

| Chemical Name  | CAS                                     | Current 5155<br>PEL<br>TWA/STEL/C | New/revised OEL | UNITS             | OEL source:<br>ACGIH (Year),<br>NIOSH, OEHHA,<br>HESIS | OEL basis/Other listing/Notations  |
|--|---|-----------------------------------|-----------------|-------------------|--|--|
| <b>Priority 1</b>                                    |   |                                   |                 |                   |  |  |
| aluminum welding fume, metal & compounds             | 7429905                                 | 5/10 RT                           | 1 R             | mg/m <sup>3</sup> | 2008   | pneumoconiosis; neurotoxicity; lower respiratory tract irritation  |
| benzophenone   | 119619                                  | NEW                               |                 | ppm               | HESIS  | Prop 65 cancer, Allergen, Irr, CNS, 0.5 mg/m <sup>3</sup> WEEL, UV-inhibitor used in plastics and other products |
| butoxyethyl acetate, 2-                              | 112072                                  | NEW                               | 20              | ppm               | 2003   | consistency with analogue 2-butoxyethanol; found in recent inspection  |
| butyl acetates, all isomers                          | 105464;<br>110190;<br>123864;<br>540885 | 150                               | 50/150          | ppm               | 2016; HESIS  | Eye and URT irr; HESIS: cancer   |
| hydrogen sulfide                                     | 7783064                                 | 1/5                               | 1/5             | ppm               | 2010   | CNS impairment upper respiratory tract irritation  |
| manganese (elemental and inorganic compounds, as Mn) | 7439965                                 | 0.2                               | 0.02R/0.11      | mg/m <sup>3</sup> | 2013   | numerous NOAEL established at this level   |
| methyl isobutyl ketone                               | 108101                                  | 50/75                             | 20/75           | ppm               | 2010   | dizziness headache upper respiratory irritation  |
| peracetic acid                                       | 79210                                   | NEW                               | 0.4 S           | ppm               | 2013   | A4, URT, eye and skin irr, NIOSH   |
| sulfur dioxide                                       | 7446095                                 | 5                                 | 0.25 S          | ppm               | 2009   | pulmonary function; lower respiratory tract irritation   |
| trichloropropane, 1,2,3-                             | 96184                                   | 10                                | 0.005           | ppm               | 2014; OEHHA  | Prop 65 cancer, chem intermediate, solvent, inactive pesticide   |
| turpentine, monoterpenes                             | 8006642                                 | 100                               | 20              | ppm               | 2003   | SEN, urt, CNS, skin irr, IUR 100-500 m lbs   |
| <b>Priority 2</b>                                    |   |                                   |                 |                   |  |  |
| acetonitrile   | 75058                                   | 40/60                             | 20              | ppm               | 2002   | pulmonary effects; lab and possibly other solvent uses / PO  |
| acetaldehyde   | 75070                                   | 25                                | 25 C            | ppm-C             | 2014   | A3, eye, urt irr, 13-16X cancer risk per oehha, cREL, IUR 100-500m   |
| acetamide  | 60355                                   | NEW                               | 1               | ppm               | 2017; OEHHA  | limited exp iur10-500k   |
| acetic anhydride                                     | 108247                                  | 5 C                               | 1/3             | ppm               | 2011   | Eye and URT irr  |
| acetone  | 67641                                   | 500/750                           | 250/500         | ppm               | 2015; NIOSH  | Eye and URT irr; CNS impair  |
| acrylamide   | 79061                                   | 0.03                              | 0.03            | mg/m <sup>3</sup> | 2005; OEHHA  | cns, 5x cancer risk per oehha, IUR 100-500m epcra 2 ca loc; just make inh+vapor / PO                             |
| alachlor   | 15972608                                | NEW                               | 1               | mg/m <sup>3</sup> | 2007   | PEST SEN Restricted material 115 Calif use records 2008 on 4,343 acres; NIOSH 5602 Inh+vap ok                    |
| aldicarb   | 116063                                  | NEW                               | 0.07            | mg/m <sup>3</sup> | no TLV   | Pest WEEL no TLV 819 Calif use records 2008 / O  |
| allyl bromide  | 106956                                  | NEW                               | 0.1/0.2         | ppm               | 2011   | Eye and urt irr / O  |

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|--|------------|--|------------------------|-------------------|--|---|
| anthraquinone                                | 84651      | NEW  |                        | mg/m <sup>3</sup> | HESIS  | Manuf paper products more than 10,000 workers exp. Reg'd pesticide (seed treatment). Chem inter for dyes and pigments. Catalyst in isomerization of linseed and other veg oils. (EPA); 5.5 M (2011). Cancer |
| antimony oxide                               | 13096441   | 0.5  | 0.5                    | mg/m <sup>3</sup> | 1979   | antimony trioxide production TLV to lowest level, lung cancer, iur 1-10m  |
| atrazine                                     | 1912249    | 5  | 2                      | mg/m <sup>3</sup> | 2014   | Hematologic, repro and developmental effects  |
| benzaldehyde                                 | 100527     | NEW  | 2                      | ppm               | no TLV   | DSEN, limited tox data, flavor use  |
| boron tribromide                             | 10294334   | 1.0C                                       | C 0.7S                 | ppm               | 2016   | Resp tract irr; pneumonitis   |
| boron trichloride                            | 10294345   | NEW  | 0.7S                   | ppm               | 2016   | Resp tract irr; pneumonitis   |
| boron trifluoride                            | 7637072    | 1/3  | 0.1/0.7C               | ppm               | 2016   | Resp tract irr; pneumonitis   |
| butane ( all isomers)                        | 75285/1069 | 800  | 1000 STEL              | ppm               | 2013   | CNS impair  |
| butyl glycidyl ether, n-                     | 2426086    | 25   | 3                      | ppm               | 2005   | testicular atrophy, SEN / P   |
| butyraldehyde                                | 123728     | NEW  | 25                     | ppm               | no TLV   | DSEN chem intermediate, IUR > 1billion lbs  |
| cadusafos                                    | 95465999   | NEW  | 0.001                  | mg/m <sup>3</sup> | 2017   | CNS impair / O  |
| calcium silicate, nat occ as<br>Wollastonite | 1344952    | 10   | 1                      | mg/m <sup>3</sup> | 2016   | Pneumoconiosis; pulm func.  |
| captafol                                     | 2425061    | 0.1  | 0.1 IFV                | mg/m <sup>3</sup> | 2017   | liver kidney da, dermal sen   |
| carbaryl                                     | 63252      | 5  | 0.5                    | mg/m <sup>3</sup> | 2008   | PEST cholinergic reproductive 3000 Calif use records 2008<br>TRI 1 Cal loc 18 US / O  |
| carbon black                                 | 1333864    | 3.5  | 3.5                    | mg/m <sup>3</sup> | 1985   | A4  |
| carbon monoxide                              | 630080     | 25/200                                     | 25                     | ppm               | 1989   | BEI, COHb-emia, aREL  |
| carbon tetrachloride                         | 56235      | 2/10/200                                   | 5/10                   | ppm               | 1990   | A2, liver, 25-69X cancer risk per oehha, cREL, aREL iur 100-500m / PO   |
| carbonyl sulfide                             | 463581     | NEW  | 5                      | ppm               | 2011   | CNS impair  |
| chlorinated paraffins                        | 108171262  | NEW  |                        |                   | no TLV   | cancer, unit risk value, sampling limitation, iur 50-100m   |
| chloroform                                   | 67663      | 2  | 10                     | ppm               | 1990; OEHHA  | A3, liver, embro/fetal, CNS, iur .5-1b, 7-29X cancer risk per oehha, cREL, aREL   |
| chloroprene                                  | 126998     | 10   | 10                     | ppm               | 1990   | urt, eye irr, iur 100-500m epcra 13 us loc / PO   |
| chlorpyrifos                                 | 2921882    | 0.2  | 0.1                    | mg/m <sup>3</sup> | 2003   | Pest >29,000 Calif use records 2008 / PO  |
| clopidol                                     | 2971906    | 10T/5R                                     | 3 (IFV)                | mg/m <sup>3</sup> | 2013   | Mutagenic eff   |
| cobalt and certain cobalt compounds          | 7440484    | 0.02                                       | 0.02                   | mg/m <sup>3</sup> | 1993   | A3, BEI, asthma, pum func, heart, limited cancer data   |
| cyanogen                                     | 460195     | 10   | 5C                     | ppm               | 2016   | Eye and URT irr   |
| cyanogen bromide                             | 506683     | NEW  | 0.3 S                  | ppm               | 2013   | Eye and resp tract irr; pulm edema  |
| decamethylcyclpentasiloxane (D5)             | 541026     | NEW  |                        |                   | no TLV   | Liver changes may be the most sensitive non-cancer endpoint, possible cancer  |

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|---|-------------|--|------------------------|-------------------|--|--|
| dichlorobenzene, p-                                 | 106467      | 10/110/200                                 | 10                     | ppm               | 1990; OEHHA  | A3, eye, kidney, CUPA usa data, 86X cancer risk per oehha, cREL iur 10-50m   |
| dichlorvos (DDVP)                                   | 62737       | 1  | 0.1                    | mg/m <sup>3</sup> | 2002   | PEST SEN, 460 Calif use records (2008) including structural/commodity fumigation/ fly control / PO   |
| diesel engine exhaust                               |             | NEW  |                        |                   | no TLV   | cancer, MSHA exp limit, ARB substance of study, cREL, sampling limitations, proposed tlv withdrawn in 2004   |
| diethanolamine                                      | 111422      | 2  | 1                      | mg/m <sup>3</sup> | 2009   | liver and kidney effects / PO  |
| diethylene glycol monobutyl ether                   | 112345      | NEW  | 10                     | ppm               | 2012   | Hematologic; liver and kidney eff  |
| diethylhydroxylamine, n,n-                          | 3710847     | NEW  | 2                      | ppm               | 2012   | URT irt  |
| dimethyl-p-toluidine, n, n-                         | 99978       | NEW  |                        | ppm               | HESIS  | Widespread use to cure methyl methacrylate but polymerization is rarely complete. use in dental materials and bone cements, artificial fingernails. 62,720 U.S. workers were exp (NIOSH, 1990). >500K-1M. Cancer |
| dioxolane,1,3                                       | 646060      | NEW  | 20                     | ppm               | 2002   | hematologic, limited tox data, epcra 1 ca loc, solvent, feedstock, IUR 10-50 million lbs   |
| disulfoton  | 298044      | 0.1  | 0.05                   | mg/m <sup>3</sup> | 2002   | Pest 499 Calif use records 2008 / PO   |
| dodecyl mercaptan                                   | 112550      | NEW  | 0.1                    | ppm               | 2004   | SEN, urt, feedstock, IUR 10-50 million lbs, cupa data  |
| endosulfan  | 115297      | 0.1  | 0.1                    | mg/m <sup>3</sup> | 2009   | Pesticide 1,498 Calif use records 2008 but only change is inh+vapor / PO   |
| ethanol   | 64175       | 1000                                       | S                      | ppm               | 2009   | eye and upper respiratory tract irritation usage   |
| ethyl acrylate                                      | 140885      | 1/5  | 5/15                   | ppm               | 1986   | A4, urt, GI irr, CNS, eye irr, skin sen, epcra 3 ca lociur 100-500m  |
| ethyl formate                                       | 109944      | 100  | 100S                   | ppm               | 2012   | A4, urt irr  |
| ethylene dichloride                                 | 107062      | 1  | 10                     | ppm               | 1977   | A4, liver, nausea, 11-14x cancer risk oehha, epcra 14 us loc, cupa data, iur > 1b, cREL /P   |
| ethylene glycol                                     | 107211      | 40C  | 25/50                  | ppm               | 2017   | A4, urt irr  |
| ethyleneimine                                       | 151564      | 0.5  | 0.05/0.1               | ppm               | 2009   | 8 CCR 5209 carcinogen (at 1% by wt of vol) upper respiratory irritation / O  |
| ethylidene norbornene                               | 16219753    | 5C   | 2/4                    | ppm               | 2014   | URT and eye irr  |
| folpet  | 133073      | NEW  | 1                      | mg/m <sup>3</sup> | 2017   | DSEN, A3, liver dam  |
| furfural  | 98011       | 2  | 0.2                    | ppm               | 2017   | A3, urt & eye irr, skin / O  |
| furfuryl alcohol                                    | 98000       | 10/15                                      | 0.2                    | ppm               | 2017   | A3, urt & eye irr, skin / O  |
| hard metals, containing cobalt and tungsten carbide | 7440484; 12 | 0.02                                       | 0.005                  | mg/m <sup>3</sup> | 2016   | Pneumonitis  |

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|-----------------------------------|-------------|-----------------------------------|-----------------|-------------------|--|---|
| hexahydrophthalic anhydride       | 1314903; 14 | NEW                               | 0.0005          | mg/m <sup>3</sup> | 2004   | SEN, rsen, epoxy curing agent, no ca use data, IUR 1-10 mil lbs                       |
| hexylene glycol                   | 107415      | 25C                               | 25/50           | ppm               | 2017   | eye & urt irr   |
| hydroquinone                      | 123319      | 2                                 | 1               | mg/m <sup>3</sup> | 2008   | SEN eye irritation and damage   |
| indium phosphide                  | 22398807    | 0.1                               | 0.03            | mg/m <sup>3</sup> | 2001   | NTP testing concluded "clear evidence" for carcinogenicity, no risk value             |
| isopropanol TLV now 2-propanol    | 67630       | 400/500                           | 200/400         | ppm               | 2003   | IUR > 1 billion lbs, cREL, aREL   |
| kerosene jet fuel, total HC vapor | 8008206     | NEW                               | 200             |                   | 2003   | IUR > 1 billion lbs, sampling limitations. NOT VAPOR?? DOC SAYS MIN AEROSOL ONLY / O  |
| lithium hydride                   | 7580678     | 0.025                             | 0.05S           | mg/m <sup>3</sup> | 2015   | Eye and resp tract irr  |
| malathion                         | 121755      | 10                                | 1               | mg/m <sup>3</sup> | 2003   | Pest >15,000 Calif use records 2008 / PO  |
| maleic anhydride                  | 108316      | 0.1                               | 0.01            | ppm               | 2011   | resp sens   |
| methanol                          | 67561       | 200/250                           |                 | ppm               | 2009; HESIS  | Industrial solvent; Occ exp through inh and der. HESIS: Developmental. / P            |
| methomyl                          | 16752775    | 2.5                               | 0.2             | mg/m <sup>3</sup> | 2014   | Cholinesterase inhib; male repro dam; hematologic eff / O                             |
| methoxy-2-propanol, 1-            | 107982      | 100/150                           | 50/100          | ppm               | 2013   | Eye and URT irr   |
| methoxyethanol acetate, 2-        | 110496      | 5                                 | 0.1             | ppm               | 2006; NIOSH  | hematologic & repro effects OSHA FR no longer used, cupa data / P                     |
| methoxyethanol, 2-                | 109864      | 5                                 | 0.1             | ppm               | 2006; NIOSH  | hematologic & repro effects OSHA FR no longer used, cupa data / P                     |
| methyl chloride                   | 74873       | 5/100/300                         | 50/100          | ppm               | 1992   | A4, cns, liver, kidney, testicular, teratogen, epcra 1 ca loc, cREL, no risk data / O |
| methyl ethyl ketone (MEK)         | 78933       | 200/300                           | 200             | ppm               | 2001; HESIS  | Widespread uses. Hoell E et al; 2-Butanone. >500M - 1B. HESIS: Developmental.         |
| methyl formate                    | 107313      | 100/150                           | 50/100          | mg/m <sup>3</sup> | 2015   | CNS impair, URT irr; eye dam / O  |
| methyl isoamyl ketone             | 110123      | 50                                | 20/50           | ppm               | 2013   | CNS impair, URT irr   |
| methyl isopropyl ketone           | 563804      | 200                               | 20              | ppm               | 2011   | Embryo/fetal dam; neonatal toxicity   |
| methyl parathion                  | 298000      | 0.2                               | 0.02            | mg/m <sup>3</sup> | 2009   | Restricted material 538 Calif use reports 2008 / PO                                   |
| methyl styrene, α-                | 98839       | 50/100                            | 10              | ppm               | 2010   | Chemical intermediate in plastics manufacture   |
| methylacetylene-propdiene mixture | 56960919    | NEW                               | 1000/1250       | ppm               | 2017   | cns   |
| mineral oil, highly refined       |             | 5                                 | 5               | mg/m <sup>3</sup> | 2010   | As aerosol, excluding metal working fluids; inhalable fraction                        |
| mineral oil, mildly refined       |             | NEW                               | ALARA           | mg/m <sup>3</sup> | 2010   | Excluding metal working fluids  |
| monochloroacetic acid             | 79118       | NEW                               | 0.5             | ppm               | 2006   | urt, various uses, high epa use, IUR 100-500 mil lbs, canning use, dermal tox / O     |

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|--|------------|--|------------------------|-------------------|--|---|
| myrcene, beta  | 123353     | NEW  |                        | ppm               | HESIS  | Prep of perfume chemicals and flavoring, detergent additive; Occ exp through inh and der. >10M - 50M. Cancer. |
| naled  | 300765     | 3  | 0.1                    | mg/m <sup>3</sup> | 2002   | Pest SEN 2,772 Calif use records 2008 / PO  |
| natural rubber latex, as total protein               | 9006046    | NEW  | 0.001                  | mg/m <sup>3</sup> | 2004   | SEN skin sensitization, air sampling and analysis limitations   |
| natural rubber latex, as inhalant allergenic protein | 9006046    | NEW  | 0.0001                 | mg/m <sup>3</sup> | 2008   | SEN skin sensitization, air sampling and analysis limitations   |
| nickel (Metallic & compounds)                        | 7440020    | 2  | 0.1 - 1.5              | ppm               | 2001; HESIS  | Dermatitis and pneumoconiosis; HESIS: cancer  |
| nickel carbonyl                                      | 13463393   | 0.001                                      | 0.05 C                 | ppm               | 2014   | Lung irr  |
| nitrilotriacetic acid                                | 139139     | NEW  |                        |                   | no TLV   | epcra 1 ca loc, cupa data NTP 11 ROC describes as "laundry detergent builder"                                 |
| nitrogen dioxide                                     | 10102440   | 1.0 S                                      | 0.2                    | ppm               | 2012   | A4, Irr irr   |
| nitromethane   | 75525      | 2  | 20                     | ppm               | 1997   | A2, thyroid, urt, lung dam, CUPA use data   |
| nitro-o-toluidine, 5-                                | 99558      | NEW  | 1                      | mg/m <sup>3</sup> | 2007   | liver damage, dye manf, IUR 100-500 K lbs, low tox  |
| pentachlorophenol                                    | 87865      | 0.5  | 0.5/1.0                | mg/m <sup>3</sup> | 2014   | URT and eye irr; CNS and cardiac impair / O   |
| perfluorobutyl ethylene                              | 19430934   | NEW  | 100                    | ppm               | 2004   | hematologic effects, teflon ingred, IUR 100-500 K lbs, low tox  |
| phenylhydrazine (and salts)                          | 100630     | 5  | 0.1                    | ppm               | 1988; OEHHA  | anemia urt irritation chemical reagent OEHHA 500X cancer risk / O   |
| phorate  | 298022     | 0.05/0.2                                   | 0.05/0.2               | mg/m <sup>3</sup> | 2005   | Pest 1,359 Calif use records 2008 just add inh + vap / O  |
| phthalic anhydride                                   | 85449      | 1  | 0.002/0.005            | ppm               | 2017   | RSEN, DSEN, A4, Skin, resp sen, asthma / O  |
| phthalidionitrile, 0-                                | 91156      | NEW  | 1                      | mg/m <sup>3</sup> | 2011   | CNS convul; body weight eff   |
| piperazine and salts, as piperazine                  | 142643     | NEW  | 0.03                   | ppm               | 2011   | Resp sens; asthma   |
| polyvinyl chloridedust (PVC)                         | 9002862    | 10 T                                       | 1 R                    | mg/m <sup>3</sup> | 2008   | pneumoconiosis; PFT changes; lower respiratory tract irritation   |
| portland cement (<1% silica)                         | 65997151   | 10   | 1                      | mg/m <sup>3</sup> | 2010   | pulmonary function asthma   |
| propylene dichloride (1,2 dichloropropane)           | 78875      | 75/110                                     | 10                     | ppm               | 2006   | SEN upper respiratory tract irritation polymer manf, IUR 100-500m, cancer                                     |
| propylene glycol mono-t-butyl ether                  | 57018527   | NEW  |                        | ppm               | HESIS  | Solvent in all purpose cleaners, inks, adhesives, nail polish lacquers. >1M-10M. Cancer.                      |
| propyleneimine                                       | 75558      | 2  | 0.2/0.4                | ppm               | 2009; OEHHA  | upper respiratory tract irritation OEHHA cancer unit risk value / PO  |
| pyridine   | 110861     | 5  | 1                      | ppm               | 2004; OEHHA  | skin irritation, no risk value, liver & kidney damage, IUR 10-50m   |

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| simazine  | 122349  | NEW                               | 0.5             | mg/m <sup>3</sup> | 2016   | Hematologic effects  |
| temephos  | 3383968 | 10/5 TR                           | 1               | mg/m <sup>3</sup> | 2005   | Pest 32 Calif use reports 2008 mainly mosquito abatement larvicide / O   |
| tert-amyl methyl ether  | 994058  | NEW                               | 20              | ppm               | 2002   | cns, embryo/fetal damage, gas additive, IUR > 1 bil lbs, limited tox data  |
| tetrachloroethylene   | 127184  | 25/100                            | 25/100          | ppm               | OEHHA;HESIS  | A3, BEI, cns, iur 100-500m, epcra 27 ca loc, 130x cancer risk per oehha, cREL, aREL  |
| Tetrafluoroethylene   | 116143  | 2                                 |                 | ppm               | 2001; HESIS  | kidney toxicity; cancer  |
| thallium and cmpnds as TI   | 7440280 | 0.1                               | 0.02            | mg/m <sup>3</sup> | 2010   | may be in semiconductors, infrared sensors, photocells / PO  |
| thiobis, 4,4'- (6-tert-butyl-m-cresol)  | 96695   | 10                                | 1               | mg/m <sup>3</sup> | 2011   | URT irr  |
| thionyl chloride  | 7719097 | 1 C                               | 0.2             | ppm               | 2010   | severe respiratory irritation mainly in synthesis of organochlorines   |
| thiourea  | 62566   | NEW                               |                 |                   | no TLV   | epcra 19 us loc, cupa data, iur .5-1m  |
| thiram  | 137268  | 1                                 | 0.05            | mg/m <sup>3</sup> | 2008   | PEST SEN Calif commodity fumigant 931 Calif use reports 2008 other industrial uses rubber accelerant lubricant additive. NIOSH says low vapor. TRI: 59 US locs no CA loc |
| trichloroacetic acid  | 76039   | 1                                 | 0.5             | ppm               | 2015   | Eye and URT irr  |
| triethylamine   | 21448   | 1.0 C                             | 0.5/1           | ppm               | 2015   | Visual impair; URT irr / O   |
| triorthocresyl phosphate  | 78308   | 0.1                               | 0.02            | mg/m <sup>3</sup> | 2016   | Neurotoxicity; cholinesterase inhibition / O   |
| tungsten & compounds in absence of Cobalt as W  | 7440337 | 5                                 | 3               | mg/m <sup>3</sup> | 2017   | lung dam   |
| vanadium pentoxide  | 1314621 | 0.05                              | 0.05            | mg/m <sup>3</sup> | 2009   | upper respiratory tract irritation; 0.05 mg/m <sup>3</sup> Inhalable TWA   |
| warfarin  | 81812   | 0.1                               | 0.01            | mg/m <sup>3</sup> | 2016   | Bleeding; teratogenic / O  |
| <b>Priority 2* - Special Committee Needed Instead of HEAC (see Notation section for reason)</b> |         |                                   |                 |                   |  |  |
| arsine  | 7784421 | 0.05                              | 0.005           | ppm               | 2007   | HEAC rec to group with update to section 5214 Arsenic, kidney; peripheral nervous system, vascular system, electronic use, aREL  |
| beryllium   | 7440417 | 0.0002                            | 0.00005         | mg/m <sup>3</sup> | 2014;  | new OSHA std, SEN notation and retained A1 list for cancer   |
| bisphenol A (BPA)   | 80057   | NEW                               | no tlv          | mg/m <sup>3</sup> | HESIS  | primarily public health issue  |

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|----------------------------------|------------|------------------------------------|------------------------|-------------------|--|--|
| bromopropane, 1-                 | 106945     | 5                                  | 0.1                    | ppm               | 2014; HESIS  | Stakeholder concerns, use in decline, CNS impair, peripheral neuropathy; hemaotological eff, developmental and repro toxicity (male and female)  |
| butyl benzyl phthalate           | 85687      | NEW                                | No TLV                 | mg/m <sup>3</sup> | no TLV; OEHHA  | Group with all phthalates, Primarily public health issue, oehha rpt, cosmetic use  |
| carbon nanotubes                 | 7782425    | 15                                 | 0.001                  | mg/m <sup>3</sup> | 2013; HESIS  | Sampling issues, Group with other nanoparticles, NIOSH REL = 1 µg/m <sup>3</sup>   |
| di(2-ethylhexyl)phthalate (DEHP) | 117817     | 5                                  | 5                      | mg/m <sup>3</sup> | 1998; OEHHA  | Group with all phthalates, Primarily public health issue, Plasticizer A2, LRT, irr, iur 100-500m, Prop 65 repro, 0.4X cancer risk per oehha  |
| diacetyl                         | 431038     | 0.012/0.035                        | 0.01/0.02              | ppm               | 2012; HESIS  | Section 5197 would need update, lung damage (bronchiolitis obiterans-like illness); NIOSH REL 0.005/0.025;   |
| dibutyl phthalate                | 84742      | 5                                  | 5                      | mg/m <sup>3</sup> | 1990; OEHHA  | Group with all phthalates, Primarily public health issue, testicular damage, eye, URT irr, Prop 65 repro, epcra 2 CA locs iur 10-50m   |
| Diisononyl phthalate (DINP)      | 28553120   | NEW                                |                        | mg/m <sup>3</sup> | HESIS  | Group with all phthalates, Primarily public health issue, 95% used in plasticizers for PVC appl and flex vinyls. Also used in glues, dyestuffs and pigments, paints, printing, metal coating, sealing comps, furn fabric, carpet tile, vinyl tile (OEHHA). |
| di-n-hexyl phthalate (DnHP)      | 84753      | NEW                                |                        | mg/m <sup>3</sup> | HESIS  | Group with all phthalates, Primarily public health issue, Plasticizer, repro per oehha   |
| ethyl isocyanate                 | 109900     | NEW                                | 0.02/0.06              | ppm               | 2013   | Group with all isocyanates, sampling issues, URT and eye irt / O   |
| formaldehyde                     | 50000      | 0.75/2                             | 0.1/0.3                | ppm               | 2017   | Section 5217 would need update   |
| gallium arsenide                 | 1303000    | see 5214                           | 0.003                  | mg/m <sup>3</sup> | 2005   | Section 5214 would need update, lrt irr, semicon use, 5214 comp std  |
| isocyanates (TRIG &/or ind sus)  |            | NEW                                | 0.017/0.07             | mg/m <sup>3</sup> | no TLV   | Group with all isocyanates, sampling issues, SEN respiratory sensitization   |
| methyl isocyanate                | 624839     | NEW                                | 0.02/0.06              | ppm               | 2013   | Group with all isocyanates, sampling issues, URT and eye irt / O   |
| pentanedione, 2,3-               | 600146     | 0.012/0.035                        | 0.009.3/0.031          | ppm               | no TLV; NIOSH; HESIS                                 | Section 5197 would need update, similar toxicity to diacetyl; REL = 0.009.3/0.031 ppm TLV/STEL; HESIS  |
| pentanedione, 2,4-               | 123546     | NEW                                | 25                     | ppm               | 2010; HESIS  | Section 5197 would need update, Neurotoxicity; CNS impair / O  |
| phenyl isocyanate                | 103719     | NEW                                | 0.005/0.015            | ppm               | 2013   | Group with all isocyanates, sampling issues, dermatitis; Hematologic eff; testicular dam / O   |

| <b>Chemical Name</b>                       | <b>CAS</b>  | <b>Current 5155<br/>PEL<br/>TWA/STEL/C</b> | <b>New/revised OEL</b> | <b>UNITS</b>      | <b>OEL source:<br/>ACGIH (Year),<br/>NIOSH, OEHHA,<br/>HESIS</b> | <b>OEL basis/Other listing/Notations</b>   |
|--|-------------|--|------------------------|-------------------|--|--|
| silica (crystalline quartz & cristobalite) |             | 0.05                                       | 0.025                  | mg/m <sup>3</sup> | 2006   | Section 5204 would need update, A2 carc pulmonary fibrosis lung cancer   |
| styrene                                    | 100425      | 50/100/500                                 | 20                     | ppm               | 2001; OEHHA  | Stakeholder concerns, CNS, urt, peripheral neuropathy, IUR > 1 bil lbs, cREL, aREL / PO  |
| titanium dioxide, ultrafine (<100 nm)      | 13463677    | 10   | 0.3                    | mg/m <sup>3</sup> | 2011; HESIS  | Group with other nanoparticles, sampling issues, NIOSH REL = 2.4 mg/m <sup>3</sup> for fine, 0.3 mg/m <sup>3</sup> for ultrafine |
| toluene diisocyanate, 2-4 and 2-6          | 584849; 910 | 0.005/0.02                                 | 0.001/0.005            | ppm               | 2016   | Group with all isocyanates, sampling issues, Asthma; pulm func; eye irr / O  |

NOTES: R = Respirable; T = Total; P= PEL skin notation, O=other skin notation; S= STEL; NEW: proposed new PEL



| <b>Chemical Name</b>                                 | <b>CAS</b>                              | <b>Current 5155 PEL TWA/STEL/C</b> | <b>New/revised OEL</b> | <b>UNITS</b>      | <b>OEL source: ACGIH (Year), NIOSH, OEHHA, HESIS</b> | <b>OEL basis/Other listing/Notations</b>   |
|--|---|------------------------------------|------------------------|-------------------|--|--|
| <b>Priority 1</b>                                    |   |                                    |                        |                   |  |  |
| aluminum welding fume, metal & compounds             | 7429905                                 | 5/10 RT                            | 1 R                    | mg/m <sup>3</sup> | 2008   | pneumoconiosis; neurotoxicity; lower respiratory tract irritation                                    |
| benzophenone   | 119619                                  | NEW                                |                        | ppm               | HESIS  | Prop 65 cancer, Allergen, Irr, CNS, 0.5 mg/m3 WEEL, UV-inhibitor used in plastics and other products |
| butoxyethyl acetate, 2-                              | 112072                                  | NEW                                | 20                     | ppm               | 2003   | consistency with analogue 2-butoxyethanol; found in recent inspection                                |
| butyl acetates, all isomers                          | 105464;<br>110190;<br>123864;<br>540885 | 150                                | 50/150                 | ppm               | 2016; HESIS  | Eye and URT irr; HESIS: cancer   |
| hydrogen sulfide                                     | 7783064                                 | 1/5                                | 1/5                    | ppm               | 2010   | CNS impairment upper respiratory tract irritation  |
| manganese (elemental and inorganic compounds, as Mn) | 7439965                                 | 0.2                                | 0.02R/0.1I             | mg/m <sup>3</sup> | 2013   | numerous NOAEL established at this level   |
| methyl isobutyl ketone                               | 108101                                  | 50/75                              | 20/75                  | ppm               | 2010   | dizziness headache upper respiratory irritation  |
| peracetic acid                                       | 79210                                   | NEW                                | 0.4 S                  | ppm               | 2013   | A4, URT, eye and skin irr, NIOSH   |
| sulfur dioxide                                       | 7446095                                 | 5                                  | 0.25 S                 | ppm               | 2009   | pulmonary function; lower respiratory tract irritation   |
| trichloropropane, 1,2,3-                             | 96184                                   | 10                                 | 0.005                  | ppm               | 2014; OEHHA  | Prop 65 cancer, chem intermediate, solvent, inactive pesticide                                       |
| turpentine, monoterpenes                             | 8006642                                 | 100                                | 20                     | ppm               | 2003   | SEN, urt, CNS, skin irr, IUR 100-500 m lbs   |
| <b>Priority 2</b>                                    |   |                                    |                        |                   |  |  |
| acetonitrile   | 75058                                   | 40/60                              | 20                     | ppm               | 2002   | pulmonary effects; lab and possibly other solvent uses / PO  |
| acetaldehyde   | 75070                                   | 25                                 | 25 C                   | ppm-C             | 2014   | A3, eye, urt irr, 13-16X cancer risk per oehha, cREL, IUR 100-500m                                   |
| acetamide  | 60355                                   | NEW                                | 1                      | ppm               | 2017; OEHHA  | limited exp iur10-500k   |
| acetic anhydride                                     | 108247                                  | 5 C                                | 1/3                    | ppm               | 2011   | Eye and URT irr  |
| acetone  | 67641                                   | 500/750                            | 250/500                | ppm               | 2015; NIOSH  | Eye and URT irr; CNS impair  |
| acrylamide   | 79061                                   | 0.03                               | 0.03                   | mg/m <sup>3</sup> | 2005; OEHHA  | cns, 5x cancer risk per oehha, IUR 100-500m epcra 2 ca loc; just make inh+vapor / PO                 |
| alachlor   | 15972608                                | NEW                                | 1                      | mg/m <sup>3</sup> | 2007   | PEST SEN Restricted material 115 Calif use records 2008 on 4,343 acres; NIOSH 5602 Inh+vap ok        |
| aldicarb   | 116063                                  | NEW                                | 0.07                   | mg/m <sup>3</sup> | no TLV   | Pest WEEL no TLV 819 Calif use records 2008 / O  |
| allyl bromide  | 106956                                  | NEW                                | 0.1/0.2                | ppm               | 2011   | Eye and urt irr / O  |

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|---|------------|------------------------------------|------------------------|-------------------|--|---|
| anthraquinone                             | 84651      | NEW                                |                        | mg/m <sup>3</sup> | HESIS  | Manuf paper products more than 10,000 workers exp. Reg'd pesticide (seed treatment). Chem inter for dyes and pigments. Catalyst in isomerization of linseed and other veg oils. (EPA); 5.5 M (2011). Cancer |
| antimony trioxide production              | 13096441   | 0.5                                | ALARA                  | mg/m <sup>3</sup> | 1979   | antimony trioxide production TLV to lowest level, lung cancer, iur 1-10m  |
| atrazine                                  | 1912249    | 5                                  | 2                      | mg/m <sup>3</sup> | 2014   | Hematologic, repro and developmental effects  |
| benzaldehyde                              | 100527     | NEW                                |                        | ppm               | no TLV   | DSEN, limited tox data, flavor use  |
| boron tribromide                          | 10294334   | 1.0C                               | C 0.7S                 | ppm               | 2016   | Resp tract irr; pneumonitis   |
| boron trichloride                         | 10294345   | NEW                                | 0.7S                   | ppm               | 2016   | Resp tract irr; pneumonitis   |
| boron trifluoride                         | 7637072    | 1/3                                | 0.1/0.7C               | ppm               | 2016   | Resp tract irr; pneumonitis   |
| butane ( all isomers)                     | 75285/1069 | 800                                | 1000 STEL              | ppm               | 2013   | CNS impair  |
| butyl glycidyl ether, n-                  | 2426086    | 25                                 | 3                      | ppm               | 2005   | testicular atrophy, SEN / P   |
| butyraldehyde                             | 123728     | NEW                                | 25                     | ppm               | no TLV   | DSEN chem intermediate, IUR > 1billion lbs  |
| cadusafos                                 | 95465999   | NEW                                | 0.001                  | mg/m <sup>3</sup> | 2017   | CNS impair / O  |
| calcium silicate, nat occ as Wollastonite | 1344952    | 10                                 | 1                      | mg/m <sup>3</sup> | 2016   | Pneumoconiosis; pulm func.  |
| captafol                                  | 2425061    | 0.1                                | 0.1 IFV                | mg/m <sup>3</sup> | 2017   | liver kidney da, dermal sen   |
| carbaryl                                  | 63252      | 5                                  | 0.5                    | mg/m <sup>3</sup> | 2008   | PEST cholinergic reproductive 3000 Calif use records 2008 TRI 1 Cal loc 18 US / O   |
| carbon black                              | 1333864    | 3.5                                | 3.5                    | mg/m <sup>3</sup> | 1985   | A4  |
| carbon monoxide                           | 630080     | 25/200                             | 25                     | ppm               | 1989   | BEI, COHb-emia, aREL  |
| carbon tetrachloride                      | 56235      | 2/10/200                           | 5/10                   | ppm               | 1990   | A2, liver, 25-69X cancer risk per oehha, cREL, aREL iur 100-500m / PO   |
| carbonyl sulfide                          | 463581     | NEW                                | 5                      | ppm               | 2011   | CNS impair  |
| chlorinated paraffins                     | 108171262  | NEW                                |                        |                   | no TLV   | cancer, unit risk value, sampling limitation, iur 50-100m   |
| chloroform                                | 67663      | 2                                  | 10                     | ppm               | 1990; OEHHA  | A3, liver, embro/fetal, CNS, iur .5-1b, 7-29X cancer risk per oehha, cREL, aREL   |
| chloroprene                               | 126998     | 10                                 | 10                     | ppm               | 1990   | urt, eye irr, iur 100-500m epkra 13 us loc / PO   |
| chlorpyrifos                              | 2921882    | 0.2                                | 0.1                    | mg/m <sup>3</sup> | 2003   | Pest >29,000 Calif use records 2008 / PO  |
| clopidol                                  | 2971906    | 10T/5R                             | 3 (IFV)                | mg/m <sup>3</sup> | 2013   | Mutagenic eff   |
| cobalt and certain cobalt compounds       | 7440484    | 0.02                               | 0.02                   | mg/m <sup>3</sup> | 1993   | A3, BEI, asthma, pum func, heart, limited cancer data   |
| cyanogen                                  | 460195     | 10                                 | 5C                     | ppm               | 2016   | Eye and URT irr   |
| cyanogen bromide                          | 506683     | NEW                                | 0.3 C                  | ppm               | 2013   | Eye and resp tract irr; pulm edema  |
| decamethylcyclopentasiloxane (D5)         | 541026     | NEW                                |                        |                   | no TLV   | Liver changes may be the most sensitive non-cancer endpoint, possible cancer  |

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|---|-------------|------------------------------------|------------------------|-------------------|--|--|
| dichlorobenzene, p-                                 | 106467      | 10/110/200                         | 10                     | ppm               | 1990; OEHHA  | A3, eye, kidney, CUPA usa data, 86X cancer risk per oehha, cREL iur 10-50m   |
| dichlorvos (DDVP)                                   | 62737       | 1                                  | 0.1                    | mg/m <sup>3</sup> | 2002   | PEST SEN, 460 Calif use records (2008) including structural/commodity fumigation/ fly control / PO   |
| diesel engine exhaust                               |             | NEW                                |                        |                   | no TLV   | cancer, MSHA exp limit, ARB substance of study, cREL, sampling limitations, proposed tlv withdrawn in 2004   |
| diethanolamine                                      | 111422      | 2                                  | 1                      | mg/m <sup>3</sup> | 2009   | liver and kidney effects / PO  |
| diethylene glycol monobutyl ether                   | 112345      | NEW                                | 10                     | ppm               | 2012   | Hematologic; liver and kidney eff  |
| diethylhydroxylamine, n,n-                          | 3710847     | NEW                                | 2                      | ppm               | 2012   | URT irt  |
| dimethyl-p-toluidine, n, n-                         | 99978       | NEW                                |                        | ppm               | HESIS  | Widespread use to cure methyl methacrylate but polymerization is rarely complete. use in dental materials and bone cements, artificial fingernails. 62,720 U.S. workers were exp (NIOSH, 1990). >500K-1M. Cancer |
| dioxolane,1,3                                       | 646060      | NEW                                | 20                     | ppm               | 2002   | hematologic, limited tox data, epcra 1 ca loc, solvent, feedstock, IUR 10-50 million lbs   |
| disulfoton  | 298044      | 0.1                                | 0.05                   | mg/m <sup>3</sup> | 2002   | Pest 499 Calif use records 2008 / PO   |
| dodecyl mercaptan                                   | 112550      | NEW                                | 0.1                    | ppm               | 2004   | SEN, urt, feedstock, IUR 10-50 million lbs, cupa data  |
| endosulfan  | 115297      | 0.1                                | 0.1                    | mg/m <sup>3</sup> | 2009   | Pesticide 1,498 Calif use records 2008 but only change is inh+vapor / PO   |
| ethanol   | 64175       | 1000                               | 1000 S                 | ppm               | 2009   | eye and upper respiratory tract irritation usage   |
| ethyl acrylate                                      | 140885      | 1/5                                | 5/15                   | ppm               | 1986   | A4, urt, GI irr, CNS, eye irr, skin sen, epcra 3 ca lociur 100-500m  |
| ethyl formate                                       | 109944      | 100                                | 100S                   | ppm               | 2012   | A4, urt irr  |
| ethylene dichloride                                 | 107062      | 1                                  | 10                     | ppm               | 1977   | A4, liver, nausea, 11-14x cancer risk oehha, epcra 14 us loc, cupa data, iur > 1b, cREL /P   |
| ethylene glycol                                     | 107211      | 40C                                | 25/50                  | ppm               | 2017   | A4, urt irr  |
| ethyleneimine                                       | 151564      | 0.5                                | 0.05/0.1               | ppm               | 2009   | 8 CCR 5209 carcinogen (at 1% by wt of vol) upper respiratory irritation / O  |
| ethylidene norbornene                               | 16219753    | 5C                                 | 2/4                    | ppm               | 2014   | URT and eye irr  |
| folpet  | 133073      | NEW                                | 1                      | mg/m <sup>3</sup> | 2017   | DSEN, A3, liver dam  |
| furfural  | 98011       | 2                                  | 0.2                    | ppm               | 2017   | A3, urt & eye irr, skin / O  |
| furfuryl alcohol                                    | 98000       | 10/15                              | 0.2                    | ppm               | 2017   | A3, urt & eye irr, skin / O  |
| hard metals, containing cobalt and tungsten carbide | 7440484; 12 | 0.02                               | 0.005                  | mg/m <sup>3</sup> | 2016   | Pneumonitis  |

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|-----------------------------------|-------------|-----------------------------|-----------------|-------------------|---|---|
| hexahydrophthalic anhydride       | 1314903; 14 | NEW                         | 0.005           | mg/m <sup>3</sup> | 2004  | SEN, rsen, epoxy curing agent, no ca use data, IUR 1-10 mil lbs                       |
| hexylene glycol                   | 107415      | 25C                         | 25/50           | ppm               | 2017  | eye & urt irr   |
| hydroquinone                      | 123319      | 2                           | 1               | mg/m <sup>3</sup> | 2008  | SEN eye irritation and damage   |
| indium phosphide                  | 22398807    | 0.1                         | 0.03            | mg/m <sup>3</sup> | 2001  | NTP testing concluded "clear evidence" for carcinogenicity, no risk value             |
| isopropanol TLV now 2-propanol    | 67630       | 400/500                     | 200/400         | ppm               | 2003  | IUR > 1 billion lbs, cREL, aREL   |
| kerosene jet fuel, total HC vapor | 8008206     | NEW                         | 200             |                   | 2003  | IUR > 1 billion lbs, sampling limitations. NOT VAPOR?? DOC SAYS MIN AEROSOL ONLY / O  |
| lithium hydride                   | 7580678     | 0.025                       | 0.05S           | mg/m <sup>3</sup> | 2015  | Eye and resp tract irr  |
| malathion                         | 121755      | 10                          | 1               | mg/m <sup>3</sup> | 2003  | Pest >15,000 Calif use records 2008 / PO  |
| maleic anhydride                  | 108316      | 0.1                         | 0.01            | ppm               | 2011  | resp sens   |
| methanol                          | 67561       | 200/250                     |                 | ppm               | 2009; HESIS                                   | Industrial solvent; Occ exp through inh and der. HESIS: Developmental. / P            |
| methomyl                          | 16752775    | 2.5                         | 0.2             | mg/m <sup>3</sup> | 2014  | Cholinesterase inhib; male repro dam; hematologic eff / O                             |
| methoxy-2-propanol, 1-            | 107982      | 100/150                     | 50/100          | ppm               | 2013  | Eye and URT irr   |
| methoxyethanol acetate, 2-        | 110496      | 5                           | 0.1             | ppm               | 2006; NIOSH                                   | hematologic & repro effects OSHA FR no longer used, cupa data / P                     |
| methoxyethanol, 2-                | 109864      | 5                           | 0.1             | ppm               | 2006; NIOSH                                   | hematologic & repro effects OSHA FR no longer used, cupa data / P                     |
| methyl chloride                   | 74873       | 5/100/300                   | 50/100          | ppm               | 1992  | A4, cns, liver, kidney, testicular, teratogen, epcra 1 ca loc, cREL, no risk data / O |
| methyl ethyl ketone (MEK)         | 78933       | 200/300                     | 200             | ppm               | 2001; HESIS                                   | Widespread uses. Hoell E et al; 2-Butanone. >500M - 1B. HESIS: Developmental.         |
| methyl formate                    | 107313      | 100/150                     | 50/100          | mg/m <sup>3</sup> | 2015  | CNS impair, URT irr; eye dam / O  |
| methyl isoamyl ketone             | 110123      | 50                          | 20/50           | ppm               | 2013  | CNS impair, URT irr   |
| methyl isopropyl ketone           | 563804      | 200                         | 20              | ppm               | 2011  | Embryo/fetal dam; neonatal toxicity   |
| methyl parathion                  | 298000      | 0.2                         | 0.02            | mg/m <sup>3</sup> | 2009  | Restricted material 538 Calif use reports 2008 / PO                                   |
| methyl styrene, α-                | 98839       | 50/100                      | 10              | ppm               | 2010  | Chemical intermediate in plastics manufacture   |
| methylacetylene-propdiene mixture | 56960919    | NEW                         | 1000/1250       | ppm               | 2017  | cns   |
| mineral oil, highly refined       |             | 5                           | 5               | mg/m <sup>3</sup> | 2010  | As aerosol, excluding metal working fluids; inhalable fraction                        |
| mineral oil, mildly refined       |             | NEW                         | ALARA           | mg/m <sup>3</sup> | 2010  | Excluding metal working fluids  |
| monochloroacetic acid             | 79118       | NEW                         | 0.5             | ppm               | 2006  | urt, various uses, high epa use, IUR 100-500 mil lbs, canning use, dermal tox / O     |

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|--|------------|------------------------------------|------------------------|-------------------|--|---|
| myrcene, beta  | 123353     | NEW                                |                        | ppm               | HESIS  | Prep of perfume chemicals and flavoring, detergent additive; Occ exp through inh and der. >10M - 50M. Cancer. |
| naled  | 300765     | 3                                  | 0.1                    | mg/m <sup>3</sup> | 2002   | Pest SEN 2,772 Calif use records 2008 / PO  |
| natural rubber latex, as total protein               | 9006046    | NEW                                | 0.001                  | mg/m <sup>3</sup> | 2004   | SEN skin sensitization, air sampling and analysis limitations   |
| natural rubber latex, as inhalant allergenic protein | 9006046    | NEW                                | 0.0001                 | mg/m <sup>3</sup> | 2008   | SEN skin sensitization, air sampling and analysis limitations   |
| nickel (Metallic & compounds)                        | 7440020    | 2                                  | 0.1 - 1.5              | ppm               | 2001; HESIS  | Dermatitis and pneumoconiosis; HESIS: cancer  |
| nickel carbonyl                                      | 13463393   | 0.001                              | 0.05 C                 | ppm               | 2014   | Lung irr  |
| nitrilotriacetic acid                                | 139139     | NEW                                |                        |                   | no TLV   | epcra 1 ca loc, cupa data NTP 11 ROC describes as "laundry detergent builder"                                 |
| nitrogen dioxide                                     | 10102440   | 1.0 S                              | 0.2                    | ppm               | 2012   | A4, Irr irr   |
| nitromethane   | 75525      | 2                                  | 20                     | ppm               | 1997   | A2, thyroid, urt, lung dam, CUPA use data   |
| nitro-o-toluidine, 5-                                | 99558      | NEW                                | 1                      | mg/m <sup>3</sup> | 2007   | liver damage, dye manf, IUR 100-500 K lbs, low tox  |
| pentachlorophenol                                    | 87865      | 0.5                                | 0.5/1.0                | mg/m <sup>3</sup> | 2014   | URT and eye irr; CNS and cardiac impair / O   |
| perfluorobutyl ethylene                              | 19430934   | NEW                                | 100                    | ppm               | 2004   | hematologic effects, teflon ingred, IUR 100-500 K lbs, low tox  |
| phenylhydrazine (and salts)                          | 100630     | 5                                  | 0.1                    | ppm               | 1988; OEHHA  | anemia urt irritation chemical reagent OEHHA 500X cancer risk / O   |
| phorate  | 298022     | 0.05/0.2                           | 0.05/0.2               | mg/m <sup>3</sup> | 2005   | Pest 1,359 Calif use records 2008 just add inh + vap / O  |
| phthalic anhydride                                   | 85449      | 1                                  | 0.002/0.005            | ppm               | 2017   | RSEN, DSEN, A4, Skin, resp sen, asthma / O  |
| phthalidionitrile, 0-                                | 91156      | NEW                                | 1                      | mg/m <sup>3</sup> | 2011   | CNS convul; body weight eff   |
| piperazine and salts, as piperazine                  | 142643     | NEW                                | 0.03                   | ppm               | 2011   | Resp sens; asthma   |
| polyvinyl chloridedust (PVC)                         | 9002862    | 10 T                               | 1 R                    | mg/m <sup>3</sup> | 2008   | pneumoconiosis; PFT changes; lower respiratory tract irritation   |
| portland cement (<1% silica)                         | 65997151   | 10                                 | 1                      | mg/m <sup>3</sup> | 2010   | pulmonary function asthma   |
| propylene dichloride (1,2 dichloropropane)           | 78875      | 75/110                             | 10                     | ppm               | 2006   | SEN upper respiratory tract irritation polymer manf, IUR 100-500m, cancer                                     |
| propylene glycol mono-t-butyl ether                  | 57018527   | NEW                                |                        | ppm               | HESIS  | Solvent in all purpose cleaners, inks, adhesives, nail polish lacquers. >1M-10M. Cancer.                      |
| propyleneimine                                       | 75558      | 2                                  | 0.2/0.4                | ppm               | 2009; OEHHA  | upper respiratory tract irritation OEHHA cancer unit risk value / PO  |
| pyridine   | 110861     | 5                                  | 1                      | ppm               | 2004; OEHHA  | skin irritation, no risk value, liver & kidney damage, IUR 10-50m   |

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|---|---------|-----------------------------|-----------------|-------------------|---|--|
| simazine  | 122349  | NEW                         | 0.5             | mg/m <sup>3</sup> | 2016  | Hematologic effects  |
| temephos  | 3383968 | 10/5 TR                     | 1               | mg/m <sup>3</sup> | 2005  | Pest 32 Calif use reports 2008 mainly mosquito abatement larvicide / O   |
| tert-amyl methyl ether  | 994058  | NEW                         | 20              | ppm               | 2002  | cns, embryo/fetal damage, gas additive, IUR > 1 bil lbs, limited tox data  |
| tetrachloroethylene   | 127184  | 25/100                      | 25/100          | ppm               | OEHHA;HESIS                                   | A3, BEI, cns, iur 100-500m, epkra 27 ca loc, 130x cancer risk per oehha, cREL, aREL  |
| Tetrafluoroethylene   | 116143  | 2                           |                 | ppm               | 2001; HESIS                                   | kidney toxicity; cancer  |
| thallium and cmpnds as TI   | 7440280 | 0.1                         | 0.02            | mg/m <sup>3</sup> | 2010  | may be in semiconductors, infrared sensors, photocells / PO  |
| thiobis, 4,4'- (6-tert-butyl-m-cresol)  | 96695   | 10                          | 1               | mg/m <sup>3</sup> | 2011  | URT irr  |
| thionyl chloride  | 7719097 | 1 C                         | 0.2             | ppm               | 2010  | severe respiratory irritation mainly in synthesis of organochlorines   |
| thiourea  | 62566   | NEW                         |                 |                   | no TLV  | epkra 19 us loc, cupa data, iur .5-1m  |
| thiram  | 137268  | 1                           | 0.05            | mg/m <sup>3</sup> | 2008  | PEST SEN Calif commodity fumigant 931 Calif use reports 2008 other industrial uses rubber accelerant lubricant additive. NIOSH says low vapor. TRI: 59 US locs no CA loc |
| trichloroacetic acid  | 76039   | 1                           | 0.5             | ppm               | 2015  | Eye and URT irr  |
| triethylamine   | 21448   | 1.0 C                       | 0.5/1           | ppm               | 2015  | Visual impair; URT irr / O   |
| triorthocresyl phosphate  | 78308   | 0.1                         | 0.02            | mg/m <sup>3</sup> | 2016  | Neurotoxicity; cholinesterase inhibition / O   |
| tungsten & compounds in absence of Cobalt as W  | 7440337 | 5                           | 3               | mg/m <sup>3</sup> | 2017  | lung dam   |
| vanadium pentoxide  | 1314621 | 0.05                        | 0.05            | mg/m <sup>3</sup> | 2009  | upper respiratory tract irritation; 0.05 mg/m3 Inhalable TWA   |
| warfarin  | 81812   | 0.1                         | 0.01            | mg/m <sup>3</sup> | 2016  | Bleeding; teratogenic / O  |
| <b>Priority 2* - Special Committee Needed Instead of HEAC (see Notation section for reason)</b> |         |                             |                 |                   |   |  |
| arsine  | 7784421 | 0.05                        | 0.005           | ppm               | 2007  | HEAC rec to group with update to section 5214 Arsenic, kidney; peripheral nervous system, vascular system, electronic use, aREL  |
| beryllium   | 7440417 | 0.0002                      | 0.00005         | mg/m <sup>3</sup> | 2014;   | new OSHA std, SEN notation and retained A1 list for cancer   |
| bisphenol A (BPA)   | 80057   | NEW                         | no tlv          | mg/m <sup>3</sup> | HESIS   | primarily public health issue  |

| <b>Chemical Name</b>             | <b>CAS</b> | <b>Current 5155 PEL TWA/STEL/C</b> | <b>New/revised OEL</b> | <b>UNITS</b>      | <b>OEL source: ACGIH (Year), NIOSH, OEHHA, HESIS</b> | <b>OEL basis/Other listing/Notations</b>   |
|----------------------------------|------------|------------------------------------|------------------------|-------------------|--|--|
| bromopropane, 1-                 | 106945     | 5                                  | 0.1                    | ppm               | 2014; HESIS  | Stakeholder concerns, use in decline, CNS impair, peripheral neuropathy; hemaotological eff, developmental and repro toxicity (male and female)  |
| butyl benzyl phthalate           | 85687      | NEW                                | No TLV                 | mg/m <sup>3</sup> | no TLV; OEHHA  | Group with all phthalates, Primarily public health issue, oehha rpt, cosmetic use  |
| carbon nanotubes                 | 7782425    | 15                                 | 0.001                  | mg/m <sup>3</sup> | 2013; HESIS  | Sampling issues, Group with other nanoparticles, NIOSH REL = 1 µg/m <sup>3</sup>   |
| di(2-ethylhexyl)phthalate (DEHP) | 117817     | 5                                  | 5                      | mg/m <sup>3</sup> | 1998; OEHHA  | Group with all phthalates, Primarily public health issue, Plasticizer A2, LRT, irr, iur 100-500m, Prop 65 repro, 0.4X cancer risk per oehha  |
| diacetyl                         | 431038     | 0.012/0.035                        | 0.01/0.02              | ppm               | 2012; HESIS  | Section 5197 would need update, lung damage (bronchiolitis obiterans-like illness); NIOSH REL 0.005/0.025;   |
| dibutyl phthalate                | 84742      | 5                                  | 5                      | mg/m <sup>3</sup> | 1990; OEHHA  | Group with all phthalates, Primarily public health issue, testicular damage, eye, URT irr, Prop 65 repro, epcra 2 CA locs iur 10-50m   |
| Diisononyl phthalate (DINP)      | 28553120   | NEW                                |                        | mg/m <sup>3</sup> | HESIS  | Group with all phthalates, Primarily public health issue, 95% used in plasticizers for PVC appl and flex vinyls. Also used in glues, dyestuffs and pigments, paints, printing, metal coating, sealing comps, furn fabric, carpet tile, vinyl tile (OEHHA). |
| di-n-hexyl phthalate (DnHP)      | 84753      | NEW                                |                        | mg/m <sup>3</sup> | HESIS  | Group with all phthalates, Primarily public health issue, Plasticizer, repro per oehha   |
| ethyl isocyanate                 | 109900     | NEW                                | 0.02/0.06              | ppm               | 2013   | Group with all isocyanates, sampling issues, URT and eye irt / O   |
| formaldehyde                     | 50000      | 0.75/2                             | 0.1/0.3                | ppm               | 2017   | Section 5217 would need update   |
| gallium arsenide                 | 1303000    | see 5214                           | 0.003                  | mg/m <sup>3</sup> | 2005   | Section 5214 would nedd update, lrt irr, semicon use, 5214 comp std  |
| isocyanates (TRIG &/or ind sus)  |            | NEW                                | 0.017/0.07             | mg/m <sup>3</sup> | no TLV   | Group with all isocyanates, sampling issues, SEN respiratory sensitization   |
| methyl isocyanate                | 624839     | NEW                                | 0.02/0.06              | ppm               | 2013   | Group with all isocyanates, sampling issues, URT and eye irt / O   |
| pentanedione, 2,3-               | 600146     | 0.012/0.035                        | 0.009.3/0.031          | ppm               | TLV; NIOSH; HES                                      | Section 5197 would need update, similar toxicity to diacetyl; REL = 0.009.3/0.031 ppm TLV/STEL; HESIS  |
| pentanedione, 2,4-               | 123546     | NEW                                | 25                     | ppm               | 2010; HESIS  | Section 5197 would need update, Neurotoxicity; CNS impair / O  |
| phenyl isocyanate                | 103719     | NEW                                | 0.005/0.015            | ppm               | 2013   | Group with all isocyanates, sampling issues, dermatitis; Hematologic eff; testicular dam / O   |

| <b>Chemical Name</b>                       | <b>CAS</b>  | <b>Current 5155<br/>PEL<br/>TWA/STEL/C</b> | <b>New/revised<br/>OEL</b> | <b>UNITS</b>      | <b>OEL source:<br/>ACGIH (Year),<br/>NIOSH, OEHHA,<br/>HESIS</b> | <b>OEL basis/Other listing/Notations</b>   |
|--|-------------|--|----------------------------|-------------------|--|--|
| silica (crystalline quartz & cristobalite) |             | 0.05                                       | 0.025                      | mg/m <sup>3</sup> | 2006   | Section 5204 would need update, A2 carc pulmonary fibrosis lung cancer   |
| styrene                                    | 100425      | 50/100/500                                 | 20                         | ppm               | 2001; OEHHA  | Stakeholder concerns, CNS, urt, peripheral neuropathy, IUR > 1 bil lbs, cREL, aREL / PO  |
| titanium dioxide, ultrafine (<100 nm)      | 13463677    | 10   | 0.3                        | mg/m <sup>3</sup> | 2011; HESIS  | Group with other nanoparticles, sampling issues, NIOSH REL = 2.4 mg/m <sup>3</sup> for fine, 0.3 mg/m <sup>3</sup> for ultrafine |
| toluene diisocyanate, 2-4 and 2-6          | 584849; 910 | 0.005/0.02                                 | 0.001/0.005                | ppm               | 2016   | Group with all isocyanates, sampling issues, Asthma; pulm func; eye irr / O  |

NOTES: R = Respirable; T = Total; IFV = Inhalable; P= PEL skin notation, O=other OEL skin notation; S= STEL; C = Ceiling limit; NEW = would be new PEL