Changes to Workplace Exposure Limits

Effective from 1 December 2026





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Safe Work Australia is providing this information to assist PCBUs and duty holders to understand and prepare for the transition to the WEL.

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1. Introduction

Workplace Exposure Limits (WEL) will come into effect from 1 December 2026.

Currently, under the <u>model Work Health and Safety (WHS) Regulations</u> persons conducting a business or undertaking (PCBU) must ensure that no person in the workplace is exposed to an airborne contaminant at a concentration exceeding the workplace exposure standard (WES).

Safe Work Australia undertook a <u>review of the WES</u>, to ensure that they are based on contemporary health evidence and provide the best protection for workers. WHS ministers agreed to change the terminology from 'workplace exposure standard' to 'workplace exposure limit' (WEL). They also approved the revised WEL list, with an implementation date of 1 December 2026. The changes WHS ministers agreed to are detailed in this document. Up until 30 November 2026 you must continue to comply with the current exposure standards in the <u>Workplace exposure standards for airborne contaminants</u> (WES list). From 1 December 2026, you must comply with the exposure standards in the <u>Workplace exposure standards</u> (WEL list).

1.1 Purpose of this document

This document provides information on the changes that will take effect from 1 December 2026. These include:

- a decreased or increased exposure limit value
- an addition or removal of a type of exposure limit
- merging or splitting of groups of airborne contaminants
- addition or removal of an airborne contaminant listing.

This document is limited only to WEL that are new or changing on 1 December 2026. It is not a full list of all chemicals subject to a WEL. For the comprehensive lists, consult the <u>WES</u> (for current standards) and <u>WEL</u> (from 1 December 2026).

1.2 The meaning of key terms

Airborne contaminant means a contaminant in the form of a fume, mist, gas, vapour or dust, and includes microorganisms. An airborne contaminant of this type is a potentially harmful substance that is either not naturally in the 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 limit represents the airborne concentration of a particular substance or mixture that must not be exceeded. The exposure limit can be of three forms:

a) eight hour time weighted average,

b) peak limitation, and

c) short term exposure limit.



Eight hour time weighted average (TWA) means the maximum average airborne concentration of a substance when calculated over an eight hour working day, for a five day working week.

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

Short term exposure limit (STEL) means the time weighted average maximum airborne concentration of a substance calculated over a 15 minute period.

Units for exposure standards (mg/m³) is a unit of measurement for airborne concentrations of gases, vapours and particulate contaminants (expressed gravimetrically as milligrams of substance per cubic metre of air, (mg/m³).

Units for exposure standards (ppm) is a unit of measurement for the concentration of gases and indicated in parts per million (ppm) by volume. Where both gravimetric (mg/m³) and volumetric (ppm) values are quoted, the volumetric (ppm) value is exact as its value is not affected by changes in temperature or pressure and should be used as the common means of reference to the exposure standard.

The comparison table was last updated on 29 May 2025.

2. Chemicals added to the WEL list

The Review of Workplace exposure standards identified health-based limits for 31 airborne contaminants, which have been added to the WEL list. From 1 December 2026, PCBUs must ensure that no person at the workplace is exposed to these chemicals at an airborne level above their exposure limit.

| New entries in the WFI | TWA | TWA | STEL | STEL | Peak Limit | Peak Limit |
|--|----------------------|-------|---------|-------|------------|------------|
| | (mg/m ³) | (ppm) | (mg/m³) | (ppm) | (mg/m³) | (ppm) |
| Barium sulfate (respirable) | 1.35 | | | | | |
| Benzoyl chloride | | | | | 2.8 | 0.5 |
| Bisphenol-A | 2 | | | | | |
| 1-Bromopropane | 0.5 | 0.1 | | | | |
| But-2-yne-1,4-diol | 0.5 | | | | | |
| Diacetyl | 0.04 | 0.01 | 0.07 | 0.02 | | |
| Dichloroacetic acid | 2.5 | 0.5 | | | | |
| Diesel particulate matter (as respirable elemental carbon) | 0.01 | | | | | |
| Diethylene glycol monobutyl ether | 67.5 | 10 | | | | |
| Dimethyl sulfide | 25 | 10 | | | | |
| 1,3-Dioxolane | 61 | 20 | | | | |
| Diquat (respirable) | 0.1 | | | | | |
| 2-Ethylhexanoic acid | 5 | | | | | |
| 2-Ethylhexanol | 5.33 | 1 | | | | |
| Ethylene thiourea | 0.02 | | | | | |
| Flour (cereal) dust | 0.5 | | | | | |
| Gallium arsenide | 0.0003 | | | | | |
| Glyoxal | 0.1 | 0.042 | | | | |
| Hexahydrophthalic anhydride | | | | | 0.005 | |
| Indium phosphide | 0.1 | | | | | |
| 2-Methylbutyl acetate | 266 | 50 | 532 | 100 | | |
| 5-nitro-o-toluidine (inhalable) | 1 | | | | | |
| 2,3-Pentanedione | 0.083 | 0.02 | | | | |
| 2,4-Pentanedione | 102 | 25 | | | | |
| Peracetic acid | | | | | 1.24 | 0.4 |
| Phenyl isocyanate | 0.024 | 0.005 | | | | |
| Polyvinyl chloride (respirable dust) | 1 | | | | | |
| Silicon carbide (non-fibrous dust) (inhalable) | 10 | | | | | |
| Terephthalic acid | 5 | | | | | |
| Tetrafluoroethylene | 8.2 | 2 | | | | |
| Tungsten, metal and compounds (as W) | 3 | | | | | |

3. WES and WEL Comparison Table

Note: In the WES and WEL lists the exposure limits for gases and vapours are given as ppm and as mg/m³, with the ppm number considered to be exact and the mg/m³ used as a guide. In this table, ppm values are used for gasses and vapours (where available) for comparative purposes. Where a ppm value is available in only one list, the mg/m³ values have been listed for comparative purposes. Consult the <u>Workplace exposure standards for airborne</u> <u>contaminants</u> and the <u>Workplace exposure limits for airborne contaminants</u> lists for full values.

Changed limits have been highlighted in red to indicate a decrease, and green to indicate an increase.

| Chamical | Unit | | WES v | alues | Name in WEL | | WEL values | |
|--|-------------------|-------|-------|------------|---|---------|------------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Acetic anhydride | ppm | | | 5 | | 0.5 | 1 | |
| Acetone | ppm | 500 | 1000 | | | 250 | 500 | |
| Acetonitrile | ppm | 40 | 60 | | | 20 | | |
| Acrolein | ppm | 0.1 | 0.3 | | | 0.02 | 0.05 | |
| Acrylic acid | ppm | 2 | | | | 10 | | |
| Allyl alcohol | ppm | 2 | 4 | | | 1 | 4 | |
| Amitrole | mg/m³ | 0.2 | | | | 2 | | |
| Ammonia | ppm | 25 | 35 | | | 20 | 35 | |
| Ammonium perfluorooctanoate | mg/m ³ | 0.1 | | | | 0.01 | | |
| Ammonium persulfate | mg/m³ | | | 0.01 | Persulfates. | | | |
| Potassium persulfate | mg/m³ | | | 0.01 | ammonium- and | 0.1 | | |
| Sodium persulfate | mg/m³ | | | 0.01 | alkali metal salts | | | |
| n-Amyl acetate | ppm | 50 | 100 | | | | | |
| sec-Amyl acetate | ppm | 50 | 100 | | Amyl acetate (iso-, n sec- isomers) | 50 | 100 | |
| Isoamyl acetate | ppm | 50 | 100 | | , | | | |
| Aniline & homologues | ppm | 2 | | | | 0.5 | | |
| Arsenic & soluble compounds (as As) | mg/m³ | 0.05 | | | Arsenic and compounds (except arsine) | 0.01 | | |
| Atrazine | mg/m³ | 5 | | | | 1 | | |
| Azinphos-methyl | mg/m³ | 0.2 | | | | 1 | | |
| Barium sulphate | mg/m3 | 10 | | | Barium sulfate (inhalable) | 4 | | |
| | mg/m° | 10 | | | Barium sulfate (respirable) | 1.35 | | |
| Benomyl | ppm | 0.84 | | | | 0.08 | | |
| Beryllium & compounds | mg/m³ | 0.002 | | | | 0.00002 | 0.0002 | |
| Bitumen fumes | mg/m³ | 5 | | | | 0.5 | | |
| Borates, tetra, sodium salts (anhydrous) | mg/m ³ | 1 | | | | 0.75 | | |

| Chamical | 11 | | WES v | alues | Name in WEL | WEL values | | |
|---|-------------------|------|-------|------------|--|------------|------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Borates, tetra, sodium salts (decahydrate) | mg/m ³ | 5 | | | Borates, tetra, sodium salts, incl | | | |
| Borates, tetra, sodium salts (pentahydrate) | mg/m³ | 1 | | | anhydrous, decahydrate, pentahydrate | | | |
| Boron tribromide | ppm | | | 1 | | | | 0.7 |
| Boron trifluoride | ppm | | | 1 | | 0.1 | | 0.7 |
| 2-Butoxyethanol | ppm | 20 | 50 | | | 10 | 40 | |
| 2-Butoxyethyl acetate | ppm | 20 | 50 | | | 20 | | |
| n-Butyl acetate | ppm | 150 | 200 | | n Dutid anotata | | | |
| sec-Butyl acetate | ppm | 200 | | | sec-Butyl acetate | 50 | 400 | |
| tert-Butyl acetate | ppm | 200 | | | tert-Butyl acetate | 50 | 100 | |
| Isobutyl acetate | ppm | 150 | | | ISO-BUTYI acetate | | | |
| n-Butyl alcohol | ppm | | | 50 | | 20 | | |
| tert-Butyl alcohol | ppm | 100 | 150 | | | 20 | | |
| n-Butyl glycidyl ether (BGE) | ppm | 25 | | | | 3 | | |
| Cadmium and compounds (as Cd) | mg/m ³ | 0.01 | | | | 0.001 | | |
| Calcium cyanamide | mg/m³ | 0.5 | | | | 0.2 | | |
| Calcium hydroxide | mg/m³ | 5 | | | | 1 | 4 | |
| Calcium oxide | mg/m³ | 2 | | | | 1 | | |
| Calcium sulphate | mg/m³ | 10 | | | Calcium sulfate | 1.5 | | |
| Camphor, synthetic | ppm | 2 | 3 | | | 2 | | |
| e-Caprolactam (dust and vapour) | mg/m ³ | 10 | 20 | | Caprolactam (dust and vapour) (incl. | 5 | | |
| Caprolactam (dust) | mg/m³ | 1 | 3 | | e caprolactam) | | | |
| Carbaryl | mg/m³ | 5 | | | | 0.5 | | |
| Carbon disulphide | ppm | 10 | | | Carbon disulfide | 1 | | |
| Carbon monoxide | ppm | 30 | | | | 20 | | |
| Carbon tetrachloride | ppm | 0.1 | | | | 0.1 | 5 | |
| alpha- Chloroacetophenone | ppm | 0.05 | | | | 0.02 | 0.05 | |
| Chlorobenzene | ppm | 10 | | | | 5 | | |
| o-Chlorobenzylidene malononitrile ¹ | mg/m ³ | | | 0.39 | | 0.02 | | |
| Chloroform | ppm | 2 | | | | 0.5 | | |
| Chlorpyrifos ² | mg/m ³ | 0.2 | | | | 0.1 | | |
| Chromium (II) compounds (as Cr) | mg/m ³ | 0.5 | | | Chromium (metal), (II), (III) (as Cr) | 0.5 | | |

¹ Consult WEL list for ppm values. ² Consult WEL list for ppm values.

| Chamical | Unit | | WES v | alues | Name in WEL | WEL values | | |
|-------------------------------------|-------------------|------|-------|------------|--|------------|------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Chromium (III) compounds (as Cr) | mg/m ³ | 0.5 | | | | | | |
| Chromium (metal) | mg/m ³ | 0.5 | | | | | | |
| Clopidol | mg/m ³ | 10 | | | | 2 | | |
| Cobalt, metal dust & fume (as Co) | mg/m ³ | 0.05 | | | Cobalt (metal and inorganic compounds) | 0.02 | | |
| Cotton dust, raw | mg/m ³ | 0.2 | | | | 0.1 | | |
| Cyanamide | mg/m ³ | 2 | | | | 0.2 | | |
| Cyanides (as CN) | mg/m ³ | 5 | | | | 1 | 5 | |
| Cyanogen | ppm | 10 | | | | | | 5 |
| Cyclohexane | ppm | 100 | 300 | | | 100 | | |
| Cyclohexanone | ppm | 25 | | | | 10 | 20 | |
| Cyclohexylamine | ppm | 10 | | | | 2 | | |
| Cyclonite | mg/m ³ | 1.5 | | | | 0.1 | | |
| Diacetone alcohol | ppm | 50 | | | | 20 | | |
| Diazinon | mg/m ³ | 0.1 | | | | 0.01 | | |
| Diborane | ppm | 0.1 | | | | 0.01 | | |
| Dibutyl phosphate | ppm | 1 | 2 | | | 0.6 | | |
| Dibutyl phthalate ³ | mg/m ³ | 5 | | | | 0.58 | | |
| 2-N- Dibutylaminoethanol | ppm | 2 | | | | 0.5 | | |
| p-Dichlorobenzene | ppm | 25 | 50 | | | 2 | 10 | |
| Dichloroethyl ether | ppm | 5 | 10 | | | 5 | | |
| Dichlorvos (DDVP) | ppm | 0.1 | | | | 0.01 | | |
| Dicyclopentadiene | ppm | 5 | | | | 0.5 | | |
| Dicyclopentadienyl iron | mg/m ³ | 10 | | | | 0.1 | | |
| Diethanolamine | ppm | 3 | | | | 0.11 | | |
| Diethyl ketone | ppm | 200 | | | | 200 | 300 | |
| Diethylamine | ppm | 10 | 25 | | | 2 | 10 | |
| Dimethylamine | ppm | 2 | 6 | | | 2 | | |
| N,N- Dimethylethylamine | ppm | 10 | 15 | | | 2 | | |
| Dimethylformamide | ppm | 10 | | | | 5 | | |
| Dinitolmide | mg/m ³ | 5 | | | | 1 | | |
| m-Dinitrobenzene | ppm | 0.15 | | | Disitash | | | |
| o-Dinitrobenzene | ppm | 0.15 | | | (m-, o-, p-isomers) | 0.15 | | |
| p-Dinitrobenzene | ppm | 0.15 | | | , | | | |

³ Consult WEL list for ppm values.

| Chamical | Unit | | WES values | | Name in WEL | WEL values | | |
|-------------------------------------|-------------------|-------------|-------------------------|----------------------------|---|------------|------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| 1,4-Dioxane | ppm | 10 | | | | 5 | | |
| Diphenylamine | mg/m³ | 10 | | | | 5 | | |
| Di-sec-octyl phthalate | mg/m³ | 5 | 10 | | | 2 | | |
| Disulfoton | mg/m³ | 0.1 | | | | 0.02 | | |
| Enflurane | ppm | 0.5 | | | | 20 | | |
| Epichlorohydrin | ppm | 2 | | | | 0.5 | | |
| EPN | mg/m³ | 0.5 | | | O-Ethyl O-(4-nitrophenyl) phenylphosphonothioate | 0.1 | | |
| Ethion | mg/m³ | 0.4 | | | | 0.05 | | |
| 2-Ethoxyethanol | ppm | 5 | | | | 2 | | |
| 2-Ethoxyethyl acetate | ppm | 5 | | | | 2 | | |
| Ethyl acrylate | ppm | | | 5 | | 2 | 5 | |
| Ethyl alcohol | ppm | 1000 | | | | 200 | 800 | |
| Ethyl benzene | ppm | 100 | 125 | | | 20 | | |
| Ethyl butyl ketone | ppm | 50 | | | | 50 | 75 | |
| Ethyl chloride | ppm | 1000 | | | | 100 | | |
| Ethyl formate | ppm | 100 | | | | 100 | 150 | |
| Ethyl silicate | ppm | 10 | | | | 5 | | |
| Ethylamine | ppm | 2 | 6 | | | 5 | 15 | |
| Ethylene glycol (particulate) | mg/m³ | 10 | | | | | 10 | |
| Ethylene glycol dinitrate | ppm | 0.05 | | | | 0.01 | | |
| Ethylidene norbornene | ppm | | | 5 | | 2 | 4 | |
| Fenamiphos | mg/m³ | 0.1 | | | Fenamiphos (including vapour) | 0.05 | | |
| Fensulfothion | mg/m³ | 0.1 | | | Fensulfothion (including vapour) | 0.01 | | |
| Ferbam | mg/m³ | 10 | | | | 5 | | |
| Furfural | ppm | 2 | | | | 0.2 | | |
| Furfuryl alcohol | ppm | 10 | 15 | | | 0.2 | | |
| Glutaraldehyde | ppm | | | 0.1 | | | | 0.05 |
| Grain dust (oats, wheat, barley) | mg/m ³ | 4 | | | | 1.5 | | |
| Hexamethylene diisocyanate | mg/m³ | See (TWA | e Isocya A: 0.02, \$ | anates, all STEL: 0.07) | | 0.02 | 0.07 | |
| Hexane (n-Hexane) | ppm | 20 | | , | | 50 | | |
| Hydrogen chloride | ppm | | | 5 | | | | 2 |
| Hydrogen fluoride (as F) | ppm | | | 3 | | 0.5 | | 2 |
| Hydrogen peroxide | ppm | 1 | | | | 0.5 | | |
| Hydrogenated terphenyls | ppm | 0.5 | | | | 0.5 | 2 | |

| Ohemieel | 11 14 | | WES v | alues | Name in WEL | WEL values | | |
|--|-------------------|-------------|-------------------------|---------------------------|--|--------------------------|------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| 2-Hydroxypropyl acrylate | ppm | 0.5 | | | Hydroxypropyl acrylate (all isomers) | 0.5 | | |
| lodine | ppm | | | 0.1 | | 0.01 | | 0.1 |
| Iron pentacarbonyl (as Fe) | ppm | 0.1 | 0.2 | | | 0.1 | | 0.2 |
| Isoamyl alcohol | ppm | 100 | 125 | | | 20 | 80 | |
| Isophorone diisocyanate | mg/m ³ | See (TWA | e Isocya A: 0.02, \$ | nates, all STEL: 0.07) | | 0.02 | 0.07 | |
| Isopropoxyethanol | ppm | 25 | | | | 10 | | |
| Isopropyl acetate | ppm | 250 | 310 | | Propyl acetate (all | 100 | 150 | |
| n-Propyl acetate | ppm | 200 | 250 | | isomers) | 100 | 150 | |
| Isopropyl alcohol | ppm | 400 | 500 | | | 200 | 400 | |
| Lithium hydride | mg/m ³ | 0.025 | | | | | 0.02 | |
| Malathion | mg/m ³ | 10 | | | | 1 | | |
| Maleic anhydride | ppm | 0.25 | | | | 0.0025 | | |
| Manganese, dust & compounds (as Mn) | mg/m ³ | 1 | | | Manganese fume, dust and compounds (as Mn) (inhalable) | 0.1 (inhala ble) | | |
| Manganese, fume (as Mn) | mg/m ³ | 1 | 3 | | Manganese fume, dust and compounds (as Mn) (respirable) | 0.02 (respir able) | | |
| Mesityl oxide | ppm | 15 | 25 | | | 2 | | |
| Methomyl | mg/m ³ | 2.5 | | | | 0.2 | | |
| 2-Methoxyethanol | ppm | 5 | | | | 0.1 | | |
| 2-Methoxyethyl acetate | ppm | 5 | | | | 0.1 | | |
| Methyl 2- cyanoacrylate | ppm | 2 | 4 | | Cyanoacrylates (Ethyl and Methyl) | 0.2 | 1 | |
| Methyl acrylate | ppm | 10 | | | | 2 | | |
| Methyl alcohol | ppm | 200 | 250 | | | 100 | | |
| Methyl bromide | ppm | 5 | | | | 1 | | |
| Methyl chloride | ppm | 50 | 100 | | | 20 | 80 | |
| Methyl ethyl ketone (MEK) | ppm | 150 | 300 | | | 200 | 300 | |
| Methyl formate | ppm | 100 | 150 | | | 50 | 100 | |
| Methyl isoamyl ketone | ppm | 50 | | | | 20 | 40 | |
| Methyl isobutyl ketone | ppm | 50 | 75 | | | 20 | 75 | |

| Chemical | Unit | | WES v | alues | Name in WEL | WEL values | | |
|--|-------------------|-------------|-------------------------|----------------------------|---|------------|------|------------|
| Chemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Methyl isocyanate ⁴ | mg/m³ | See (TWA | e Isocya \: 0.02, \$ | nates, all STEL: 0.07) | | 0.047 | 0.14 | |
| Methyl isopropyl ketone | ppm | 200 | | | | 20 | | |
| Methyl n-butyl ketone | ppm | 5 | | | | 5 | 10 | |
| Methyl parathion | mg/m ³ | 0.2 | | | | 0.02 | | |
| Methyl propyl ketone | ppm | 200 | 250 | | | | 150 | |
| 1-Methyl-2- pyrrolidone | ppm | 25 | 75 | | | 20 | | |
| Methylcyclohexane | ppm | 400 | | | | 200 | | |
| Methylene bis(4- cyclo- hexylisocyanate) | mg/m³ | See (TWA | e Isocya \: 0.02, \$ | inates, all STEL: 0.07) | | 0.02 | 0.07 | |
| Methylene bisphenyl isocyanate (MDI) | mg/m³ | See (TWA | e Isocya \: 0.02, \$ | nates, all STEL: 0.07) | Isocyanates, | 0.02 | 0.07 | |
| Toluene-2,4- diisocvanate (TDI) | mg/m³ | See (TWA | e Isocya \: 0.02. \$ | nates, all STEL: 0.07) | (poly-) (as NCO) | 0.01 | 0.01 | |
| Methyl-tert butyl ether | ppm | 25 | 75 | | | 50 | | |
| Mevinphos ⁵ | mg/m ³ | 0.092 | 0.27 | | | 0.01 | | |
| Mineral turpentine ⁶ | mg/m ³ | 480 | | | Mineral spirits (mineral turpentine) | 296 | 593 | |
| White spirits ⁷ | mg/m³ | 790 | | | Mineral spirits (white spirits) | 296 | 593 | |
| Molybdenum, insoluble compounds (as Mo) | mg/m ³ | 10 | | | Molybdenum, insoluble compounds (as Mo) (inhalable) Molybdenum, insoluble compounds (as Mo) (respirable) | 10 3 | | |
| Molybdenum, soluble compounds (as Mo) | mg/m ³ | 5 | | | | 0.5 | | |
| Monochloroacetic acid | ppm | 0.3 | | | | 0.5 | | |
| Monocrotophos | mg/m³ | 0.25 | | | | 0.05 | | |
| Naled | mg/m³ | 3 | | | | 0.1 | | |
| Naphthalene | ppm | 10 | 15 | | | 10 | | |
| Nickel carbonyl (as Ni) | ppm | 0.05 | | | | | | 0.05 |
| Nickel dichloride | mg/m³ | 0.1 | | | Nickel, metal and | 0.1 | | |
| Nickel salt, nitric acid | mg/m³ | 0.1 | | | insoluble | 0.1 | | |

⁴ Consult WEL list for ppm values.
⁵ Consult WES list for ppm values.
⁶ Consult WEL list for ppm values.
⁷ Consult WEL list for ppm values.

| Chomical | Unit | | WES v | alues | Name in WEL | | WEL values | | |
|--|-------------------|--------|--------|------------|--------------------------------------|--------|------------|------------|--|
| Chemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit | |
| Nickel dinitrate | mg/m³ | 0.1 | | | compounds | | | | |
| Nickel, metal | mg/m³ | 1 | | | | | | | |
| Nickel sulphide roasting (fume & dust) (as Ni) | mg/m³ | 1 | | | | | | | |
| Nickel, powder | mg/m ³ | 1 | | | | | | | |
| Nitric acid | ppm | 2 | 4 | | | 2 | | | |
| Nitric oxide | ppm | 25 | | | | 2 | | | |
| Nitroglycerine (NG) | ppm | 0.05 | | | | 0.01 | 0.02 | | |
| Nitrous oxide | ppm | 25 | | | | 50 | | | |
| Osmium tetroxide (as Os) | ppm | 0.0002 | 0.0006 | | | 0.0002 | | | |
| Paraquat (respirable sizes) | mg/m³ | 0.1 | | | | 0.05 | | | |
| Pentaborane | ppm | 0.005 | 0.015 | | | 0.005 | | | |
| Pentane | ppm | 600 | 750 | | Pentane (all isomers) | 1000 | | | |
| Perchloroethylene | ppm | 50 | 150 | | | 20 | 40 | | |
| Perchloryl fluoride | ppm | 3 | 6 | | | 3 | | | |
| Petrol (gasoline) ⁸ | mg/m³ | 900 | | | | 900 | | 1480 | |
| Phenyl mercaptan | ppm | 0.5 | | | | 0.1 | | | |
| Phorate | mg/m³ | 0.05 | 0.2 | | | 0.05 | | | |
| Phosgene | ppm | 0.02 | 0.06 | | | 0.1 | 0.4 | | |
| Phosphine | ppm | 0.3 | 1 | | | 0.05 | | 0.15 | |
| Phosphorus (yellow) | mg/m³ | 0.1 | | | | 0.01 | | | |
| Phosphorus oxychloride | ppm | 0.1 | | | | 0.02 | | | |
| Phthalic anhydride | ppm | 1 | | | | 0.0003 | | | |
| Piperazine dihydrochloride ⁹ | mg/m³ | 5 | | | Piperazine and salts | 0.1 | 0.3 | | |
| Platinum, metal | mg/m³ | 1 | | | | 0.1 | | | |
| Portland cement | mg/m³ | 10 | | | Portland cement (respirable dust) | 1 | | | |
| Propane-1,2-diol total (vapour & particulates) ¹⁰ | mg/m³ | 474 | | | | 50 | | | |
| Propane-1,2-diol (particulates only) | mg/m³ | 10 | | | | 50 | | | |
| n-Propyl nitrate | ppm | 25 | 40 | | | 25 | | | |
| Propylene glycol dinitrate | ppm | 0.05 | | | | 0.01 | | | |

 ⁸ Consult WEL list for ppm values.
 ⁹ Consult WEL list for ppm values.
 ¹⁰ Consult WES list for ppm values.

| Chamical | Unit | | WES v | alues | Name in WEL | WEL values | | |
|---|-------------------|-------|-------|------------|---|------------|------|------------|
| Chemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Propylene imine | ppm | 2 | | | | 0.2 | | |
| Propylene oxide | ppm | 20 | | | | 2 | | |
| Pyrethrum | mg/m³ | 5 | | | | 1 | | |
| Pyridine | ppm | 5 | | | | 1 | | |
| Resorcinol | ppm | 10 | 20 | | | 10 | | |
| Ronnel | mg/m ³ | 10 | | | Ronnel (inhalable and vapour) | 5 | | |
| Silicon carbide | mg/m³ | 10 | | | Silicon carbide (non-fibrous dust) (respirable) | 3 | | |
| Sodium fluoroacetate | mg/m³ | 0.05 | 0.15 | | | 0.05 | | |
| Stearates | mg/m ³ | 10 | | | Stearates (inhalable) | 10 | | |
| | | | | | (respirable) | 3 | | |
| Styrene, monomer | ppm | 50 | 100 | | | 20 | 40 | |
| Sulphur dioxide | ppm | 2 | 5 | | Sulfur dioxide | | 0.25 | |
| Sulphuric acid | mg/m³ | 1 | 3 | | Sulfuric acid | 0.1 | | |
| Sulprofos ¹¹ | mg/m³ | 1 | | | | 0.1 | | |
| Talc (containing no asbestos fibres) | mg/m³ | 2.5 | | | Talc (respirable) (containing no asbestos fibres) | 2 | | |
| Temephos ¹² | mg/m³ | 10 | | | | 2 | | |
| Tetrahydrofuran | ppm | 100 | | | | 50 | | |
| Thallium, soluble compounds (as Tl) | mg/m³ | 0.1 | | | | 0.02 | | |
| Thionyl chloride | ppm | | | 1 | | | | 0.2 |
| Tin, organic compounds (as Sn) | mg/m ³ | 0.1 | 0.2 | | | 0.1 | | |
| Tin, metal | mg/m ³ | 2 | | | Tin (metal and | | | |
| Tin oxide and inorganic compounds except SnH4 (as Sn) | mg/m³ | 2 | | | inorganic compounds) | 2 | | |
| Toluene | ppm | 50 | 150 | | | 20 | | |
| Triethylamine | ppm | 2 | 4 | | | 1 | 2 | |
| Trimellitic anhydride | ppm | 0.005 | | | | 0.00006 | | 0.00002 |
| Trimethyl benzene | ppm | 25 | | | Trimethyl benzene (all isomers) | 20 | | |
| 2,4,6-Trinitrotoluene (TNT) | mg/m ³ | 0.5 | | | | 0.1 | | |
| Tungsten, insoluble compounds (as W) | mg/m ³ | 5 | 10 | | | 3 | | |

¹¹ Consult WEL list for ppm values.
 ¹² Consult WEL list for ppm values.

| Chamical | Unit | | WES v | alues | Name in WEL | | WEL values | |
|---|-------------------|-----|-------|------------|--|------|------------|------------|
| Cnemical | Unit | TWA | STEL | Peak Limit | (if changed) | TWA | STEL | Peak Limit |
| Tungsten, soluble compounds (as W) | mg/m ³ | 1 | 3 | | | 3 | | |
| Uranium (natural), soluble & insoluble compounds (as H) | mg/m ³ | 0.2 | 0.6 | | Uranium (natural), soluble and insoluble compounds (as U) | 0.2 | | |
| Vinyl acetate | ppm | 10 | 20 | | | 10 | 15 | |
| Vinyl toluene | ppm | 50 | 100 | | | 20 | 40 | |
| Warfarin | mg/m ³ | 0.1 | | | | 0.01 | | |
| Wood dust (soft wood) | mg/m ³ | 5 | 10 | | | 2 | | |
| Zinc chloride (fume) | mg/m ³ | 1 | 2 | | | | 2 | |
| Zinc oxide (dust) | mg/m ³ | 10 | | | Zinc oxide (dust | 2 | 10 | |
| Zinc oxide (fume) | mg/m ³ | 5 | 10 | | and fume) | 2 | 10 | |

3.1 Removal of WES for non-threshold genotoxic carcinogens

The Review of Workplace exposure standards identified that 33 airborne contaminants are <u>non-threshold genotoxic carcinogens</u> (NTGCs). These are chemicals that can cause genetic damage and may lead to cancer. Unlike other airborne contaminants, NTGCs cannot be assigned a practical safe level of exposure due to limited data and the nature of their effects.

From 1 December 2026, there will no longer be exposure limits for NTGCs. However if NTGCs are present, PCBUs must either eliminate them from the workplace, replace them with a safer alternative if possible, or reduce the risk as much as reasonably practicable.

| NTGCs |
|---|
| Acrylamide |
| Acrylonitrile (Vinyl cyanide) |
| Allyl chloride (3-Chloro-1-propene) |
| Allyl glycidyl ether (AGE, Allyl 2,3-epoxypropyl ether) |
| Anisidine (o, p- isomers) (Methoxyaniline) |
| o-Anisidine |
| p-Anisidine |
| Benzidine |
| (bis)chloromethyl ether |
| 1,3-Butadiene |
| Catechol (Pyrocatechol, o-Dihydroxybenzene) |
| beta-Chloroprene (2-Chloro-1,3-butadiene) |
| Chromium VI compounds (including zinc chromates) |
| Coal tar pitch volatiles (as benzene solubles) |
| 1,2-Dibromo ethane (ethylene dibromide) |

| NTGCs |
|--|
| 3,3'-Dichlorobenzidine |
| Diethyl sulfate |
| Dimethycarbamoyl chloride |
| Dimethyl sulfate |
| Dinitrotoluene |
| Ethylene dichloride (1,2-Dichloroethane) |
| Ethylene oxide (Oxirane) |
| Ethylenimine (Aziridine) |
| Hydrazine (Diamine) |
| Lead chromate (as Cr) |
| 4,4'-Methylene bis(2-chloroaniline) (MOCA, MBOCA, 2,2'-Dichloro-4,4'-methylenedianiline) |
| 2-Nitrotoluene |
| Propane sultone |
| Polycyclic aromatic hydrocarbon (PAH) mixture when containing benzo[a]pyrene |
| Tetranitromethane (TNM) |
| Urethane |
| Vinyl Bromide (Bromoethylene) |
| Vinyl chloride, monomer (Chloroethylene) |

3.2 Other chemicals removed from the WES list

The Review of Workplace exposure standards identified 6 airborne contaminants which are **prohibited for import, manufacture and use under Australian legislation** and which are not included in the WEL list.

| Entries removed in the WEL |
|--|
| Aldrin |
| Chlordane |
| DDT (Dichlorodiphenyl-trichloroethane) |
| Dieldrin |
| Endrin |
| Heptachlor |