluene  |   | 98-51-1 | 10 | 61 | 20 | 121 | - | -  |   |
| Cadmium and compounds (as Cd) |   | 7440-43-9 | - | 0.01 | - | - | 2 | - |   |
| Caesium hydroxide | Cesium hydroxide | 21351-79-1 | - | 2 | - | - | - | -  |   |
| Calcium carbonate  | LimestoneMarbleWhiting | 471-34-1 | - | 10  | - | - | - | -  | (a) |
| Calcium cyanamide | Calcium carbimide | 156-62-7 | - | 0.5 | - | - | - | -  |   |
| Calcium hydroxide |   | 1305-62-0 | - | 5 | - | - | - | -  |   |
| Calcium oxide |   | 1305-78-8 | - | 2 | - | - | - | -  |   |
| Calcium silicate  |   | 1344-95-2 | - | 10  | - | - | - | -  | (a) |
| Calcium sulphate  | GypsumPlaster of Paris | 7778-18-9 | - | 10  | - | - | - | -  | (a) |
| Camphor, synthetic | Bornan-2-one | 76-22-2 | 2 | 12 | 3 | 19 | - | -  |   |
| e-Caprolactam (dust and vapour) | 1,6-HexanelactamHexahydro-2H-azepin-2-one | 105-60-2 | - | 10 | - | 20 | - | -  |   |
| Caprolactam (dust) |   | 105-60-2 | - | 1 | - | 3 | - | -  |   |
| Captafol | Difolatan | 2425-06-1 | - | 0.1 | - | - | - | Sk  |   |
| Captan |   | 133-06-2 | - | 0.5 | - | - | 2 | Sk;Sen  |   |
| Carbaryl | Sevin | 63-25-2 | - | 5 | - | - | - | -  |   |
| Carbofuran | Furadan | 1563-66-2 | - | 0.1 | - | - | - | -  |   |
| Carbon black |   | 1333-86-4 | - | 3 | - | - | - | -  |   |
| Carbon dioxide |   | 124-38-9 | 5000 | 9000 | 30000 | 54000 | - | -  |   |
| Carbon dioxide in coal mines |   | 124-38-9 | 12500 | 22500 | 30000 | 54000 | - | -  |   |
| Carbon disulphide |   | 75-15-0 | 10 | 31 | - | - | - | Sk  |   |
| Carbon monoxide  |   | 630-08-0 | 30 | 34  | - | - | - | -  |   |
| Carbon tetrabromide | Tetrabromomethane | 558-13-4 | 0.1 | 1.4 | 0.3 | 4.1 | - | -  |   |
| Carbon tetrachloride | Tetrachloromethane | 56-23-5 | 0.1 | 0.63 | - | - | 2 | Sk  |   |
| Carbonyl fluoride |   | 353-50-4 | 2 | 5.4 | 5 | 13 | - | -  |   |
| Catechol | Pyrocatecholo-Dihydroxybenzene | 120-80-9 | 5 | 23 | - | - | - | -  |   |
| Cellulose (paper fibre)  |   | 9004-34-6 | - | 10  | - | - | - | -  | (a) |
| Ceramic fibres |   |   | - | 0.5 f/ml | - | - | - | -  | See Synthetic mineral fibres (f) |
| Chlordane |   | 57-74-9 | - | 0.5 | - | - | 3 | Sk  |   |
| Chlorinated camphene | Camphechlor | 8001-35-2 | - | 0.5 | - | 1 | - | Sk  |   |
| Chlorinated diphenyl oxide |   | 31242-93-0 | - | 0.5 | - | - | - | -  |   |
| Chlorine |   | 7782-50-5 | 1 Peak limitation | 3 Peak limitation | - | - | - | -  |   |
| Chlorine dioxide |   | 10049-04-4 | 0.1 | 0.28 | 0.3 | 0.83 | - | -  |   |
| Chlorine trifluoride |   | 7790-91-2 | 0.1 Peak limitation | 0.38 Peak limitation | - | - | - | -  |   |
| 1-Chloro-1-nitropropane |   | 600-25-9 | 2 | 10 | - | - | - | -  |   |
| Chloroacetaldehyde |   | 107-20-0 | 1 Peak limitation | 3.2 Peak limitation | - | - | - | -  |   |
| Chloroacetone |   | 78-95-5 | 1 Peak limitation | 3.8 Peak limitation | - | - | - | Sk  |   |
| alpha-Chloroacetophenone | Phenacyl chloride | 532-27-4 | 0.05 | 0.32 | - | - | - | -  |   |
| Chloroacetyl chloride | Chloroacetic acid chloride | 79-04-9 | 0.05 | 0.23 | 0.15 | 0.69 | - | Sk  |   |
| Chlorobenzene |   | 108-90-7 | 10 | 46 | - | - | - | -  |   |
| o-Chlorobenzylidene malononitrile |   | 2698-41-1 | 0.05 Peak limitation | 0.39 Peak limitation | - | - | - | Sk  |   |
| Chlorobromomethane | Bromochloromethane | 74-97-5 | 200 | 1060 | - | - | - | -  |   |
| Chlorodifluoromethane | DifluorochloromethaneFluorocarbon 22 (Freon 22) | 75-45-6 | 1000 | 3540 | - | - | - | -  |   |
| Chloroform | Trichloromethane | 67-66-3 | 2 | 10 | - | - | 3 | Sk |   |
| bis(Chloromethyl) ether |   | 542-88-1 | 0.001 | 0.005 | - | - | 1 | - |   |
| Chloropentafluoroethane | Fluorocarbon 115 (Freon 115) | 76-15-3 | 1000 | 6320 | - | - | - | -  |   |
| Chloropicrin | Trichloronitromethane | 76-06-2 | 0.1 | 0.67 | - | - | - | -  |   |
| beta-Chloroprene | 2-Chloro-1,3-butadiene | 126-99-8 | 10 | 36 | - | - | - | Sk  |   |
| 2-Chloropropionic acid |   | 598-78-7 | 0.1 | 0.44 | - | - | - | Sk  |   |
| o-Chlorostyrene |   | 2039-87-4 | 50 | 283 | 75 | 425 | - | -  |   |
| Chlorosulphonic acid |   | 7790-94-5 | 0.209 | 1 | - | - | - | -  |   |
| o-Chlorotoluene |   | 95-49-8 | 50 | 259 | - | - | - | -  |   |
| Chlorpyrifos | Dursban | 2921-88-2 | - | 0.2 | - | - | - | Sk  |   |
| Chromium (II) compounds (as Cr) |   |   | - | 0.5 | - | - | - | -  |   |
| Chromium (III) compounds (as Cr) |   |   | - | 0.5 | - | - | - | -  |   |
| Chromium (metal) |   | 7440-47-3 | - | 0.5 | - | - | - | -  |   |
| Chromium (VI) compounds (as Cr), certain water insoluble  |   |   | - | 0.05 | - | - | 1 | Sen |   |
| Chromium (VI) compounds (as Cr), water soluble |   |   | - | 0.05 | - | - | - | Sen  |   |
| Chrysotile  |   | 12001-29-5 | 0.1 f/mL | - | - | - | - | -  | See Asbestos (b) |
| Clopidol | Coyden | 2971-90-6 | - | 10 | - | - | - | -  |   |
| Coal dust (containing < 5% quartz) (respirable dust) |   |   | - | 3  | - | - | - | -  |   |
| Coal tar pitch volatiles (as benzene solubles) |   | 65996-93-2 | - | 0.2 | - | - | 1 | - |   |
| Cobalt carbonyl (as Co) |   | 10210-68-1 | - | 0.1 | - | - | - | Sen  |   |
| Cobalt hydrocarbonyl (as Co) |   | 16842-03-8 | - | 0.1 | - | - | - | Sen  |   |
| Cobalt, metal dust & fume (as Co)  |   | 7440-48-4 | - | 0.05 | - | - | - | Sen  |   |
| Copper (fume) |   | 7440-50-8 | - | 0.2 | - | - | - | -  |   |
| Copper, dusts & mists (as Cu) |   | 7440-50-8 | - | 1 | - | - | - | -  |   |
| Cotton dust, raw  |   |   | - | 0.2 | - | - | - | -  | (c) |
| Cresol, all isomers |   | 1319-77-3 | 5 | 22 | - | - | - | Sk  |   |
| Cristobalite (respirable dust) |   | 14464-46-1 | - | 0.1 | - | - | - | -  | See Silica - Crystalline |
| Crocidolite  |   | 12001-28-4 | 0.1 f/mL  | - | - | - | - | -  | See Asbestos (b) |
| Crotonaldehyde | trans-But-2-enal | 4170-30-3 | 2 | 5.7 | - | - | - | -  |   |
| Crufomate |   | 299-86-5 | - | 5 | - | - | - | -  |   |
| Cumene | Isopropyl benzene | 98-82-8 | 25 | 125 | 75 | 375 | - | Sk  |   |
| Cyanamide |   | 420-04-2 | - | 2 | - | - | - | -  |   |
| Cyanides (as CN) |   | 151-50-8 | - | 5 | - | - | - | Sk  |   |
| Cyanogen | Oxalonitrile | 460-19-5 | 10 | 21 | - | - | - | -  |   |
| Cyanogen chloride |   | 506-77-4 | 0.3 Peak limitation | 0.75 Peak limitation | - | - | - | -  |   |
| Cyclohexane |   | 110-82-7 | 100 | 350 | 300 | 1050 | - | -  |   |
| Cyclohexanol |   | 108-93-0 | 50 | 206 | - | - | - | Sk  |   |
| Cyclohexanone | Anone | 108-94-1 | 25 | 100 | - | - | - | Sk  |   |
| Cyclohexene |   | 110-83-8 | 300 | 1010 | - | - | - | -  |   |
| Cyclohexylamine | Aminocyclohexane | 108-91-8 | 10 | 41 | - | - | - | -  |   |
| Cyclonite | RDXHexahydro-1,3,5-trinitro-1,3,5-triazine | 121-82-4 | - | 1.5 | - | - | - | Sk  |   |
| Cyclopentadiene |   | 542-92-7 | 75 | 203 | - | - | - | -  |   |
| Cyclopentane |   | 287-92-3 | 600 | 1720 | - | - | - | -  |   |
| Cyhexatin | PlictranTricyclohexyltin hydroxide | 13121-70-5 | - | 5 | - | - | - | -  |   |
| 2,4-D | 2,4-Dichlorophenoxyacetic acid | 94-75-7 | - | 10 | - | - | - | -  |   |
| DDT (Dichlorodiphenyl-trichloroethane) | p,p-Dichlorodiphenyl trichloroethane2,2-bis(p-Chlorophenyl)-1,1,1 trichloroethane1,1,1-Trichlorobis (chlorophenyl) ethane | 50-29-3 | - | 1 | - | - | - | -  |   |
| Decaborane |   | 17702-41-9 | 0.05 | 0.25 | 0.15 | 0.75 | - | Sk  |   |
| Demeton | Systox | 8065-48-3 | 0.01 | 0.11 | - | - | - | Sk  |   |
| Diacetone alcohol | 4-Hydroxy-4-methyl-2-pentanone | 123-42-2 | 50 | 238 | - | - | - | -  |   |
| Diatomaceous earth (uncalcined)  |   | 61790-53-2 | - | 10 | - | - | - | -  | See Silica - Amorphous (a) |
| Diazinon |   | 333-41-5 | - | 0.1 | - | - | - | Sk  |   |
| Diazomethane |   | 334-88-3 | 0.2 | 0.34 | - | - | 3 | - |   |
| Diborane |   | 19287-45-7 | 0.1 | 0.11 | - | - | - | -  |   |
| Dibutyl phenyl phosphate |   | 2528-36-1 | 0.3 | 3.5 | - | - | - | Sk  |   |
| Dibutyl phosphate | Dibutyl hydrogen phosphate | 107-66-4 | 1 | 8.6 | 2 | 17 | - | -  |   |
| Dibutyl phthalate |   | 84-74-2 | - | 5 | - | - | - | -  |   |
| 2-N-Dibutylaminoethanol  | N,N-Di-n-butylaminoethanol | 102-81-8 | 2 | 14 | - | - | - | Sk  |   |
| 1,1-Dichloro-1-nitroethane |   | 594-72-9 | 2 | 12 | - | - | - | -  |   |
| 1,3-Dichloro-5,5-dimethyl hydantoin |   | 118-52-5 | - | 0.2 | - | 0.4 | - | -  |   |
| Dichloroacetylene |   | 7572-29-4 | 0.1 Peak limitation | 0.39 Peak limitation | - | - | 3 | - |   |
| o-Dichlorobenzene |   | 95-50-1 | 25 | 150 | 50 | 301 | - | -  |   |
| p-Dichlorobenzene |   | 106-46-7 | 25 | 150 | 50 | 300 | - | -  |   |
| Dichlorodifluoromethane | DifluorochloromethaneFluorocarbon 12 (Freon 12) | 75-71-8 | 1000 | 4950 | - | - | - | -  |   |
| 1,1-Dichloroethane | Ethylidene chloride | 75-34-3 | 100 | 412 | - | - | - | Sk  |   |
| Dichloroethyl ether | bis-(2-Chloroethyl)-ether | 111-44-4 | 5 | 29 | 10 | 58 | - | Sk  |   |
| 1,2-Dichloroethylene | Acetylene dichloride | 540-59-0 | 200 | 793 | - | - | - | -  |   |
| Dichlorofluoromethane | Fluorocarbon 21 (Freon 21)Fluorodichloromethane | 75-43-4 | 10 | 42 | - | - | - | -  |   |
| Dichloropropene | gamma-Chloroallyl chloride | 542-75-6 | 1 | 4.5 | - | - | 3 | Sk  |   |
| 2,2-Dichloropropionic acid | Dalapon | 75-99-0 | 1 | 5.8 | - | - | - | -  |   |
| Dichlorotetrafluoroethane | CryofluoraneFluorocarbon 114 (Freon 114)R-114Tetrafluoro dichloroethane | 76-14-2 | 1000 | 6990 | - | - | - | -  |   |
| Dichlorvos (DDVP) | DDVP | 62-73-7 | 0.1 | 0.9 | - | - | - | Sk  |   |
| Dicrotophos | Bidrin | 141-66-2 | - | 0.25 | - | - | - | Sk  |   |
| Dicyclopentadiene |   | 77-73-6 | 5 | 27 | - | - | - | -  |   |
| Dicyclopentadienyl iron | Ferrocene | 102-54-5 | - | 10 | - | - | - | -  |   |
| Dieldrin |   | 60-57-1 | - | 0.25 | - | - | - | Sk  |   |
| Diethanolamine  | 2,2'-Iminodiethanol | 111-42-2 | 3 | 13 | - | - | - | -  |   |
| Diethyl ketone | 3-Pentanone | 96-22-0 | 200 | 705 | - | - | - | -  |   |
| Diethyl phthalate |   | 84-66-2 | - | 5 | - | - | - | -  |   |
| Diethylamine  |   | 109-89-7 | 10 | 30 | 25 | 75 | - | -  |   |
| 2-Diethylaminoethanol  |   | 100-37-8 | 10 | 48 | - | - | - | Sk  |   |
| Diethylene triamine | 2,2'-Diaminodiethylamine1,4,7-Tri-(aza)-heptane | 111-40-0 | 1 | 4.2 | - | - | - | Sk  |   |
| Difluorodibromomethane | Dibromodifluoromethane | 75-61-6 | 100 | 858 | - | - | - | -  |   |
| Diglycidyl ether (DGE) | DGEbis(2,3-Epoxy propyl) ether | 2238-07-5 | 0.1 | 0.53 | - | - | - | -  |   |
| Diisobutyl ketone | 2,6-Dimethyl-4-heptanone | 108-83-8 | 25 | 145 | - | - | - | -  |   |
| Diisopropylamine |   | 108-18-9 | 5 | 21 | - | - | - | Sk  |   |
| Dimethyl acetamide |   | 127-19-5 | 10 | 36 | - | - | - | Sk  |   |
| Dimethyl ether |   | 115-10-6 | 400 | 760 | 500 | 950 | - | -  |   |
| Dimethyl sulphate |   | 77-78-1 | 0.1 | 0.52 | - | - | 2 | Sk  |   |
| Dimethylamine |   | 124-40-3 | 2 | 3.8 | 6 | 11 | - | -  |   |
| Dimethylaminoethanol |   | 108-01-0 | 2 | 7.4 | 6 | 22 | - |   |   |
| N,N-Dimethylaniline |   | 121-69-7 | 5 | 25 | 10 | 50 | - | Sk  |   |
| N,N-Dimethylethylamine | N,N-Dimethylethanamine | 598-56-1 | 10 | 30 | 15 | 45 | - | -  |   |
| Dimethylformamide |   | 68-12-2 | 10 | 30 | - | - | - | Sk  |   |
| 1,1-Dimethylhydrazine |   | 57-14-7 | 0.01 | 0.025 | - | - | 2 | Sk  |   |
| Dimethylphthalate |   | 131-11-3 | - | 5 | - | - | - | -  |   |
| Dinitolmide | 3,5-Dinitro-o-toluamideZoalene | 148-01-6 | - | 5 | - | - | - | -  |   |
| m-Dinitrobenzene |   | 99-65-0 | 0.15 | 1 | - | - | - | Sk  |   |
| o-Dinitrobenzene |   | 528-29-0 | 0.15 | 1 | - | - | - | Sk  |   |
| p-Dinitrobenzene |   | 100-25-4 | 0.15 | 1 | - | - | - | Sk  |   |
| Dinitro-o-cresol | DNOC2-Methyl-4,6-dinitrophenol | 534-52-1 | - | 0.2 | - | - | - | Sk  |   |
| Dinitrotoluene  |   | 25321-14-6 | - | 1.5 | - | - | - | Sk  |   |
| 1,4-Dioxane | Diethylene dioxide | 123-91-1 | 10 | 36 | - | - | - | Sk  |   |
| Dioxathion | Delnav | 78-34-2 | - | 0.2 | - | - | - | Sk  |   |
| Diphenylamine |   | 122-39-4 | - | 10 | - | - | - | -  |   |
| Dipropyl ketone | 4-Heptanone | 123-19-3 | 50 | 233 | - | - | - | -  |   |
| Diquat | Diquat dibromide (ISO) | 85-00-7 | - | 0.5 | - | - | - | -  |   |
| Di-sec-octyl phthalate | DOPDi (2-ethylhexyl) phthalatebis(2-Ethylhexyl) phthalate | 117-81-7 | - | 5 | - | 10 | - | -  |   |
| Disulfiram | Tetraethyl thiuram disulphide | 97-77-8 | - | 2 | - | - | - | -  |   |
| Disulfoton | Disyston | 298-04-4 | - | 0.1 | - | - | - | -  |   |
| 2,6-Di-tert-butyl-p-cresol |   | 128-37-0 | - | 10 | - | - | - | -  |   |
| Diuron |   | 330-54-1 | - | 10 | - | - | - | -  |   |
| Divinyl benzene |   | 1321-74-0 | 10 | 53 | - | - | - | -  |   |
| Emery (dust)  |   | 1302-74-5 | - | 10  | - | - | - | -  | (a) |
| Endosulfan | Thiodan | 115-29-7 | - | 0.1 | - | - | - | Sk  |   |
| Endrin |   | 72-20-8 | - | 0.1 | - | - | - | Sk  |   |
| Enflurane | 2-Chloro-1,1,2-trifluoroethyl difluoromethyl ether | 13838-16-9 | 0.5 | 3.8 | - | - | - | -  |   |
| Epichlorohydrin | 1-Chloro-2,3-epoxy-propane | 106-89-8 | 2 | 7.6 | - | - | 2 | Sk  |   |
| EPN  | O-Ethyl-O-(4-nitrophenyl) phenylthiophosphonate | 2104-64-5 | - | 0.5 | - | - | - | Sk  |   |
| Ethanolamine | 2-Aminoethanol | 141-43-5 | 3 | 7.5 | 6 | 15 | - | -  |   |
| Ethion | Nialate | 563-12-2 | - | 0.4 | - | - | - | Sk  |   |
| 2-Ethoxyethanol | Ethyl glycolEthylene glycol, monoethyl etherGlycol, monoethyl etherCellosolve | 110-80-5 | 5 | 18 | - | - | - | Sk  |   |
| 2-Ethoxyethyl acetate | Cellosolve acetateGlycol, monoethyl ether acetateEthylene glycol, monoethyl ether acetateEthyl glycol acetate | 111-15-9 | 5 | 27 | - | - | - | Sk  |   |
| Ethyl acetate | Acetic acid ethyl esterAcetic ester | 141-78-6 | 200 | 720 | 400 | 1440 | - | -  |   |
| Ethyl acrylate | Acrylic acid,ethyl ester | 140-88-5 | 5 Peak limitation | 20 Peak limitation | - | - | - | Sen  |   |
| Ethyl alcohol | Ethanol | 64-17-5 | 1000 | 1880 | - | - | - | -  |   |
| Ethyl benzene |   | 100-41-4 | 100 | 434 | 125 | 543 | - | -  |   |
| Ethyl bromide | Bromoethane | 74-96-4 | 5 | 22 | - | - | 3 | Sk  |   |
| Ethyl butyl ketone | 3-Heptanone | 106-35-4 | 50 | 234 | - | - | - | -  |   |
| Ethyl chloride | Chloroethane | 75-00-3 | 1000 | 2640 | - | - | - | -  |   |
| Ethyl ether | Diethyl ether | 60-29-7 | 400 | 1210 | 500 | 1520 | - | -  |   |
| Ethyl formate | Formic acid, ethyl ester | 109-94-4 | 100 | 303 | - | - | - | -  |   |
| Ethyl mercaptan | Ethanethiol | 75-08-1 | 0.5 | 1.3 | - | - | - | -  |   |
| Ethyl silicate | Tetraethyl orthosilicate | 78-10-4 | 10 | 85 | - | - | - | -  |   |
| Ethylamine |   | 75-04-7 | 2 | 3.8 | 6 | 11 | - | -  |   |
| Ethylene chlorohydrin | 2-Chloroethanol | 107-07-3 | 1 Peak limitation | 3.3 Peak limitation | - | - | - | Sk  |   |
| Ethylene dichloride | 1,2-Dichloroethane | 107-06-2 | 10 | 40 | - | - | - | -  |   |
| Ethylene glycol (particulate) | Ethane-1,2-diol | 107-21-1 | - | 10 | - | - | - | Sk  |   |
| Ethylene glycol (vapour) | Ethane-1,2-diol | 107-21-1 | 20 | 52 | 40 | 104 | - | Sk  |   |
| Ethylene glycol dinitrate | Ethylene dinitrateGlycol dinitrateNitroglycolEGDN | 628-96-6 | 0.05 | 0.31 | - | - | - | Sk  |   |
| Ethylene oxide | Oxirane | 75-21-8 | 1 | 1.8 | - | - | 2 | - |   |
| Ethylenediamine | 1,2-Diaminoethane | 107-15-3 | 10 | 25 | - | - | - | Sen  |   |
| Ethylenimine | Aziridine | 151-56-4 | 0.5 | 0.88 | - | - | 3 | Sk |   |
| Ethylidene norbornene |   | 16219-75-3 | 5 Peak limitation | 25 Peak limitation | - | - | - | -  |   |
| N-Ethylmorpholine |   | 100-74-3 | 5 | 24 | - | - | - | Sk  |   |
| Fenamiphos | Nemacur | 22224-92-6 | - | 0.1 | - | - | - | Sk  |   |
| Fensulfothion | Dasanit | 115-90-2 | - | 0.1 | - | - | - | -  |   |
| Fenthion | BaytexLebaycid | 55-38-9 | - | 0.2 | - | - | - | Sk  |   |
| Ferbam |   | 14484-64-1 | - | 10 | - | - | - | -  |   |
| Ferrovanadium dust |   | 12604-58-9 | - | 1 | - | 3 | - | -  |   |
| Fluorides (as F) |   |   | - | 2.5 | - | - | - | -  |   |
| Fluorine |   | 7782-41-4 | 1 | 1.6 | 2 | 3.1 | - | -  |   |
| Fonofos | Dyfonate | 944-22-9 | - | 0.1 | - | - | - | Sk  |   |
| Formaldehyde  |   | 50-00-0 | 1 | 1.2 | 2 | 2.5 | 2 | Sen  |   |
| Formamide |   | 75-12-7 | 10 | 18 | - | - | - | Sk  |   |
| Formic acid |   | 64-18-6 | 5 | 9.4 | 10 | 19 | - | -  |   |
| Fumed silica (respirable dust) |   | 7631-86-9 | - | 2 | - | - | - | -  | See Silica - Amorphous  |
| Furfural | 2-Furaldehyde | 98-01-1 | 2 | 7.9 | - | - | - | Sk  |   |
| Furfuryl alcohol |   | 98-00-0 | 10 | 40 | 15 | 60 | - | Sk  |   |
| Germanium tetrahydride | Germane | 7782-65-2 | 0.2 | 0.63 | - | - | - | -  |   |
| Glasswool |   |   |  - | 0.5 f/ml | - | - | - | - | See Synthetic mineral fibres (f) |
| Glutaraldehyde | 1,5-Pentanedial | 111-30-8 | 0.1 Peak limitation | 0.41 Peak limitation | - | - | - | Sen  |   |
| Glycerin mist  |   | 56-81-5 | - | 10 | - | - | - | -  | (a) |
| Glycidol | 2,3-Epoxy-1-propanol | 556-52-5 | 25 | 76 | - | - | - | -  |   |
| Grain dust (oats,wheat, barley) |   |   | - | 4 | - | - | - | -  |   |
| Graphite (all forms except fibres) (respirable dust) (natural & synthetic) |   | 7782-42-5 | - | 3  | - | - | - | -  | (e) |
| Hafnium |   | 7440-58-6 | - | 0.5 | - | - | - | -  |   |
| Halothane | 1,1,1-Trifluoro-2-chloro-2-bromoethane | 151-67-7 | 0.5 | 4.1 | - | - | - | -  |   |
| Heptachlor  |   | 76-44-8 | - | 0.5 | - | - | - | Sk  |   |
| Heptane (n-Heptane) |   | 142-82-5 | 400 | 1640 | 500 | 2050 | - | -  |   |
| Hexachlorobutadiene |   | 87-68-3 | 0.02 | 0.21 | - | - | 3 | Sk |   |
| Hexachlorocyclopentadiene |   | 77-47-4 | 0.01 | 0.11 | - | - | - | -  |   |
| Hexachloroethane |   | 67-72-1 | 1 | 9.7 | - | - | 3 | - |   |
| Hexachloronaphthalene |   | 1335-87-1 | - | 0.2 | - | - | - | Sk  |   |
| Hexafluoroacetone |   | 684-16-2 | 0.1 | 0.68 | - | - | - | Sk  |   |
| Hexamethylene diisocyanate | HDI | 822-06-0 | See Isocyanates, all  |  |
| Hexane (n-Hexane) |   | 110-54-3 | 20 | 72 | - | - | - | -  |   |
| Hexane, other isomers |   |   | 500 | 1760 | 1000 | 3500 | - | -  |   |
| sec-Hexyl acetate | 1,3-Dimethyl butyl acetate | 108-84-9 | 50 | 295 | - | - | - | -  |   |
| Hexylene glycol | 2-Methylpentane-2,4-diol | 107-41-5 | 25 Peak limitation | 121 Peak limitation | - | - | - | -  |   |
| Hydrazine | Diamine | 302-01-2 | 0.01 | 0.013 | - | - | 2 | Sk;Sen |   |
| Hydrogen bromide |   | 10035-10-6 | 3 Peak limitation | 9.9 Peak limitation | - | - | - | -  |   |
| Hydrogen chloride | Hydrochloric acid | 7647-01-0 | 5 Peak limitation | 7.5 Peak limitation | - | - | - | -  |   |
| Hydrogen cyanide  | Hydrocyanic acid | 74-90-8 | 10 Peak limitation | 11 Peak limitation | - | - | - | Sk  |   |
| Hydrogen fluoride (as F) |   | 7664-39-3 | 3 Peak limitation | 2.6 Peak limitation | - | - | - | -  |   |
| Hydrogen peroxide |   | 7722-84-1 | 1 | 1.4 | - | - | - | -  |   |
| Hydrogen selenide (as Se) |   | 7783-07-5 | 0.05 | 0.16 | - | - | - | -  |   |
| Hydrogen sulphide |   | 7783-06-4 | 10 | 14 | 15 | 21 | - | -  |   |
| Hydrogenated terphenyls |   | 37275-59-5 | 0.5 | 4.9 | - | - | - | -  |   |
| Hydroquinone | p-Dihydroxybenzene | 123-31-9 | - | 2 | - | - | - | -  |   |
| 2-Hydroxypropyl acrylate |   | 999-61-1 | 0.5 | 2.8 | - | - | - | Sk  |   |
| Indene |   | 95-13-6 | 10 | 48 | - | - | - | -  |   |
| Indium & compounds (as In) |   | 7440-74-6 | - | 0.1 | - | - | - | -  |   |
| Iodine |   | 7553-56-2 | 0.1 Peak limitation | 1 Peak limitation | - | - | - | -  |   |
| Iodoform |   | 75-47-8 | 0.6 | 10 | - | - | - | -  |   |
| Iron oxide fume (Fe2O3) (as Fe) |   | 1309-37-1 | - | 5 | - | - | - | -  |  |
| Iron pentacarbonyl (as Fe) |   | 13463-40-6 | 0.1 | 0.23 | 0.2 | 0.45 | - | -  |   |
| Iron salts, soluble (as Fe) |   |   | - | 1 | - | - | - | -  |   |
| Isoamyl acetate | Isopentyl acetate | 123-92-2 | 50 | 270 | 100 | 541 | - | -  |   |
| Isoamyl alcohol | 3-Methylbutan-1-ol | 123-51-3 | 100 | 361 | 125 | 452 | - | -  |   |
| Isobutyl acetate |   | 110-19-0 | 150 | 713 |   |   | - | -  |   |
| Isobutyl alcohol | 2-Methylpropan-1-oliso-Butanol | 78-83-1 | 50 | 152 | - | - | - | -  |   |
| Isocyanates, all (as-NCO) |   |   | - | 0.02 | - | 0.07 | - | Sen  |   |
| Isooctyl alcohol |   | 26952-21-6 | 50 | 266 | - | - | - | Sk  |   |
| Isophorone | 3,5,5-Trimethylcyclohex-2-enone | 78-59-1 | 5 Peak limitation | 28 Peak limitation | - | - | - | -  |   |
| Isophorone diisocyanate |   | 4098-71-9 | See Isocyanates, all  |  |
| Isopropoxyethanol |   | 109-59-1 | 25 | 106 | - | - | - | -  |   |
| Isopropyl acetate |   | 108-21-4 | 250 | 1040 | 310 | 1290 | - | -  |   |
| Isopropyl alcohol | Propan-2-ol | 67-63-0 | 400 | 983 | 500 | 1230 | - | -  |   |
| Isopropyl ether | Diisopropyl ether | 108-20-3 | 250 | 1040 | 310 | 1300 | - | -  |   |
| Isopropyl glycidyl ether (IGE) | IGE2,3-Epoxypropyl isopropyl ether | 4016-14-2 | 50 | 238 | 75 | 356 | - | -  |   |
| Isopropylamine | 2-Aminopropane | 75-31-0 | 5 | 12 | 10 | 24 | - | -  |   |
| N-Isopropylaniline |   | 768-52-5 | 2 | 11 | - | - | - | Sk  |   |
| Kaolin  |   | 1332-58-7 | - | 10 | - | - | - | -  | (a) |
| Ketene |   | 463-51-4 | 0.5 | 0.86 | 1.5 | 2.6 | - | -  |   |
| Lead arsenate (as Pb3(AsO4)2) |   | 3687-31-8 | - | 0.15 | - | - | - | -  |   |
| Lead chromate (as Cr)  |   | 7758-97-6 | - | 0.05 | - | - | 2 | -  |   |
| Lead, inorganic dusts & fumes (as Pb) |   | 7439-92-1 | - | 0.15 | - | - | - | -  | (f) |
| Lindane | gamma-BHC (ISO)Gammexanegamma-HCHgamma-Hexachlorocyclohexane | 58-89-9 | 0.008 | 0.1 | - | - | - | Sk  |   |
| Lithium hydride |   | 7580-67-8 | - | 0.025 | - | - | - | -  |   |
| LPG (liquified petroleum gas) |   | 68476-85-7 | 1000 | 1800 | - | - | - | -  |   |
| Magnesite  |   | 546-93-0 | - | 10 | - | - | - | -  | (a) |
| Magnesium oxide (fume) |   | 1309-48-4 | - | 10 | - | - | - | -  |   |
| Malathion | Maldison | 121-75-5 | - | 10 | - | - | - | Sk  |   |
| Maleic anhydride |   | 108-31-6 | 0.25 | 1 | - | - | - | Sen  |   |
| Manganese cyclopenta-dienyl tricarbonyl (as Mn) | Tricarbonyl (eta cyclopentadienyl) manganese | 12079-65-1 | - | 0.1 | - | - | - | Sk  |   |
| Manganese, dust & compounds (as Mn) |   | 7439-96-5 | - | 1 | - | - | - | -  |   |
| Manganese, fume (as Mn) | Manganese tetroxide | 7439-96-5 | - | 1 | - | 3 | - | -  |   |
| Man-made mineral fibres |   |   | - | 0.5 f/ml | - | - | - | -  | See Synthetic mineral fibres (f) |
| Mercury, alkyl compounds (as Hg) |   |   | - | 0.01 | - | 0.03 | - | Sk  |   |
| Mercury, aryl compounds (as Hg) |   |   | - | 0.1 | - | - | - | Sk  |   |
| Mercury, elemental vapour (as Hg) |   | 7439-97-6 | 0.003 | 0.025 | - | - | - | -  |   |
| Mercury, inorganic divalent compounds (as Hg) |   |   | 0.003 | 0.025 | - | - | - | -  |   |
| Mercury, inorganic monovalent compounds (as Hg) |   |   | - | 0.1 | - | - | - | Sk  |   |
| Mesityl oxide | 4-Methylpent-3-en-2-one | 141-79-7 | 15 | 60 | 25 | 100 | - | -  |   |
| Methacrylic acid |   | 79-41-4 | 20 | 70 | - | - | - | -  |   |
| Methomyl | Lannate | 16752-77-5 | - | 2.5 | - | - | - | -  |   |
| 1-Methoxy-2-propanol acetate |   | 108-65-6 | 50 | 274 | 100 | 548 | - | Sk  |   |
| Methoxychlor | 2,2-bis(p-Methoxyphenyl)-1,1,1-trichloroethaneDMDT | 72-43-5 | - | 10 | - | - | - | -  |   |
| 2-Methoxyethanol | Methyl cellosolveMethyl gylcolGlycol monomethyl etherEthylene glycol monomethyl ether | 109-86-4 | 5 | 16 | - | - | - | Sk  |   |
| 2-Methoxyethyl acetate | Ethylene glycol monomethyl ether acetateGlycol monomethyl ether acetateMethyl glycol acetateMethyl cellosolve acetate | 110-49-6 | 5 | 24 | - | - | - | Sk  |   |
| (2-Methoxymethylethoxy) propenol | Dipropylene glycol (mono) methyl ether | 34590-94-8 | 50 | 308 | - | - | - | Sk  |   |
| 4-Methoxyphenol | Mequinol (INN) | 150-76-5 | - | 5 | - | - | - | -  |   |
| Methyl 2-cyanoacrylate |   | 137-05-3 | 2 | 9.1 | 4 | 18 | - | -  |   |
| Methyl acetate |   | 79-20-9 | 200 | 606 | 250 | 757 | - | -  |   |
| Methyl acetylene | Propyne | 74-99-7 | 1000 | 1640 | - | - | - | -  |   |
| Methyl acetylene-propadiene mixture (MAPP) |   |   | 1000 | 1640 | 1250 | 2050 | - | -  |   |
| Methyl acrylate | Acrylic acid, methyl ester | 96-33-3 | 10 | 35 | - | - | - | Sk;Sen  |   |
| Methyl alcohol | Methanol | 67-56-1 | 200 | 262 | 250 | 328 | - | Sk  |   |
| N-Methyl aniline |   | 100-61-8 | 0.5 | 2.2 | - | - | - | Sk  |   |
| Methyl bromide | Bromomethane | 74-83-9 | 5 | 19 | - | - | - | Sk  |   |
| Methyl chloride | Chloromethane | 74-87-3 | 50 | 103 | 100 | 207 | - | -  |   |
| Methyl demeton | Demeton-O-methyl plus demeton-S-methylMetasystox | 8022-00-2 | - | 0.5 | - | - | - | Sk  |   |
| Methyl ethyl ketone (MEK) | MEK2-Butanone | 78-93-3 | 150 | 445 | 300 | 890 | - | -  |   |
| Methyl ethyl ketone peroxide | MEKP | 1338-23-4 | 0.2 Peak limitation | 1.5 Peak limitation | - | - | - | -  |   |
| Methyl formate | Formic acid, methyl ester | 107-31-3 | 100 | 246 | 150 | 368 | - | -  |   |
| Methyl hydrazine |   | 60-34-4 | 0.01 | 0.019 | - | - | 3 | Sk  |   |
| Methyl iodide | Iodomethane | 74-88-4 | 2 | 12 | - | - | 3 | Sk  |   |
| Methyl isoamyl ketone | Isoamyl methyl ketone5-Methyl-2-hexanone | 110-12-3 | 50 | 234 | - | - | - | -  |   |
| Methyl isobutyl carbinol | Methyl amyl alcohol | 108-11-2 | 25 | 104 | 40 | 167 | - | Sk  |   |
| Methyl isobutyl ketone | MIBK4-Methyl-2-pentanoneHexone | 108-10-1 | 50 | 205 | 75 | 307 | - | -  |   |
| Methyl isocyanate |   | 624-83-9 | See Isocyanates, all  |  |
| Methyl isopropyl ketone | 3-Methyl-2-butanone | 563-80-4 | 200 | 705 | - | - | - | -  |   |
| Methyl mercaptan | Methanethiol | 74-93-1 | 0.5 | 0.98 | - | - | - | -  |   |
| Methyl methacrylate | Methacrylic acid, methyl ester | 80-62-6 | 50 | 208 | 100 | 416 | - | -  |   |
| Methyl n-amyl ketone | 2-HeptanoneHeptan-2-one | 110-43-0 | 50 | 233 | - | - | - | -  |   |
| Methyl n-butyl ketone | 2-Hexanone | 591-78-6 | 5 | 20 | - | - | - | Sk  |   |
| Methyl parathion |   | 298-00-0 | - | 0.2 | - | - | - | Sk  |   |
| Methyl propyl ketone | 2-Pentanone | 107-87-9 | 200 | 705 | 250 | 881 | - | -  |   |
| Methyl silicate | Tetramethyl orthosilicate | 681-84-5 | 1 | 6 | - | - | - | -  |   |
| alpha-Methyl styrene | 2-Phenylpropene | 98-83-9 | 50 | 242 | 100 | 483 | - | -  |   |
| 1-Methyl-2-pyrrolidone |   | 872-50-4 | 25 | 103 | 75 | 309 | - | Sk  |   |
| Methylacrylonitrile |   | 126-98-7 | 1 | 2.7 | - | - | - | Sk  |   |
| Methylal | Dimethoxymethane | 109-87-5 | 1000 | 3110 | - | - | - | -  |   |
| Methylamine  |   | 74-89-5 | 10 | 13 | - | - | - | -  |   |
| Methylcyclohexane |   | 108-87-2 | 400 | 1610 | - | - | - | -  |   |
| Methylcyclohexanol |   | 25639-42-3 | 50 | 234 | - | - | - | -  |   |
| o-Methylcyclohexanone |   | 583-60-8 | 50 | 229 | 75 | 344 | - | Sk  |   |
| Methylcyclopentadienyl manganese tricarbonyl (as Mn) | Tricarbonyl (methylcyclopentadienyl)-manganese | 12108-13-3 | - | 0.2 | - | - | - | Sk  |   |
| 4,4’-Methylene bis(2-chloroaniline)  | MOCAMBOCA2,2'-Dichloro-4,4'-methylenedianiline | 101-14-4 | 0.02 | 0.22 | - | - | 2 | Sk |   |
| Methylene bis(4-cyclo-hexylisocyanate) |   | 5124-30-1 | See Isocyanates, all  |  |
| Methylene bisphenyl isocyanate (MDI) | Diphenylmethane diisocyanateMDI | 101-68-8 | See Isocyanates, all |  |
| Methylene chloride | Dichloromethane | 75-09-2 | 50 | 174 | - | - | 3 | Sk  |   |
| 4,4'-Methylene dianiline | DADPMDDMp,p'-DiaminodiphenylmethaneMDA | 101-77-9 | 0.1 | 0.81 | - | - | 2 | Sk  |   |
| 5-Methylheptan-3-one  | Ethyl amyl ketone | 541-85-5 | 10 | 53 | 20 | 107 | - | -  |   |
| Methyl-tert butyl ether |   | 1634-04-4 | 25 | 92 | 75 | 275 | - | -  |   |
| Metribuzin | Sencor | 21087-64-9 | - | 5 | - | - | - | -  |   |
| Mevinphos | Phosdrin | 7786-34-7 | 0.01 | 0.092 | 0.03 | 0.27 | - | Sk  |   |
| Mica |   | 12001-26-2 | - | 2.5  | - | - | - | -  |   |
| Mineral turpentine |   |   | - | 480  | - | - | - | -  |  |
| Molybdenum, insoluble compounds (as Mo) |   | 7439-98-7 | - | 10 | - | - | - | -  |   |
| Molybdenum, soluble compounds (as Mo) |   | 7439-98-7 | - | 5 | - | - | - | -  |   |
| Monochloroacetic acid |   | 79-11-8 | 0.3 | 1.2 | - | - | - | Sk  |   |
| Monocrotophos | Azodrin | 6923-22-4 | - | 0.25 | - | - | - | -  |   |
| Morpholine |   | 110-91-8 | 20 | 71 | - | - | - | Sk  |   |
| Naled | DibromDimethyl-1,2-dibromo-2,2-dichloroethylphosphate | 300-76-5 | - | 3 | - | - | - | Sk  |   |
| Naphthalene |   | 91-20-3 | 10 | 52 | 15 | 79 | - | -  |   |
| Nickel carbonyl (as Ni) | Tetracarbonyl nickel | 13463-39-3 | 0.05 | 0.12 | - | - | - | -  |   |
| Nickel sulphide roasting (fume & dust) (as Ni) |   |   | - | 1 | - | - | 1 | Sen |   |
| Nickel, metal |   | 7440-02-0 | - | 1 | - | - | - | Sen  |   |
| Nickel, soluble compounds (as Ni) |   | 7440-02-0 | - | 0.1 | - | - | - | Sen  |   |
| Nicotine |   | 54-11-5 | - | 0.5 | - | - | - | Sk  |   |
| Nitrapyrin | N-Serve2-Chloro-6-(trichloromethyl) pyridine | 1929-82-4 | - | 10 | - | 20 | - | -  |   |
| Nitric acid |   | 7697-37-2 | 2 | 5.2 | 4 | 10 | - | -  |   |
| Nitric oxide | Nitrogen monoxide | 10102-43-9 | 25 | 31 | - | - | - | -  |   |
| p-Nitroaniline |   | 100-01-6 | - | 3 | - | - | - | Sk  |   |
| Nitrobenzene |   | 98-95-3 | 1 | 5 | - | - | - | Sk  |   |
| p-Nitrochlorobenzene | p-Chloronitrobenzene | 100-00-5 | 0.1 | 0.64 | - | - | - | Sk  |   |
| Nitroethane |   | 79-24-3 | 100 | 307 | - | - | - | -  |   |
| Nitrogen dioxide |   | 10102-44-0 | 3 | 5.6 | 5 | 9.4 | - | -  |   |
| Nitrogen trifluoride |   | 7783-54-2 | 10 | 29 | - | - | - | -  |   |
| Nitroglycerin (NG) | NGGlyceryl trinitrate | 55-63-0 | 0.05 | 0.46 | - | - | - | Sk  |   |
| Nitromethane |   | 75-52-5 | 20 | 50 | - | - | - | -  |   |
| 1-Nitropropane |   | 108-03-2 | 25 | 91 | - | - | - | -  |   |
| 2-Nitropropane |   | 79-46-9 | 10 | 36 | - | - | 2 | -  |   |
| Nitrotoluene |   | 88-72-299-08-199-99-0 | 2 | 11 | - | - | - | Sk  |   |
| Nitrous oxide | Dinitrogen monoxideLaughing gas | 10024-97-2 | 25 | 45 | - | - | - | -  |   |
| Nonane |   | 111-84-2 | 200 | 1050 | - | - | - | -  |   |
| Octachloronaphthalene |   | 2234-13-1 | - | 0.1 | - | 0.3 | - | Sk  |   |
| Octane |   | 111-65-9 | 300 | 1400 | 375 | 1750 | - | -  |   |
| Oil mist, refined mineral |   | 8012-95-1 | - | 5 | - | - | - | -  |   |
| Osmium tetroxide (as Os) |   | 20816-12-0 | 0.0002 | 0.0016 | 0.0006 | 0.0047 | - | -  |   |
| Oxalic acid |   | 144-62-7 | - | 1 | - | 2 | - | -  |   |
| 2,2'-Oxybis[ethanol] | Diethylene glycol | 111-46-6 | 23 | 100 | - | - | - | -  |   |
| Oxygen difluoride |   | 7783-41-7 | 0.05 Peak limitation | 0.11 Peak limitation | - | - | - | -  |   |
| Ozone |   | 10028-15-6 | 0.1 Peak limitation | 0.2 Peak limitation | - | - | - | -  |   |
| Paraffin wax (fume) |   | 8002-74-2 | - | 2 | - | - | - | -  |   |
| Paraquat (respirable sizes) | Paraquat dichloride (ISO) | 4685-14-7 | - | 0.1 | - | - | - | -  |   |
| Parathion |   | 56-38-2 | - | 0.1 | - | - | - | Sk  |   |
| PCBs (42% Chlorine) | Polychlorinated biphenylsPolychlorobiphenylsChlorobiphenyl | 53469-21-9 | - | 1 | - | 2 | 2 | Sk |   |
| PCBs (54% Chlorine) | Chlorobiphenyl | 11097-69-1 | - | 0.5 | - | 1 | 2 | Sk  |   |
| Pentaborane |   | 19624-22-7 | 0.005 | 0.013 | 0.015 | 0.039 | - | -  |   |
| Pentachloronaphthalene |   | 1321-64-8 | - | 0.5 | - | - | - | -  |   |
| Pentachloronitrobenzene |   | 82-68-8 | - | 0.5 | - | - | - | -  |   |
| Pentachlorophenol |   | 87-86-5 | - | 0.5 | - | - | - | Sk  |   |
| Pentaerythritol  |   | 115-77-5 | - | 10 | - | - | - | -  | (a) |
| Pentane |   | 109-66-0 | 600 | 1770 | 750 | 2210 | - | -  |   |
| Perchloroethylene | Tetrachloroethylene | 127-18-4 | 50 | 340 | 150 | 1020 | 3 | - |   |
| Perchloromethyl mercaptan |   | 594-42-3 | 0.1 | 0.76 | - | - | - | -  |   |
| Perchloryl fluoride |   | 7616-94-6 | 3 | 13 | 6 | 25 | - | -  |   |
| Perfluoroisobutylene | Octafluoroisobutylene | 382-21-8 | 0.01 Peak limitation | 0.082 Peak limitation | - | - | - | -  |   |
| Perlite dust  |   | 93763-70-3 | - | 10 | - | - | - | -  | (a) |
| Petrol (gasoline) |   |   | - | 900 | - | - | - | -  |  |
| Phenol |   | 108-95-2 | 1 | 4 | - | - | - | Sk  |   |
| Phenothiazine |   | 92-84-2 | - | 5 | - | - | - | Sk  |   |
| Phenyl ether (vapour) | Diphenyl ether | 101-84-8 | 1 | 7 | 2 | 14 | - | -  |   |
| Phenyl glycidyl ether (PGE) | Phenyl-2,3-epoxypropyl etherPGE | 122-60-1 | 1 | 6.1 | - | - | - | Sen  |   |
| Phenyl mercaptan | Benzenethiol | 108-98-5 | 0.5 | 2.3 | - | - | - | -  |   |
| m-Phenylenediamine | 1,3-Benzenediamine | 108-45-2 | - | 0.1 | - | - | - | Sk;Sen  |   |
| o-Phenylenediamine | 1,2-Benzenediamine | 95-54-5 | - | 0.1 | - | - | 3 | Sen  |   |
| p-Phenylenediamine | 1,4-Benzenediamine | 106-50-3 | - | 0.1 | - | - | - | Sen  |   |
| Phenylhydrazine |   | 100-63-0 | 0.1 | 0.44 | - | - | 2 | Sk;Sen |   |
| Phenylphosphine |   | 638-21-1 | 0.05 Peak limitation | 0.23 Peak limitation | - | - | - | -  |   |
| Phorate | Thimet | 298-02-2 | - | 0.05 | - | 0.2 | - | Sk  |   |
| Phosgene | Carbonyl chloride | 75-44-5 | 0.02 | 0.08 | 0.06 | 0.25 | - | -  |   |
| Phosphine |   | 7803-51-2 | 0.3 | 0.42 | 1 | 1.4 | - | -  |   |
| Phosphoric acid | Orthophosphoric acid | 7664-38-2 | - | 1 | - | 3 | - | -  |   |
| Phosphorus (yellow) |   | 7723-14-0 | - | 0.1 | - | - | - | -  |   |
| Phosphorus oxychloride | Phosphoryl trichloride | 10025-87-3 | 0.1 | 0.63 | - | - | - | -  |   |
| Phosphorus pentachloride |   | 10026-13-8 | 0.1 | 0.85 | - | - | - | -  |   |
| Phosphorus pentasulphide | Diphosphorous pentasulphide | 1314-80-3 | - | 1 | - | 3 | - | -  |   |
| Phosphorus trichloride |   | 7719-12-2 | 0.2 | 1.1 | 0.5 | 2.8 | - | -  |   |
| Phthalic anhydride |   | 85-44-9 | 1 | 6.1 | - | - | - | Sen  |   |
| m-Phthalodinitrile |   | 626-17-5 | - | 5 | - | - | - | -  |   |
| Picloram | Tordon | 1918-02-1 | - | 10 | - | - | - | -  |   |
| Picric acid | 2,4,6-Trinitrophenol | 88-89-1 | - | 0.1 | - | - | - | -  |   |
| Pindone | Pival2-Pivalyl-1,3-indandione | 83-26-1 | - | 0.1 | - | - | - | -  |   |
| Piperazine dihydrochloride |   | 142-64-3 | - | 5 | - | - | - | -  |   |
| Piperidine |   | 110-89-4 | 1 | 3.5 | - | - | - | Sk  |   |
| Platinum, metal |   | 7440-06-4 | - | 1 | - | - | - | -  |   |
| Platinum, soluble salts (as Pt) |   |   | - | 0.002 | - | - | - | Sen  |   |
| Portland cement  |   | 65997-15-1 | - | 10 | - | - | - | -  | (a) |
| Potassium hydroxide |   | 1310-58-3 | - | 2 Peak limitation | - | - | - | -  |   |
| Potassium Persulfate | Potassium Persulphate | 7727-21-1 | - | 0.01 Peak Limitation | - | - | - | -  |   |
| Precipitated silica  |   | 112926-00-8 | - | 10 | - | - | - | -  | See Silica - Amorphous (a) |
| Propane-1,2-diol total: (vapour & particulates) |   | 57-55-6 | 150 | 474 |   |   | - |   |   |
| Propane-1,2-diol: particulates only |   | 57-55-6 | - | 10 | - | - | - | -  |   |
| Propargyl alcohol | Prop-2-yn-1-ol | 107-19-7 | 1 | 2.3 | - | - | - | Sk  |   |
| beta-Propiolactone |   | 57-57-8 | 0.5 | 1.5 | - | - | 2 | - |   |
| Propionic acid |   | 79-09-4 | 10 | 30 | - | - | - | -  |   |
| Propoxur | PHCBaygonArprocarb | 114-26-1 | - | 0.5 | - | - | - | -  |   |
| Propranolol |   | 525-66-6 | 0.188 | 2 | 0.565 | 6 | - |   |   |
| n-Propyl acetate |   | 109-60-4 | 200 | 835 | 250 | 1040 | - | -  |   |
| Propyl alcohol | Propan-1-ol | 71-23-8 | 200 | 492 | 250 | 614 | - | Sk  |   |
| n-Propyl nitrate |   | 627-13-4 | 25 | 107 | 40 | 172 | - | -  |   |
| Propylene dichloride | 1,2-Dichloropropane | 78-87-5 | 75 | 347 | 110 | 508 | - | -  |   |
| Propylene glycol dinitrate |   | 6423-43-4 | 0.05 | 0.34 | - | - | - | Sk  |   |
| Propylene glycol monomethyl ether | 1-Methoxypropan-2-ol | 107-98-2 | 100 | 369 | 150 | 553 | - | -  |   |
| Propylene imine |   | 75-55-8 | 2 | 4.7 | - | - | 2 | Sk |   |
| Propylene oxide | 1,2-Epoxypropane | 75-56-9 | 20 | 48 | - | - | 2 | - |   |
| Pyrethrum | Pyrethrins (ISO) | 8003-34-7 | - | 5 | - | - | - | Sen  |   |
| Pyridine |   | 110-86-1 | 5 | 16 | - | - | - | -  |   |
| Quartz (respirable dust) |   | 14808-60-7 | - | 0.1 | - | - | - | -  | See Silica - Crystalline  |
| Quinone | p-Benzoquinone | 106-51-4 | 0.1 | 0.44 | - | - | - | -  |   |
| Resorcinol | m-Dihydroxybenzene | 108-46-3 | 10 | 45 | 20 | 90 | - | -  |   |
| Rhodium, insoluble compounds (as Rh) |   | 7440-16-6 | - | 1 | - | - | - | -  |   |
| Rhodium, metal |   | 7440-16-6 | - | 1 | - | - | - | -  |   |
| Rhodium, soluble compounds (as Rh) |   | 7440-16-6 | - | 0.01 | - | - | - | -  |   |
| Rockwool |   |   | - | 0.5 f/ml | - | - | - | -  | See Synthetic mineral fibres (f) |
| Ronnel | Fenchlorphos | 299-84-3 | - | 10 | - | - | - | -  |   |
| Rosin core solder pyrolysis products (as formaldehyde) |   |   | - | 0.1 | - | - | - | -  |   |
| Rotenone (commercial) | Derris, commercial | 83-79-4 | - | 5 | - | - | - | -  |   |
| Rouge dust  |   |   | - | 10 | - | - | - | -  | (a) |
| Selenium compounds (as Se) excluding hydrogen selenide |   | 7782-49-2 | - | 0.1 | - | - | - | -  |   |
| Selenium hexafluoride (as Se) |   | 7783-79-1 | 0.05 | 0.16 | - | - | - | -  |   |
| Sesone | 2,4-DES sodiumCrag HerbicideSodium 2,4-dichloro phenoxyethyl sulfate | 136-78-7 | - | 10 | - | - | - | -  |   |
| Silica – Amorphous |   |   |   |   |   |   | - |   |  |
| Diatomaceous earth (uncalcined)  |   | 61790-53-2 | - | 10 | - | - | - | -  | (a) |
| Fume (thermally generated)(respirable dust)  |   |   | - | 2 | - | - | - | -  | (e) |
| Fumed silica (respirable dust) |   | 7631-86-9 | - | 2 | - | - | - | -  |   |
| Precipitated silica  |   | 112926-00-8 | - | 10 | - | - | - | -  |  (a) |
| Silica gel  |   | 112926-00-8 | - | 10 | - | - | - | -  |  (a) |
| Silica – Crystalline |   |   |   |   |   |   | - |   |  |
| Cristobalite (respirable dust) |   | 14464-46-1 | - | 0.1 | - | - | - | -  |   |
| Quartz (respirable dust) |   | 14808-60-7 | - | 0.1 | - | - | - | -  |   |
| Tridymite (respirable dust) |   | 15468-32-3 | - | 0.1 | - | - | - | -  |   |
| Silica gel  |   | 112926-00-8 | - | 10 | - | - | - | -  | See Silica – Amorphous (a) |
| Silica, fused |   | 60676-86-0 | See Silica - Crystalline  |  |
| Silicon  |   | 7440-21-3 | - | 10 | - | - | - | -  | (a) |
| Silicon carbide  |   | 409-21-2 | - | 10 | - | - | - | -  | (a) |
| Silicon tetrahydride | Silane | 7803-62-5 | 5 | 6.6 | - | - | - | -  |   |
| Silver, metal |   | 7440-22-4 | - | 0.1 | - | - | - | -  |   |
| Silver, soluble compounds (as Ag) |   | 7440-22-4 | - | 0.01 | - | - | - | -  |   |
| Soapstone  |   |   | - | 6 | - | - | - | -  | See also Soapstone (respirable dust) (a) |
| Soapstone (respirable dust) |   |   | - | 3 | - | - | - | -  | See also Soapstone (a) |
| Sodium azide  |   | 26628-22-8 | 0.11 Peak limitation | 0.3 Peak limitation | - | - | - | -  | (d) |
| Sodium bisulphite | Sodium hydrogen sulphite | 7631-90-5 | - | 5 | - | - | - | -  |   |
| Sodium fluoroacetate |   | 62-74-8 | - | 0.05 | - | 0.15 | - | Sk  |   |
| Sodium hydroxide |   | 1310-73-2 | - | 2 Peak limitation | - | - | - | -  |   |
| Sodium metabisulphite | Disodium disulphite | 7681-57-4 | - | 5 | - | - | - | -  |   |
| Sodium persulfate | Sodium persulphate | 7775-27-1 | - | 0.01 Peak limitation | - | - | - | -  |   |
| Starch  |   | 9005-25-8 | - | 10 | - | - | - | -  | (a)  |
| Stearates  |   |   | - | 10 | - | - | - | -  | (a) |
| Stibine |   | 7803-52-3 | 0.1 | 0.51 | - | - | - | -  |   |
| Strychnine |   | 57-24-9 | - | 0.15 | - | - | - | -  |   |
| Styrene, monomer | PhenylethyleneVinyl benzene | 100-42-5 | 50 | 213 | 100 | 426 | - | -  |   |
| Subtilisins (Proteolytic enzymes as 100% pure crystalline enzyme) |   | 1395-21-7 | - | 0.00006 Peak limitation | - | - | - | Sen  |   |
| Sucrose  |   | 57-50-1 | - | 10 | - | - | - | -  | (a) |
| Sulfotep | TEDPO,O,O,O-Tetraethyl dithiopyrophosphate | 3689-24-5 | 0.007 | 0.1 | - | - | - | Sk  |   |
| Sulphur dioxide | Sulfur dioxide | 7446-09-5 | 2 | 5.2 | 5 | 13 | - | -  |   |
| Sulphur hexafluoride | Sulfur hexafluoride | 2551-62-4 | 1000 | 5970 | - | - | - | -  |   |
| Sulphur monochloride | Disulphur dichlorideSulfur monochlorideDisulfur dichloride | 10025-67-9 | 1 Peak limitation | 5.5 Peak limitation | - | - | - | -  |   |
| Sulphur pentafluoride | Disulphur decafluoride | 5714-22-7 | 0.01 Peak limitation | 0.1 Peak limitation | - | - | - | -  |   |
| Sulphur tetrafluoride | Sulfur tetrafluoride | 7783-60-0 | 0.1 Peak limitation | 0.44 Peak limitation | - | - | - | -  |   |
| Sulphuric acid | Sulfuric acid | 7664-93-9 | - | 1 | - | 3 | - | -  |   |
| Sulphuryl fluoride | Sulfuryl fluoride | 2699-79-8 | 5 | 21 | 10 | 42 | - | -  |   |
| Sulprofos | Bolstar | 35400-43-2 | - | 1 | - | - | - | -  |   |
| Superfine glassfibre  |   |   | - | 0.5 f/ml  | - | - | - | - | See Synthetic mineral fibres (f) |
| Synthetic mineral fibres (SMF)  |   |   | - | 0.5 f/ml | - | - | - | - | (f) |
| Ceramic fibres  |   |   | - | 0.5 f/ml | - | - | - | -  | (f) |
| Glasswool (including superfine glassfibre)  |   |   | - | 0.5 f/ml | - | - | - | -  | (f)  |
| Rockwool  |   |   | - | 0.5 f/ml | - | - | - | -  | (f) |
| 2,4,5-T | 2,4,5-Trichlorophenoxyacetic acid | 93-76-5 | - | 10 | - | - | - | -  |   |
| Talc, (containing no asbestos fibres) |   | 14807-96-6 | - | 2.5 | - | - | - | -  |   |
| Tantalum, metal & oxide dusts |   | 7440-25-7 | - | 5 | - | - | - | -  |   |
| Tellurium & compounds (as Te) |   | 13494-80-9 | - | 0.1 | - | - | - | -  |   |
| Tellurium hexafluoride (as Te) |   | 7783-80-4 | 0.02 | 0.1 | - | - | - | -  |   |
| Temephos | Abate | 3383-96-8 | - | 10 | - | - | - | -  |   |
| TEPP | Tetraethyl pyrophosphate | 107-49-3 | 0.004 | 0.047 | - | - | - | Sk  |   |
| Terphenyls |   | 26140-60-3 | 0.5 Peak limitation | 4.7 Peak limitation | - | - | - | -  |   |
| 1,1,2,2-Tetrabromoethane | Acetylene tetrabromide | 79-27-6 | 1 | 14 | - | - | - | -  |   |
| 1,1,2,2-Tetrachloro-1,2-difluoroethane |   | 76-12-0 | 500 | 4170 | - | - | - | -  |   |
| 1,1,1,2-Tetrachloro-2,2-difluoroethane |   | 76-11-9 | 500 | 4170 | - | - | - | -  |   |
| 1,1,2,2-Tetrachloroethane |   | 79-34-5 | 1 | 6.9 | - | - | - | Sk  |   |
| Tetrachloronaphthalene |   | 1335-88-2 | - | 2 | - | - | - | -  |   |
| Tetraethyl lead (as Pb) |   | 78-00-2 | - | 0.1 | - | - | - | Sk  |   |
| 1,1,1,2-Tetrafluoroethane | HFC 134a | 811-97-2 | 1000 | 4240 | - | - | - | -  |   |
| Tetrahydrofuran |   | 109-99-9 | 100 | 295 | - | - | - | Sk  |   |
| Tetramethyl lead (as Pb) |   | 75-74-1 | - | 0.15 | - | - | - | Sk  |   |
| Tetramethyl succinonitrile |   | 3333-52-6 | 0.5 | 2.8 | - | - | - | Sk  |   |
| Tetranitromethane  |   | 509-14-8 | 1 | 8 | - | - | - | -  |   |
| Tetrasodium pyrophosphate |   | 7722-88-5 | - | 5 | - | - | - | -  |   |
| Tetryl | 2,4,6-TrinitrophenylmethylnitramineN-Methyl-N-2,4,6-tetranitroaniline | 479-45-8 | - | 1.5 | - | - | - | Sen  |   |
| Thallium, soluble compounds (as Tl) |   | 7440-28-0 | - | 0.1 | - | - | - | Sk  |   |
| 4,4'-Thiobis (6-tert-butyl-m-cresol) | 6,6'-Di-tert-butyl-4,4'-thiodi-m-cresol | 96-69-5 | - | 10 | - | - | - | -  |   |
| Thioglycolic acid | Mercaptoacetic acid | 68-11-1 | 1 | 3.8 | - | - | - | Sk  |   |
| Thionyl chloride |   | 7719-09-7 | 1 Peak limitation | 4.9 Peak limitation | - | - | - | -  |   |
| Thiram | Tetramethyl thiuram disulphide | 137-26-8 | - | 1 | - | - | - | -  |   |
| Tin, metal |   | 7440-31-5 | - | 2 | - | - | - | -  |   |
| Tin, organic compounds (as Sn) |   | 7440-31-5 | - | 0.1 | - | 0.2 | - | Sk  |   |
| Tin, oxide & inorganic compounds, except SnH4 (as Sn) |   | 7440-31-5 | - | 2 | - | - | - | -  |   |
| Titanium dioxide  |   | 13463-67-7 | - | 10 | - | - | - | -  | (a) |
| Toluene  |   | 108-88-3 | 50 | 191 | 150 | 574 | - | Sk  |   |
| Toluene-2,4-diisocyanate (TDI) | TDI | 584-84-9 | See Isocyanates, all  |  |
| m-Toluidine |   | 108-44-1 | 2 | 8.8 | - | - | - | Sk  |   |
| o-Toluidine |   | 95-53-4 | 2 | 8.8 | - | - | 2 | Sk  |   |
| p-Toluidine |   | 106-49-0 | 2 | 8.8 | - | - | 2 | Sk |   |
| Tributyl phosphate |   | 126-73-8 | 0.2 | 2.2 | - | - | - | -  |   |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Fluorocarbon 113 (Freon 113) | 76-13-1 | 1000 | 7670 | 1250 | 9590 | - | -  |   |
| Trichloroacetic acid |   | 76-03-9 | 1 | 6.7 | - | - | - | -  |   |
| 1,2,4-Trichlorobenzene |   | 120-82-1 | 5 Peak limitation | 37 Peak limitation | - | - | - | -  |   |
| 1,1,1-Trichloroethane | Methyl chloroform | 71-55-6 | 100 | 555 | 200 | 1110 | - | -  |   |
| 1,1,2-Trichloroethane |   | 79-00-5 | 10 | 55 | - | - | - | Sk  |   |
| Trichloroethylene |   | 79-01-6 | 10 | 54 | 40 | 216 | - | Sk  |   |
| Trichlorofluoromethane | Fluorocarbon 11 (Freon 11)Fluorotrichloromethane | 75-69-4 | 1000 Peak limitation | 5620 Peak limitation | - | - | - | -  |   |
| Trichloronaphthalene |   | 1321-65-9 | - | 5 | - | - | - | Sk  |   |
| 1,2,3-Trichloropropane |   | 96-18-4 | 10 | 60 | - | - | - | Sk  |   |
| Tridymite (respirable dust) |   | 15468-32-3 | - | 0.1 | - | - | - | -  | See Silica - Crystalline  |
| Triethanolamine |   | 102-71-6 | - | 5 | - | - | - | Sen  |   |
| Triethylamine | N,N-Diethylethanamine | 121-44-8 | 2 | 8 | 4 | 17 | - | -  |   |
| Trifluorobromomethane | Fluorocarbon 13B1Bromotrifluoromethane | 75-63-8 | 1000 | 6090 | - | - | - | -  |   |
| Triglycidylisocyanurate (TGIC) | Araldite PT 810TGIC | 2451-62-9 | - | 0.08 | - | - | - | Sen  |   |
| Trimellitic anhydride | Benzene-1,2,4-tricarboxylic acid-1,2-anhydride | 552-30-7 | 0.005 | 0.039 | - | - | - | Sen  |   |
| Trimethyl benzene |   | 25551-13-7 | 25 | 123 | - | - | - | -  |   |
| Trimethyl phosphite |   | 121-45-9 | 2 | 10 | - | - | - | -  |   |
| Trimethylamine  |   | 75-50-3 | 10 | 24 | 15 | 36 | - | -  |   |
| 2,4,6-Trinitrotoluene (TNT) | TNT | 118-96-7 | - | 0.5 | - | - | - | Sk  |   |
| Triorthocresyl phosphate | Tri o-tolylphosphate | 78-30-8 | - | 0.1 | - | - | - | Sk  |   |
| Triphenyl amine |   | 603-34-9 | - | 5 | - | - | - | -  |   |
| Triphenyl phosphate |   | 115-86-6 | - | 3 | - | - | - | -  |   |
| Tripoli |   | 1317-95-9 | See Silica - Crystalline  |  |
| Tungsten, insoluble compounds (as W) |   | 7440-33-7 | - | 5 | - | 10 | - | -  |   |
| Tungsten, soluble compounds (as W) |   | 7440-33-7 | - | 1 | - | 3 | - | -  |   |
| Turpentine (wood) | Turpentine | 8006-64-2 | 100 | 557 | - | - | - | Sen  |   |
| Uranium (natural), soluble & insoluble compounds (as H) |   | 7440-61-1 | - | 0.2 | - | 0.6 | - | -  |   |
| n-Valeraldehyde |   | 110-62-3 | 50 | 176 | - | - | - | -  |   |
| Vanadium (as V2O5), (respirable dust & fume) |   | 1314-62-1 | - | 0.05 | - | - | - | -  |   |
| Vegetable oil mists (except castor oil, cashew nut or similar irritant oils) |   |   | - | 10 | - | - | - | -  | (a)  |
| Vinyl acetate  |   | 108-05-4 | 10 | 35 | 20 | 70 | - | -  |   |
| Vinyl bromide | Bromoethylene | 593-60-2 | 5 | 22 | - | - | 2 | - |   |
| Vinyl chloride, monomer | Chloroethylene | 75-01-4 | 5 | 13 | - | - | 1 | - |   |
| Vinyl cyclohexene dioxide | 1,2-Epoxy-4-(epoxy-ethyl)-cyclohexane | 106-87-6 | 10 | 57 | - | - | 3 | Sk  |   |
| Vinyl toluene | Methyl styrene | 25013-15-4 | 50 | 242 | 100 | 483 | - | -  |   |
| Vinylidene chloride | 1,1-Dichloroethylene | 75-35-4 | 5 | 20 | 20 | 79 | - | -  |   |
| Warfarin |   | 81-81-2 | - | 0.1 | - | - | - | -  |   |
| Welding fumes (not otherwise classified) |   |   | - | 5 | - | - | - | -  |  |
| White spirits | Stoddard solvent | 8052-41-3 | - | 790 | - | - | - | -  |  |
| Wood dust (certain hardwoods such as beech & oak) |   |   | - | 1 | - | - | - | Sen  |   |
| Wood dust (soft wood) |   |   | - | 5 | - | 10 | - | Sen  |   |
| Xylene (o-, m-, p- isomers) |   |   | 80 | 350 | 150 | 655 | - | -  |   |
| m-Xylene-alpha,alpha'-diamine | m-Xylylendiamine1,3-Benzenedimethanamine | 1477-55-0 | - | 0.1 Peak limitation | - | - | - | Sk  |   |
| Xylidine | DimethylaminobenzeneAminodimethyl benzene | 1300-73-8 | 0.5 | 2.5 | - | - | 2 | Sk |   |
| Yttrium, metal & compounds (as Y) |   | 7440-65-5 | - | 1 | - | - | - | -  |   |
| Zinc chloride (fume) |   | 7646-85-7 | - | 1 | - | 2 | - | -  |   |
| Zinc chromate (as Cr) |   | 11103-86-913530-65-937300-23-5 | - | 0.01 | - | - | 1 | - |   |
| Zinc oxide (dust)  |   | 1314-13-2 | - | 10 | - | - | - | -  | (a) |
| Zinc oxide (fume) |   | 1314-13-2 | - | 5 | - | 10 | - | -  |   |
| Zirconium compounds (as Zr) |   | 7440-67-7 | - | 5 | - | 10 | - | -  |   |

1. Available on the Safe Work Australia webstie. [↑](#footnote-ref-1)
2. National Occupational Health and Safety Commission, *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition* [NOHSC:3003(2005)]. [↑](#footnote-ref-2)
3. European Chemical Industry Ecology and Toxicology Centre, A Guide to the Classification of Carcinogens, Mutagens and Teratogens under the Sixth Amendment, technical report no. 21, Brussels, February 1986. [↑](#footnote-ref-3)