

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

Below is a list of NSRLs and MADLs that provide "safe harbor" for businesses subject to the requirements of Proposition 65. These NSRLs and MADLs are established in regulation in Title 27, Cal. Code of Regulations, Sections 25705, 25709 and 25805. These safe harbor levels do not preclude the use of alternative levels that can be demonstrated by their users as being scientifically valid. A hyperlink is provided for those NSRLs or MADLs for which the documentation of their derivation is electronically available.

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|--|---|--|
| A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole) | 2 | |
| Acetaldehyde | 90 (inhalation) | |
| Acetamide | 10 | |
| 2-Acetylaminofluorene | 0.2 | |
| Acrylamide | 0.2 | 140 |
| Acrylonitrile | 0.7 | |
| Actinomycin D | 0.00008 | |
| AF-2;[2-(2-furyl)-3-(5-nitro-2-furyl)]acrylamide | 3 | |
| Aldrin | 0.04 | |
| 2-Aminoanthraquinone | 20 | |
| o-Aminoazotoluene | 0.2 | |
| 4-Aminobiphenyl (4-aminodiphenyl) | 0.03 | |
| 3-Amino-9-ethylcarbazole hydrochloride | 9 | |
| 1-Amino-2-methylantraquinone | 5 | |
| 2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole | 0.04 | |
| Amitrole | 0.7 | |
| Aniline | 100 | |
| o-Anisidine | 5 | |
| o-Anisidine hydrochloride | 7 | |
| Aramite | 20 | |
| Arsenic (inorganic arsenic compounds) | 0.06 (inhalation) 10 (except inhalation) | |
| Asbestos | 100 fibers/day (inhalation) | |
| Auramine | 0.8 | |
| Avermectin B1 (Abamectin) | | 4.4 |
| Azaserine | 0.06 | |
| Azathioprine | 0.4 | |
| Azobenzene | 6 | |
| Benz[a]anthracene | 0.033 (oral) | |
| Benzene | 6.4 (oral) 13 (inhalation) | 24 (oral) 49 (inhalation) |
| Benzidine [and its salts] | 0.001 | |
| Benzo[b]fluoranthene | 0.096 (oral) | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|--|------------------------------|-----------------------------|
| Benzofluoranthene | 0.11 (oral) | |
| Benzofuran | 1.1 | |
| Benzo[a]pyrene | 0.06 | |
| Benzyl chloride | 4 | |
| Benzyl violet 4B | 30 | |
| Beryllium | 0.1 | |
| Beryllium oxide | 0.1 | |
| Beryllium sulfate | 0.0002 | |
| Bis(2-chloroethyl)ether | 0.3 | |
| Bis(chloromethyl)ether | 0.02 | |
| Bromodichloromethane | 5 | |
| Bromoethane | 96 | |
| Bromoform | 64 | |
| 1,3-Butadiene | 0.4 | |
| Butylated hydroxyanisole | 4000 | |
| Butyl benzyl phthalate ^b | | 1200 (oral) |
| beta-Butyrolactone | 0.7 | |
| Cadmium | 0.05 (inhalation) | 4.1 (oral) |
| Captafol | 5 | |
| Captan | 300 | |
| Carbazole | 4.1 | |
| Carbon tetrachloride | 5 | |
| N-Carboxymethyl-N-nitrosourea | 0.70 | |
| Chlorambucil | 0.002 | |
| Chlordane | 0.5 | |
| Chlordecone (Kepone) | 0.04 | |
| Chlorendic acid | 8 | |
| Chlorinated paraffins (Average chain length, C12; approximately 60 percent chlorine by weight) | 8 | |
| p-Chloroaniline | 1.5 | |
| p-Chloroaniline hydrochloride | 1.9 | |
| Chloroethane (Ethyl chloride) | 150 | |
| Chloroform | 20 (oral) 40 (inhalation) | |
| Chloromethyl methyl ether (technical grade) | 0.3 | |
| 3-Chloro-2-methylpropene | 5 | |
| 4-Chloro-o-phenylenediamine | 40 | |
| Chlorothalonil | 41 | |
| p-Chloro-o-toluidine | 3 | |
| p-Chloro-o-toluidine, hydrochloride | 3.3 | |
| Chlorozotocin | 0.003 | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a | |
|---|--|-----------------------------------|------------------------------------|
| Chromium (hexavalent compounds) | 0.001 (inhalation) | 8.2 (oral) | |
| Chrysene | 0.35 (oral) | | |
| C.I. Basic Red 9 monohydrochloride | 3 | | |
| C.I. Direct Blue 218 | 50 | | |
| Cinnamyl anthranilate | 200 | | |
| Coke oven emissions | 0.3 | | |
| p-Cresidine | 5 | | |
| Cupferron | 3 | | |
| Cyanide salts that readily dissociate in solution (expressed as cyanide) ^b | | | 9.8 (oral) |
| Cyclophosphamide (anhydrous) | 1 | | |
| Cyclophosphamide (hydrated) | 1 | | |
| D&C Red No. 9 | 100 | | |
| Dacarbazine | 0.01 | | |
| Daminozide | 40 | | |
| Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone) | 9 | | |
| 2,4-D butyric acid | | 910 | |
| DDD, DDE, DDT (in combination) | 2 | | |
| DDVP (Dichlorvos) | 2 | | |
| 2,4-Diaminoanisole | 30 | | |
| 2,4-Diaminoanisole sulfate | 50 | | |
| 4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline) | 5 | | |
| 2,4-Diaminotoluene | 0.2 | | |
| Dibenz[a,h]anthracene | 0.2 | | |
| 7H-Dibenzo[c,g]carbazole | 0.0030 (oral) | | |
| Dibenzo[a,h]pyrene | 0.0054 (oral) | | |
| Dibenzo[a,i]pyrene | 0.0050 (oral) | | |
| | | 3.1 (oral) | |
| 1,2-Dibromo-3-chloropropane (DBCP) | 0.1 | 4.3 (inhalation) | |
| p-Dichlorobenzene | 20 | | |
| 3,3'-Dichlorobenzidine | 0.6 | | |
| 1,1-Dichloroethane | 100 | | |
| | 50 | | |
| Dichloromethane (Methylene chloride) | 200 (inhalation) | | |
| 1,2-Dichloropropane | 9.7 | | |
| Dieldrin | 0.04 | | |
| Di(2-ethylhexyl)phthalate | 310 | | |
| | Adult ^c | | 4200 (intravenous) |
| | Infant boys, age 29 days - 24 mos. ^c | | 600 (intravenous) |
| | Neonatal infant boys, age 0 - 28 days ^c | 210 (intravenous) | |
| | Adult ^c | 410 (oral) | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|--|--|---|
| Infant boys, age 29 days - 24 mos. ^c | | 58 (oral) |
| Neonatal infant boys, age 0 - 28 days ^c | | 20 (oral) |
| Diethylstilbestrol (DES) | 0.002 | |
| Diglycidyl resorcinol ether (DGRE) | 0.4 | |
| Dihydrosafrole | 20 | |
| Di-isodecyl phthalate (DIDP) | | 2200 |
| Diisononyl phthalate (DINP) | 146 | |
| 3,3'-Dimethoxybenzidine (o-Dianisidine) | 0.15 | |
| 3,3'-Dimethoxybenzidine dihydrochloride | 0.19 | |
| 4-Dimethylaminoazobenzene | 0.2 | |
| trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole | 2 | |
| 7,12-Dimethylbenz(a)anthracene | 0.003 | |
| 3,3'-Dimethylbenzidine (ortho-Tolidine) | 0.044 | |
| 3,3'-Dimethylbenzidine dihydrochloride | 0.059 | |
| Dimethylcarbamoyl chloride | 0.05 | |
| 1,2-Dimethylhydrazine | 0.001 | |
| Dimethylvinylchloride | 20 | |
| Di-n-butyl phthalate (DBP) | | 8.7 |
| Di-n-hexyl phthalate (DnHP) | | 2200 (oral) |
| m-Dinitrobenzene | | 38 |
| 2,4-Dinitrotoluene | 2 | |
| 1,4-Dioxane | 30 | |
| Direct Black 38 (technical grade) | 0.09 | |
| Direct Blue 6 (technical grade) | 0.09 | |
| Direct Brown 95 (technical grade) | 0.1 | |
| Disodium cyanodithioimidocarbonate | | 56 (oral) 170 (oral) as 32% pesticidal formulation |
| Disperse Blue 1 | 200 | |
| Epichlorohydrin | 9 | |
| Estradiol 17B | 0.02 | |
| Ethylbenzene | 54 (inhalation) 41 (oral) | |
| Ethyl dipropylthiocarbamate | | 700 (oral and inhalation) 6700 (dermal) |
| Ethyl-4,4'-dichlorobenzilate | 7 | |
| Ethylene dibromide | 0.2 (oral) 3 (inhalation) | |
| Ethylene dichloride (1,2-Dichloroethane) | 10 | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a | |
|--|----------------------------|--|----------------------------|
| Ethylene glycol monoethyl ether | | 750 (oral) 960 (inhalation) | |
| Ethylene glycol monoethyl ether acetate | | 1100 (oral) 1400 (inhalation) | |
| Ethylene glycol monomethyl ether | | 63 (oral) | |
| Ethylene glycol monomethyl ether acetate | | 98 (oral) | |
| Ethyleneimine | 0.01 | | |
| Ethylene oxide | 2 | 20 | |
| Ethylene thiourea | 20 | | |
| Folpet | 200 | | |
| Formaldehyde (gas) | 40 | | |
| 2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole | 0.3 | | |
| Furmecyclox | 20 | | |
| Glu-P-1 (2-Amino-6-methyldipyrido[1,2- a:3',2'- d]imidazole) | 0.1 | | |
| Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole) | 0.5 | | |
| Glycidol | 0.54 | | |
| Gyromitrin (Acetaldehyde methylformylhydrazone) | 0.07 | | |
| HC Blue 1 | 10 | | |
| Heptachlor | 0.2 | | |
| Heptachlor epoxide | 0.08 | | |
| Hexachlorobenzene | 0.4 | | |
| Hexachlorocyclohexane (technical grade) | 0.2 | | |
| Hexachlorocyclohexane (alpha isomer) | 0.3 | | |
| Hexachlorocyclohexane (beta isomer) | 0.5 | | |
| Hexachlorocyclohexane (gamma isomer) | 0.6 | | |
| Hexachlorodibenzodioxin | 0.0002 | | |
| Hexachloroethane | 20 | | |
| Hydramethylnon | | | 120 (oral) |
| Hydrazine | 0.04 | | |
| Hydrazine sulfate | 0.2 | | |
| Hydrazobenzene (1,2-Diphenylhydrazine) | 0.8 | | |
| Hydrogen cyanide ^b | | | |
| Imazalil | 11 | | |
| IQ (2-Amino-3-methylimidazo[4,5-f] quinoline) | 0.5 | | |
| Isobutyl nitrite | 7.4 | | |
| Lasiocarpine | 0.09 | | |
| Lead | 15 (oral) | 0.5 | |
| Lead acetate | 23 (oral) | | |
| Lead phosphate | 58 (oral) | | |
| Lead subacetate | 41 (oral) | | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|---|--|--|
| Linuron | | 460 |
| Me-A-alpha-C (2-Amino-3-methyl-9H-pyrido[2,3-b]indole) | 0.6 | |
| MelQ (2-Amino-3,4-dimethylimidazo[4,5-f]quinoline) | 0.46 | |
| MelQx (2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline) | 0.41 | |
| Melphalan | 0.005 | |
| Methanol | | 47,000 (inhalation) 23,000 (oral) |
| 2-Methylaziridine (Propyleneimine) | 0.028 | |
| Methyl bromide, as a structural fumigant | | 810 (inhalation) |
| Methyl carbamate | 160 | |
| 3-Methylcholanthrene | 0.03 | |
| 5-Methylchrysene | 0.0084 (oral) | |
| 4,4'-Methylene bis(2-chloroaniline) | 0.5 | |
| 4,4'-Methylene bis(N,N-dimethyl)benzenamine | 20 | |
| 4,4'-Methylene bis(2-methylaniline) | 0.8 | |
| 4,4'-Methylenedianiline | 0.4 | |
| 4,4'-Methylenedianiline dihydrochloride | 0.6 | |
| Methylhydrazine | 0.058 (oral) 0.090 (inhalation) | |
| Methylhydrazine sulfate | 0.18 | |
| 4-Methylimidazole | 29 | |
| Methyl methanesulfonate | 7 | |
| 2-Methyl-1-nitroanthraquinone (of uncertain purity) | 0.2 | |
| N-Methyl-N'-nitro-N-nitrosoguanidine | 0.08 | |
| N-Methylpyrrolidone | | 3200 (inhalation) 17000 (dermal) |
| Methylthiouracil | 2 | |
| Michler's ketone | 0.8 | |
| Mirex | 0.04 | |
| Mitomycin C | 0.00009 | |
| Monocrotaline | 0.07 | |
| 5-(Morpholinomethyl)-3-[(5-nitrofurfurylidene)-amino]-2-oxazolidinone | 0.18 | |
| MX (3-chloro-4-dichloromethyl-5-hydroxy-2(5H)-furanone) | 0.11 | |
| Nalidixic acid | 28 | |
| Naphthalene | 5.8 | |
| 2-Naphthylamine | 0.4 | |
| Nickel refinery dust from the pyrometallurgical process | 0.8 | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|--|----------------------------|----------------------------|
| Nickel subsulfide | 0.4 | |
| Nitrilotriacetic acid | <u>100</u> | |
| Nitrilotriacetic acid, trisodium salt monohydrate | <u>70</u> | |
| 5-Nitroacenaphthene | <u>6</u> | |
| Nitrofen (technical grade) | <u>9</u> | |
| Nitrofurazone | <u>0.5</u> | |
| 1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinone | <u>0.4</u> | |
| N-[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide | <u>0.5</u> | |
| Nitromethane | <u>39</u> | |
| N-Nitrosodiethanolamine | 0.3 | |
| N-Nitrosodiethylamine | 0.02 | |
| N-Nitrosodimethylamine | 0.04 | |
| N-Nitrosodi- <i>n</i> -butylamine | 0.06 | |
| N-Nitrosodi- <i>n</i> -propylamine | 0.1 | |
| <i>p</i> -Nitrosodiphenylamine | <u>30</u> | |
| N-Nitrosodiphenylamine | 80 | |
| 4-(N-Nitrosomethylamino)-1-(3-pyridyl)1-butanone | <u>0.014</u> | |
| N-Nitrosomethylethylamine | 0.03 | |
| N-Nitrosomorpholine | <u>0.1</u> | |
| N-Nitroso-N-ethylurea | 0.03 | |
| N-Nitroso-N-methylurea | 0.006 | |
| N-Nitroso-N-methylurethane | <u>0.006</u> | |
| N-Nitrosornicotine | <u>0.5</u> | |
| N-Nitrosopiperidine | <u>0.07</u> | |
| N-Nitrosopyrrolidine | 0.3 | |
| Pentachlorophenol | 40 | |
| Phenacetin | <u>300</u> | |
| Phenazopyridine | <u>4</u> | |
| Phenazopyridine hydrochloride | <u>5</u> | |
| Phenesterin | <u>0.005</u> | |
| Phenobarbital | <u>2</u> | |
| Phenoxybenzamine | <u>0.2</u> | |
| Phenoxybenzamine hydrochloride | <u>0.3</u> | |
| <i>o</i> -Phenylenediamine | <u>26</u> | |
| <i>o</i> -Phenylenediamine dihydrochloride | <u>44</u> | |
| Phenyl glycidyl ether | <u>5</u> | |
| Phenylhydrazine | <u>1</u> | |
| Phenylhydrazine hydrochloride | <u>1.4</u> | |
| <i>o</i> -Phenylphenate, sodium | <u>200</u> | |
| Polybrominated biphenyls | 0.02 | |
| Polychlorinated biphenyls | 0.09 | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|---|---------------------------------|---|
| Polygeenan | 1200 | |
| Ponceau MX | 200 | |
| Ponceau 3R | 40 | |
| Potassium bromate | 1 | |
| Potassium cyanide ^b | | 25 (oral) |
| Potassium dimethyldithiocarbamate | | 720 |
| Procarbazine | 0.05 | |
| Procarbazine hydrochloride | 0.06 | |
| 1,3-Propane sultone | 0.3 | |
| beta-Propiolactone | 0.05 | |
| Propylthiouracil | 0.7 | |
| Quizalofop-ethyl | | 590 |
| Reserpine | 0.06 | |
| Safrole | 3 | |
| Sodium cyanide ^b | | 19 (oral) |
| | | 23 (oral) |
| Sodium dimethyldithiocarbamate | | 58 (oral) as a 40% pesticidal formulation |
| Sterigmatocystin | 0.02 | |
| Streptozotocin (streptozocin) | 0.006 | |
| Styrene oxide | 4 | |
| Sulfallate | 4 | |
| Sulfur dioxide ^b | | 10,000 |
| 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin (TCDD) | 0.000005 | |
| 1,1,2,2-Tetrachloroethane | 3 | |
| Tetrachloroethylene (Perchloroethylene) | 14 | |
| Tetranitromethane | 0.059 | |
| Thioacetamide | 0.1 | |
| 4,4'-Thiodianiline | 0.05 | |
| Thiophanate methyl | | 600 (oral) |
| Thiourea | 10 | |
| Toluene | | 7000 ^d |
| Toluene diisocyanate | 20 | |
| o-Toluidine | 4 | |
| o-Toluidine hydrochloride | 5 | |
| Toxaphene (Polychlorinated camphenes) | 0.6 | |
| | 14 (oral) | |
| Trichloroethylene | 50 (inhalation) | |
| 2,4,6-Trichlorophenol | 10 | |
| Trimethyl phosphate | 24 | |
| 2,4,6-Trinitrotoluene (TNT) | 8.2 | |
| Tris(1-aziridinyl)phosphine sulfide (Thiotepa) | 0.06 | |

Office of Environmental Health Hazard Assessment
Proposition 65 No Significant Risk Levels (NSRLs) for Carcinogens and
Maximum Allowable Dose Levels (MADLs) for Chemicals Causing Reproductive Toxicity

| Chemical | NSRL (µg/day) ^a | MADL (µg/day) ^a |
|---|----------------------------|----------------------------|
| Tris(2,3-dibromopropyl)phosphate | <u>0.3</u> | |
| Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) | <u>5.4</u> | |
| Trp-P-1 (Tryptophan-P-1) | <u>0.03</u> | |
| Trp-P-2 (Tryptophan-P-2) | <u>0.2</u> | |
| Urethane (Ethyl carbamate) | 0.7 | |
| Vinyl chloride | 3 | |
| Vinyl trichloride (1,1,2-Trichloroethane) | <u>10</u> | |
| 2,6-Xylidine (2,6-Dimethylaniline) | <u>110</u> | |

^a Where a source or product results in exposures by multiple routes, the total exposure must be considered. For example, the MADL for benzene is exceeded when the absorbed dose exceeds 24 µg/day. If only inhalation and oral exposure occurs, the benzene MADL is exceeded when: (oral dose ÷ 24 µg/day) + (inhalation dose ÷ 49 µg/day) > 1.0.

^b Butyl benzyl phthalate MADL was adopted June 25, 2013, Sulfur dioxide MADL was adopted July 11, 2013, Hydrogen cyanide and cyanide salts MADLs were adopted August 8, 2013; however, in accordance with Government Code section 11343.4 the MADLs will become effective October 1, 2013.

^c Levels for male children and adolescents were calculated by application of the default bodyweights specified in Section 25703(a)(8) to the procedure specified in Sections 25801 and 25803, Title 27, California Code of Regulations.

^d Level represents absorbed dose (rounded from 6,525 µg/day). Since 100% of ingested toluene is absorbed, oral dose is equivalent to administered dose. It is assumed that roughly 50% of the dose administered by the inhalation route is absorbed. Therefore the MADL for inhaled toluene is 13,000 µg/day (rounded from 13,050 µg/day), corresponding to an absorbed dose of 6,525 µg/day.