

**PROPOSED CHANGES TO OCCUPATIONAL EXPOSURE LIMITS AND/OR LISTINGS FOR SUBSTANCES REGULATED UNDER REGULATION 833, CONTROL OF EXPOSURE TO BIOLOGICAL OR CHEMICAL AGENTS  
BASED ON 2019 ACGIH RECOMMENDATIONS**

<b>Substance</b>	<b>Current TWA</b>	<b>Current STEL / C</b>	<b>Proposed Substance Listing</b>	<b>Proposed TWA</b>	<b>Proposed STEL / C</b>	<b>Change</b>
Chlordane [57-74-9] - Skin	0.5 mg/m <sup>3</sup>	-	Chlordane [57-74-9] - Skin	0.5 ppm <sup>(IFV)</sup>	-	OEL developed for inhalable fraction and vapour.
o-Chlorobenzylidene malononitrile [2698-41-1] - Skin	-	C 0.05 ppm	o-Chlorobenzylidene malononitrile [2698-41-1] - Skin		C 0.05 ppm <sup>(IFV)</sup>	OEL developed for inhalable fraction and vapour.
Cobalt [7440-48-4] and inorganic compounds, as Co	0.02 mg/m <sup>3</sup>	-	Cobalt [7440-48-4] and inorganic compounds, as Co	0.02 mg/m <sup>3</sup> <sup>(I)</sup>	-	OEL developed for inhalable particulate matter.
Cyanazine [21725-46-2]	No listing	No listing	Cyanazine [21725-46-2]	0.1 mg/m <sup>3</sup> <sup>(I)</sup>	-	Substance new to regulation.
Cyclopentadiene [542-92-7]	75 ppm	-	Separate listing and OEL withdrawn	-	-	Separate listing and OEL withdrawn. See new listing for Dicyclopentadiene [77-73-6], including Cyclopentadiene.
Dicyclopentadiene [77-73-6]	5 ppm	-	Dicyclopentadiene [77-73-6], including Cyclopentadiene	0.5 ppm	1 ppm	Change in listing to add Cyclopentadiene. TWA reduced. STEL added.
Dimethylphenol, all isomers [95-65-8; 95-87-4;105-67-9;108-68-9;526-75-0;576-26-1;1300-71-6]	No listing	No listing	Dimethylphenol, all isomers [95-65-8; 95-87-4;105-67-9;108-68-9;526-75-0;576-26-1;1300-71-6]	1 ppm <sup>(IFV)</sup>	-	Substance new to regulation.
	0.15 ppm	-	Dinitrobenzene, all isomers [99-65-0; 100-25-4; 528-29-0; 25154-54-5] - Skin	0.15 ppm <sup>(IFV)</sup>	-	OEL developed for inhalable fraction and vapour.

Dinitrobenzene, all isomers [99-65-0; 100-25-4; 528-29-0; 25154-54-5] – Skin						
Dinitro-o-cresol [534-52-1] – Skin	0.2 mg/m <sup>3</sup>	-	Dinitro-o-cresol [534-52-1] - Skin	0.2 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
EPN [2104-64-5] – Skin	0.1 mg/m <sup>3</sup> (I)	-	EPN [2104-64-5] - Skin	0.1 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
Fluorine [7782-41-4]	1.0 ppm	2.0 ppm	Fluorine [7782-41-4], as F	0.1 ppm	C 0.5 ppm	TWA and C reduced.
Indium tin oxide [50926-11-9], as In	No listing	No listing	Indium tin oxide [50926-11-9], as In	0.0001 mg/m <sup>3</sup> (R)	-	Substance new to regulation.
Isobutyl nitrite [542-56-3]	-	C 1.0 ppm (IFV)	Isobutyl nitrite [542-56-3]	-	C 1.0 ppm	Removal of inhalable fraction and vapour notation.
4,4' – Methylene bis (2-chloroaniline) (MBOCA; MOCA®) [101-14-4] – Skin	0.0005 ppm 0.005 mg/m <sup>3</sup>	-	4,4' – Methylene bis (2-chloroaniline) [101-14-4] – Skin	0.01 ppm (IFV)	-	OEL developed for inhalable fraction and vapour.
Methyltetrahydrophthalic anhydride isomers [3425-89-6; 5333-84-6; 11070-44-3; 19438-63-2; 19438-64-3; 26590-20-5; 42498-58-8] – Skin	No listing	No listing	Methyltetrahydrophthalic anhydride isomers [3425-89-6; 5333-84-6; 11070-44-3; 19438-63-2; 19438-64-3; 26590-20-5; 42498-58-8] - Skin	0.07 ppb	0.3 ppb	Substance new to regulation.
Methyl vinyl ketone [78-94-4]- Skin	-	C 0.2 ppm	Methyl vinyl ketone [78-94-4]	-	C 0.01 ppm	C limit reduced. Skin notation removed.
Monomethylformamide [123-39-7] – Skin	No listing	No listing	Monomethylformamide [123-39-7] - Skin	1 ppm	-	Substance new to regulation.

Nitrapyrin [1929-82-4]	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>	Nitrapyrin [1929-82-4]	10 mg/m <sup>3</sup> (IFV)	20 mg/m <sup>3</sup> (IFV)	OEL developed for inhalable fraction and vapour.
5- Nitro-o-toluidine [99-55-8]	1 mg/m <sup>3</sup> (I)	-	5- Nitro-o-toluidine [99-55-8]	1 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
Pentachloronaphthalene [1321-64-8] – Skin	0.5 mg/m <sup>3</sup>	-	Pentachloronaphthalene [1321-64-8] - Skin	0.5 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
o- Phthalaldehyde [643-79-8]	No listing	No listing	o- Phthalaldehyde [643-79-8] - Skin	-	C 0.1 ppb <sup>(v)</sup>	Substance new to regulation.
Propylene glycol ethyl ether [1569-02-4] – Skin	No listing	No listing	Propylene glycol ethyl ether [1569-02-4] - Skin	50 ppm	200 ppm	Substance new to regulation.
Sulfometuron methyl [74222-97-2]	5 mg/m <sup>3</sup>	-	Sulfometuron methyl [74222-97-2]	5 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
Sulfoxaflor [946578-00-3]	No listing	No listing	Sulfoxaflor [946578-00-3]	0.1 mg/m <sup>3</sup> (I)	-	Substance new to regulation.
Temephos [3383-96-8] – Skin	1 mg/m <sup>3</sup> (IFV)	-	Temephos [3383-96-8] - Skin	1 mg/m <sup>3</sup> (I)	-	OEL developed for inhalable particulate matter.
1,1,2,2- Tetrabromoethane [79-27-6]	0.1 ppm (IFV)	-	1,1,2,2- Tetrabromoethane [79-27-6]	0.1 ppm	-	Removal of inhalable fraction and vapour endnote.
Tetramethyl succinonitrile [3333-52-6] – Skin	0.5 ppm	-	Tetramethyl succinonitrile [3333-52-6] - Skin	0.5 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
2,4,6-Trinitrotoluene [118-96-7] – Skin	0.1 mg/m <sup>3</sup>	-	2,4,6-Trinitrotoluene [118-96-7] - Skin	0.1 mg/m <sup>3</sup> (IFV)	-	OEL developed for inhalable fraction and vapour.
Thiacloprid [111988-49-9]	No listing	No listing	Thiacloprid [111988-49-9]	0.2 mg/m <sup>3</sup> (I)	-	

						Substance new to regulation.
Tin [7440-31-5], as Sn	-	-	Tin [7440-31-5] and inorganic compounds [18282-10-5; 21651-19-4], excluding Tin hydride and Indium tin oxide, as Sn	2 mg/m <sup>3</sup> (I)	-	OEL developed for inhalable particulate matter. Indium tin oxide excluded and listed separately.
- Metal	2 mg/m <sup>3</sup>	-	-	-	-	-
- Oxide and inorganic compounds, as Sn, except tin hydride	2 mg/m <sup>3</sup>	-	-	-	-	-
- Organic compounds, as Sn – Skin	0.1 mg/m <sup>3</sup>	-	Tin [7440-31-5], organic compounds, as Sn – Skin	0.1 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>	STEL added. Note: Substance listed in Table 1 of Regulation 833.
m-Xylene $\alpha,\alpha'$ – diamine [1477-55-0] - Skin		C 0.1 mg/m <sup>3</sup>	m-Xylene $\alpha,\alpha'$ – diamine [1477-55-0] - Skin		C 0.018 ppm	C reduced.

#### Endnotes and Abbreviations

TWA or time-weighted average limit means the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week.

STEL or short-term exposure limit means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed in any 15-minute period; no more than four times during an eight hour work shift, and with at least one hour between exposures.

C or ceiling limit means the maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time;

(I) Inhalable particulate matter

(IFV) Inhalable fraction and vapour

(R) Respirable particulate matter