

---

---

## Proposition 65 Compliance and Non-Use Declaration

---

---

Dear Customer,

January 11, 2018

Semtech Corporation, in cooperation with our suppliers, is continuously receiving industry standards regarding environmentally safe practices and processes. One such endeavor is compliance to California Proposition 65, also known as the "Safe Drinking Water and Toxic Enforcement Act of 1986" as it applies to any of the materials used in the fabrication or assembly of Semtech product.

Currently, Semtech Corporation employs and maintains a fables business model whereby Semtech Corporation does not fabricate or assemble its product within the state of California. Semtech Corporation acknowledges that our product may find it's way into California. Our due diligence has indicated that there are no substances identified by Proposition 65 which are used, intentionally added or disposed in a manner which could potentially impact the environment or harm human beings.

A full listing of the substances imparted by Proposition 65 are listed below with their No Significant Risk Levels (NSRL) and Maximum Allowable Dose Levels (MADL). These levels have been established in regulation in Title 27, Cal. Code of Regulations, Sections 25705, 25709 and 25805.

Semtech Corporation is confident that this declaration satisfies any concerns regarding compliance to Proposition 65 as it applies to Semtech product assembled in or shipped to California.

Sincerely,



Pat Sanchez  
Corporate Quality  
Semtech Corporation  
200 Flynn Road  
Camarillo, CA 93012  
[Psanchez@semtech.com](mailto:Psanchez@semtech.com)  
[conflictfree@semtech.com](mailto:conflictfree@semtech.com)  
[RiskManagement@semtech.com](mailto:RiskManagement@semtech.com)  
[RoHSCompliance@semtech.com](mailto:RoHSCompliance@semtech.com)  
Office: (805) 480-2074  
Fax: (805) 498-3804

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole)	<a href="#">2</a>	
Acetaldehyde	90 (inhalation)	
Acetamide	<a href="#">10</a>	
2-Acetylaminofluorene	<a href="#">0.2</a>	
Acrylamide	0.2	<a href="#">140</a>
Acrylonitrile	0.7	
Actinomycin D	<a href="#">0.00008</a>	
AF-2;[2-(2-furyl)-3-(5-nitro-2-furyl)]acrylamide	<a href="#">3</a>	
Aldrin	0.04	
2-Aminoanthraquinone	<a href="#">20</a>	
o-Aminoazotoluene	<a href="#">0.2</a>	
4-Aminobiphenyl (4-aminodiphenyl)	<a href="#">0.03</a>	
3-Amino-9-ethylcarbazole hydrochloride	<a href="#">9</a>	
1-Amino-2-methylantraquinone	<a href="#">5</a>	
2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	<a href="#">0.04</a>	
Amitrole	<a href="#">0.7</a>	
Aniline	100	
o-Anisidine	<a href="#">5</a>	
o-Anisidine hydrochloride	<a href="#">7</a>	
Aramite	<a href="#">20</a>	
Arsenic (inorganic arsenic compounds)	0.06 (inhalation) 10 (except inhalation)	
Asbestos	100 fibers/day (inhalation)	
Atrazine [effective July 1, 2017]		<a href="#">100 (oral)</a>
Auramine	<a href="#">0.8</a>	
Avermectin B1 (Abamectin)		<a href="#">4.4</a>
Azaserine	<a href="#">0.06</a>	
Azathioprine	<a href="#">0.4</a>	
Azobenzene	6	
Benz[a]anthracene	<a href="#">0.033 (oral)</a>	
Benzene	<a href="#">6.4 (oral)</a> <a href="#">13 (inhalation)</a>	<a href="#">24 (oral)</a> <a href="#">49 (inhalation)</a>
Benzidine [and its salts]	0.001	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>	
Benzo[b]fluoranthene	<a href="#">0.096 (oral)</a>		
Benzo[j]fluoranthene	<a href="#">0.11 (oral)</a>		
Benzofuran	<a href="#">1.1</a>		
Benzo[a]pyrene	0.06		
Benzyl chloride	4		
Benzyl violet 4B	<a href="#">30</a>		
Beryllium	0.1		
Beryllium oxide	0.1		
Beryllium sulfate	0.0002		
Bis(2-chloroethyl)ether	0.3		
Bis(chloromethyl)ether	0.02		
Bisphenol A (BPA)			<a href="#">3 (dermal exposure from solid materials)</a>
Bromodichloromethane	5		
Bromoethane	<a href="#">96</a>		
Bromoform	<a href="#">64</a>		
1,3-Butadiene	0.4		
Butylated hydroxyanisole	4000		
Butyl benzyl phthalate <sup>b</sup>			<a href="#">1200 (oral)</a>
beta-Butyrolactone	<a href="#">0.7</a>		
Cadmium	0.05 (inhalation)		<a href="#">4.1 (oral)</a>
Captafol	<a href="#">5</a>		
Captan	<a href="#">300</a>		
Carbazole	<a href="#">4.1</a>		
Carbon tetrachloride	5		
N-Carboxymethyl-N-nitrosourea	<a href="#">0.70</a>		
Chlorambucil	<a href="#">0.002</a>		
Chlordane	0.5		
Chlordecone (Kepone)	<a href="#">0.04</a>		
Chlorendic acid	<a href="#">8</a>		
Chlorinated paraffins (Average chain length, C12; approximately 60 percent chlorine by weight)	<a href="#">8</a>		
p-Chloroaniline	<a href="#">1.5</a>		
p-Chloroaniline hydrochloride	<a href="#">1.9</a>		
Chloroethane (Ethyl chloride)	<a href="#">150</a>		
Chloroform	20 (oral) 40 (inhalation)		
Chloromethyl methyl ether (technical grade)	<a href="#">0.3</a>		
3-Chloro-2-methylpropene	<a href="#">5</a>		
4-Chloro-o-phenylenediamine	<a href="#">40</a>		
Chlorothalonil	<a href="#">41</a>		

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
p-Chloro-o-toluidine	<a href="#">3</a>	
p-Chloro-o-toluidine, hydrochloride	<a href="#">3.3</a>	
Chlorozotocin	<a href="#">0.003</a>	
Chromium (hexavalent compounds)	0.001 (inhalation)	<a href="#">8.2 (oral)</a>
Chrysene	<a href="#">0.35 (oral)</a>	
C.I. Basic Red 9 monohydrochloride	<a href="#">3</a>	
C.I. Direct Blue 218	<a href="#">50</a>	
Cinnamyl anthranilate	<a href="#">200</a>	
Coke oven emissions	0.3	
p-Cresidine	<a href="#">5</a>	
Cupferron	<a href="#">3</a>	
Cyanide salts that readily dissociate in solution (expressed as cyanide) <sup>b</sup>		<a href="#">9.8 (oral)</a>
Cyclophosphamide (anhydrous)	<a href="#">1</a>	
Cyclophosphamide (hydrated)	<a href="#">1</a>	
D&C Red No. 9	<a href="#">100</a>	
Dacarbazine	<a href="#">0.01</a>	
Daminozide	<a href="#">40</a>	
Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone)	<a href="#">9</a>	
2,4-D butyric acid		<a href="#">910</a>
DDD, DDE, DDT (in combination)	2	
DDVP (Dichlorvos)	2	
Des-ethyl atrazine (DEA) [effective July 1, 2017]		<a href="#">100 (oral)</a>
Des-isopropyl atrazine (DIA) [effective July 1, 2017]		<a href="#">100 (oral)</a>
2,4-Diaminoanisole	<a href="#">30</a>	
2,4-Diaminoanisole sulfate	<a href="#">50</a>	
2,4 -diamino-6-chloro-s-triazine (DACT) [effective July 1, 2017]		<a href="#">100 (oral)</a>
4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline)	<a href="#">5</a>	
2,4-Diaminotoluene	<a href="#">0.2</a>	
Dibenz[a,h]anthracene	<a href="#">0.2</a>	
7H-Dibenzo[c,g]carbazole	<a href="#">0.0030 (oral)</a>	
Dibenzo[a,h]pyrene	<a href="#">0.0054 (oral)</a>	
Dibenzo[a,i]pyrene	<a href="#">0.0050 (oral)</a>	
1,2-Dibromo-3-chloropropane (DBCP)	0.1	<a href="#">3.1 (oral)</a> <a href="#">4.3 (inhalation)</a>
p-Dichlorobenzene	20	
3,3'-Dichlorobenzidine	0.6	
1,1-Dichloroethane	<a href="#">100</a>	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
Dichloromethane (Methylene chloride)	50 200 (inhalation)	
1,2-Dichloropropane	<a href="#">9.7</a>	
Dieldrin	0.04	
Di(2-ethylhexyl)phthalate (DEHP)	<a href="#">310</a>	
Adult <sup>c</sup>		<a href="#">4200 (intravenous)</a>
Infant boys, age 29 days - 24 mos. <sup>c</sup>		<a href="#">600 (intravenous)</a>
Neonatal infant boys, age 0 - 28 days <sup>c</sup>		<a href="#">210 (intravenous)</a>
Adult <sup>c</sup>		<a href="#">410 (oral)</a>
Infant boys, age 29 days - 24 mos. <sup>c</sup>		<a href="#">58 (oral)</a>
Neonatal infant boys, age 0 - 28 days <sup>c</sup>		<a href="#">20 (oral)</a>
Diethylstilbestrol (DES)	<a href="#">0.002</a>	
Diglycidyl resorcinol ether (DGRE)	<a href="#">0.4</a>	
Dihydrosafrole	<a href="#">20</a>	
Di-isodecyl phthalate (DIDP)		<a href="#">2200</a>
Diisononyl phthalate (DINP)	<a href="#">146</a>	
3,3'-Dimethoxybenzidine (o-Dianisidine)	<a href="#">0.15</a>	
3,3'-Dimethoxybenzidine dihydrochloride	<a href="#">0.19</a>	
4-Dimethylaminoazobenzene	<a href="#">0.2</a>	
trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole	<a href="#">2</a>	
7,12-Dimethylbenz(a)anthracene	<a href="#">0.003</a>	
3,3'-Dimethylbenzidine (ortho-Tolidine)	<a href="#">0.044</a>	
3,3'-Dimethylbenzidine dihydrochloride	<a href="#">0.059</a>	
Dimethylcarbonyl chloride	<a href="#">0.05</a>	
1,2-Dimethylhydrazine	<a href="#">0.001</a>	
Dimethylvinylchloride	<a href="#">20</a>	
Di-n-butyl phthalate (DBP)		<a href="#">8.7</a>
Di-n-hexyl phthalate (DnHP)		<a href="#">2200 (oral)</a>
m-Dinitrobenzene		<a href="#">38</a>
2,4-Dinitrotoluene	2	
1,4-Dioxane	30	
Direct Black 38 (technical grade)	<a href="#">0.09</a>	
Direct Blue 6 (technical grade)	<a href="#">0.09</a>	
Direct Brown 95 (technical grade)	<a href="#">0.1</a>	
		<a href="#">56 (oral)</a>
Disodium cyanodithioimidocarbonate		<a href="#">170 (oral) as 32% pesticidal formulation</a>
Disperse Blue 1	<a href="#">200</a>	
Epichlorohydrin	9	
Estradiol 17B	<a href="#">0.02</a>	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
Ethylbenzene	<a href="#">54 (inhalation)</a> <a href="#">41 (oral)</a>	
Ethyl dipropylthiocarbamate		<a href="#">700 (oral and inhalation)</a> <a href="#">6700 (dermal)</a>
Ethyl-4,4'-dichlorobenzilate	<a href="#">7</a>	
Ethylene dibromide	0.2 (oral) 3 (inhalation)	
Ethylene dichloride (1,2-Dichloroethane)	10	
Ethylene glycol (ingested) [effective July 1, 2017]		<a href="#">8700 (oral)</a>
Ethylene glycol monoethyl ether		<a href="#">750 (oral)</a> <a href="#">960 (inhalation)</a>
Ethylene glycol monoethyl ether acetate		<a href="#">1100 (oral)</a> <a href="#">1400 (inhalation)</a>
Ethylene glycol monomethyl ether		<a href="#">63 (oral)</a>
Ethylene glycol monomethyl ether acetate		<a href="#">98 (oral)</a>
Ethyleneimine	<a href="#">0.01</a>	
Ethylene oxide	2	20
Ethylene thiourea	<a href="#">20</a>	
Folpet	200	
Formaldehyde (gas)	40	
2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole	<a href="#">0.3</a>	
Furmecycloz	20	
Glu-P-1 (2-Amino-6-methyldipyrido[1,2- a:3',2'- d]imidazole)	<a href="#">0.1</a>	
Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)	<a href="#">0.5</a>	
Glycidol	<a href="#">0.54</a>	
Gyromitrin (Acetaldehyde methylformylhydrazon	<a href="#">0.07</a>	
HC Blue 1	<a href="#">10</a>	
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	<a href="#">20</a>	
Hydramethylnon		<a href="#">120 (oral)</a>
Hydrazine	0.04	
Hydrazine sulfate	0.2	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
Hydrazobenzene (1,2-Diphenylhydrazine)	<a href="#">0.8</a>	
Hydrogen cyanide <sup>b</sup>		<a href="#">10 (oral)</a>
Imazalil	<a href="#">11</a>	
IQ (2-Amino-3-methylimidazo[4,5-f] quinoline)	<a href="#">0.5</a>	
Isobutyl nitrite	<a href="#">7.4</a>	
Lasiocarpine	<a href="#">0.09</a>	
Lead	<a href="#">15 (oral)</a>	0.5
Lead acetate	<a href="#">23 (oral)</a>	
Lead phosphate	<a href="#">58 (oral)</a>	
Lead subacetate	<a href="#">41 (oral)</a>	
Linuron		<a href="#">460</a>
Me-A-alpha-C (2-Amino-3-methyl-9H-pyrido[2,3-b]indole)	<a href="#">0.6</a>	
MelQ (2-Amino-3,4-dimethylimidazo[4,5-f]quinoli	<a href="#">0.46</a>	
MelQx (2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline)	<a href="#">0.41</a>	
Melphalan	<a href="#">0.005</a>	
Methanol		<a href="#">47,000 (inhalation)</a> <a href="#">23,000 (oral)</a>
2-Methylaziridine (Propyleneimine)	<a href="#">0.028</a>	
Methyl bromide, as a structural fumigant		<a href="#">810 (inhalation)</a>
Methyl carbamate	<a href="#">160</a>	
3-Methylcholanthrene	<a href="#">0.03</a>	
5-Methylchrysene	<a href="#">0.0084 (oral)</a>	
4,4'-Methylene bis(2-chloroaniline)	<a href="#">0.5</a>	
4,4'-Methylene bis(N,N-dimethyl)benzenamine	20	
4,4'-Methylene bis(2-methylaniline)	<a href="#">0.8</a>	
4,4'-Methylenedianiline	<a href="#">0.4</a>	
4,4'-Methylenedianiline dihydrochloride	<a href="#">0.6</a>	
Methylhydrazine	<a href="#">0.058 (oral)</a> <a href="#">0.090 (inhalation)</a>	
Methylhydrazine sulfate	<a href="#">0.18</a>	
4-Methylimidazole	<a href="#">29</a>	
Methyl methanesulfonate	<a href="#">7</a>	
2-Methyl-1-nitroanthraquinone (of uncertain purit	<a href="#">0.2</a>	
N-Methyl-N'-nitro-N-nitrosoguanidine	<a href="#">0.08</a>	
N-Methylpyrrolidone		<a href="#">3200 (inhalation)</a> <a href="#">17000 (dermal)</a>
Methylthiouracil	<a href="#">2</a>	
Michler's ketone	<a href="#">0.8</a>	
Mirex	<a href="#">0.04</a>	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
Mitomycin C	<a href="#">0.00009</a>	
Monocrotaline	<a href="#">0.07</a>	
5-(Morpholinomethyl)-3-[(5-nitrofurfurylidene)-amino]-2-oxazolidinone	<a href="#">0.18</a>	
MX (3-chloro-4-dichloromethyl-5-hydroxy-2(5H)-furanone)	<a href="#">0.11</a>	
Nalidixic acid	<a href="#">28</a>	
Naphthalene	<a href="#">5.8</a>	
2-Naphthylamine	<a href="#">0.4</a>	
Nickel refinery dust from the pyrometallurgical process	0.8	
Nickel subsulfide	0.4	
Nitrilotriacetic acid	<a href="#">100</a>	
Nitrilotriacetic acid, trisodium salt monohydrate	<a href="#">70</a>	
5-Nitroacenaphthene	<a href="#">6</a>	
Nitrofen (technical grade)	<a href="#">9</a>	
Nitrofurazone	<a href="#">0.5</a>	
1-[(5-Nitrofurfurylidene)-amino]-2-imidazolidinon	<a href="#">0.4</a>	
N-[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide	<a href="#">0.5</a>	
Nitromethane	<a href="#">39</a>	
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	
p-Nitrosodiphenylamine	<a href="#">30</a>	
N-Nitrosodiphenylamine	80	
4-(N-Nitrosomethylamino)-1-(3-pyridyl)1-butanon	<a href="#">0.014</a>	
N-Nitrosomethylethylamine	0.03	
N-Nitrosomorpholine	<a href="#">0.1</a>	
N-Nitroso-N-ethylurea	0.03	
N-Nitroso-N-methylurea	0.006	
N-Nitroso-N-methylurethane	<a href="#">0.006</a>	
N-Nitrosornicotine	<a href="#">0.5</a>	
N-Nitrosopiperidine	<a href="#">0.07</a>	
N-Nitrosopyrrolidine	0.3	
Pentachlorophenol	40	
Phenacetin	<a href="#">300</a>	
Phenazopyridine	<a href="#">4</a>	
Phenazopyridine hydrochloride	<a href="#">5</a>	
Phenesterin	<a href="#">0.005</a>	



**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
Phenobarbital	<a href="#">2</a>	
Phenoxybenzamine	<a href="#">0.2</a>	
Phenoxybenzamine hydrochloride	<a href="#">0.3</a>	
o-Phenylenediamine	<a href="#">26</a>	
o-Phenylenediamine dihydrochloride	<a href="#">44</a>	
Phenyl glycidyl ether	<a href="#">5</a>	
Phenylhydrazine	<a href="#">1</a>	
Phenylhydrazine hydrochloride	<a href="#">1.4</a>	
o-Phenylphenate, sodium	<a href="#">200</a>	
Polybrominated biphenyls	0.02	
Polychlorinated biphenyls	0.09	
Polygeenan	<a href="#">1200</a>	
Ponceau MX	<a href="#">200</a>	
Ponceau 3R	<a href="#">40</a>	
Potassium bromate	<a href="#">1</a>	
Potassium cyanide <sup>b</sup>		<a href="#">25 (oral)</a>
Potassium dimethyldithiocarbamate		<a href="#">720</a>
Procarbazine	<a href="#">0.05</a>	
Procarbazine hydrochloride	<a href="#">0.06</a>	
Propazine [effective July 1, 2017]		<a href="#">100 (oral)</a>
1,3-Propane sultone	<a href="#">0.3</a>	
beta-Propiolactone	<a href="#">0.05</a>	
Propylthiouracil	<a href="#">0.7</a>	
Quizalofop-ethyl		<a href="#">590</a>
Reserpine	<a href="#">0.06</a>	
Safrole	<a href="#">3</a>	
Simazine [effective July 1, 2017]		<a href="#">100 (oral)</a>
Sodium cyanide <sup>b</sup>		<a href="#">19 (oral)</a>
		<a href="#">23 (oral)</a>
Sodium dimethyldithiocarbamate		<a href="#">58 (oral) as a 40% pesticidal formulation</a>
Sterigmatocystin	<a href="#">0.02</a>	
Streptozotocin (streptozocin)	<a href="#">0.006</a>	
Styrene [effective July 1, 2017]	<a href="#">27</a>	
Styrene oxide	<a href="#">4</a>	
Sulfallate	<a href="#">4</a>	
Sulfur dioxide <sup>b</sup>		<a href="#">10,000</a>
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin (TCDD)	0.000005	
1,1,2,2-Tetrachloroethane	<a href="#">3</a>	
Tetrachloroethylene (Perchloroethylene)	14	
Tetranitromethane	<a href="#">0.059</a>	
Thioacetamide	<a href="#">0.1</a>	

**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) <sup>a</sup>	MADL (µg/day) <sup>a</sup>
4,4'-Thiodianiline	<a href="#">0.05</a>	
Thiophanate methyl		<a href="#">600 (oral)</a>
Thiourea	<a href="#">10</a>	
Toluene		7000 <sup>d</sup>
Toluene diisocyanate	<a href="#">20</a>	
o-Toluidine	<a href="#">4</a>	
o-Toluidine hydrochloride	<a href="#">5</a>	
Toxaphene (Polychlorinated camphenes)	0.6	
Trichloroethylene	<a href="#">14 (oral)</a> <a href="#">50 (inhalation)</a>	
2,4,6-Trichlorophenol	10	
Trimethyl phosphate	<a href="#">24</a>	
2,4,6-Trinitrotoluene (TNT)	<a href="#">8.2</a>	
Tris(1-aziridiny)phosphine sulfide (Thiotepa)	<a href="#">0.06</a>	
Tris(2,3-dibromopropyl)phosphate	<a href="#">0.3</a>	
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	<a href="#">5.4</a>	
Trp-P-1 (Tryptophan-P-1)	<a href="#">0.03</a>	
Trp-P-2 (Tryptophan-P-2)	<a href="#">0.2</a>	
Urethane (Ethyl carbamate)	0.7	
Vinyl chloride	3	
Vinyl trichloride (1,1,2-Trichloroethane)	<a href="#">10</a>	
2,6-Xylidine (2,6-Dimethylaniline)	<a href="#">110</a>	

<sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> 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.

<sup>d</sup> 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.