

REPRODUCTIVE TOXINS

OSHA Laboratory Standard Definition: Reproductive toxin means chemicals which affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).

CHEMICAL NAME	CAS NUMBER
Acetohydroxamic acid	546-88-3
Actinomycin D	50-76-0
All-trans retinoic acid	302-79-4
Alprazolam	8981-97-7
Amikacin sulfate	3983-55-5
Aminoglutethimide	125-84-8
Aminoglycosides	
Aminopterin	54-62-6
Angiotensin converting enzyme (ACE inhibitors)	
Anisindione	117-37-3
Aspirin	50-78-2
Barbiturates	
Benomyl	17804-35-2
Benzphetamine hydrochloride	5411-22-3
Benzodiazepines	
Bischloroethyl nitrosourea (BCNU) (carmustine)	154-93-8
Bromoxynil	1689-84-5
Butabarbital sodium	143-81-7
1,4-Butanediol dimethylsulfonate (busulfan)	55-98-1
Carbon disulfide	75-15-0
Carbon monoxide	630-08-0
Carboplatin	41575-94-4
Chenodiol	474-25-9
Chlorcyclizine hydrochloride	1620-21-9
Clorambucil	305-03-3
Chlordecone (kepone)	143-50-0
Chlordiazepoxide	58-25-3
Chlordiazepoxide hydrochloride	438-41-5
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	13010-47-4
Clomiphene citrate	50-41-9
Chlorazepate dipotassium	57109-90-7
Cocaine	50-36-2
Colchicine	64-86-8
Conjugated estrogens	
Cyanazine	21715-46-2
Cycloheximide	66-81-9
Cyclophosphamide (anhydrous)	50-18-0
Cyclophosphamide (hydrated)	6055-19-2
Cyhexatin	13121-70-5
Cytarabine	147-94-4
Danazol	17230-88-5
Daunorubicin hydrochloride	23541-50-6
Demeclocycline hydrochloride (internal use)	64-73-3
Diazepam	439-14-5

Dicumarol	66-76-2
Diethylstilbestrol (DES)	56-53-1
Dinocap	39300-45-3
Dinoseb	88-85-7
Diphenylhydantoin (phenytoin)	57-41-0
Doxycycline (internal use)	564-25-0
Doxycycline calcium (internal use)	94088-85-4
Doxycycline hyclate (internal use)	24390-14-5
Doxycycline monohydrate (internal use)	17086-28-1
Ergotamine tartrate	379-79-3
Ethylene glycol monoethyl ether	110-80-5
Ethylene glycol monomethyl ether	109-86-4
Ethylene glycol monoethyl ether acetate	111-15-9
Ethylene glycol monomethyl ether acetate	110-49-6
Ethylene thiourea	96-45-7
Etoposide	33419-42-0
Etrinate	54350-48-0
Fluorouracil	51-21-8
Fluoxymesterone	76-43-7
Flurazepam hydrochloride	1172-18-5
Flutamide	13311-84-7
Halazepam	23093-17-3
Hexachlorobenzene	118-74-1
Ifosfamide	3778-73-2
Iodine-131	24267-56-9
Isotretinoin	4759-48-2
Lead	
Lithium carbonate	554-13-2
Lithium citrate	919-16-4
Lorazepam	846-49-1
Lovastatin	75330-75-5
Medroxyprogesterone acetate	71-58-9
Megestrol acetate	595-33-5
Melphalan	148-82-3
Menotropins	9002-68-0
Meprobamate	57-53-4
Mercaptopurine	6112-76-1
Methacycline hydrochloride	6112-76-1
Methimazole	60-56-0
Methotrexate	59-05-2
Tethotrexate sodium	15475-56-6
Methyl bromide	74-83-9
Methyl mercury	22967-92-6
Methyltestosterone	58-18-4
Midazolam hydrochloride	59467-96-8
Minocycline hydrochloride (internal use)	13614-98-7
Misoprostol	62015-39-8
Mitoxantrone hydrochloride	70476-82-3
Nafgarelin acetate	86220-42-0
Neomycon sulfate (internal use)	1405-10-3
Netilmicin sulfate	56391-57-2
Nicotine	54-11-5

Nitrogen mustard (mechlorethamine)	51-75-2
Nitrogen mustard hydrochloride	55-86-7
Norethisterone (norethindrone)	68-22-4
Norethisterone acetate (norethindrone acetate)	51-98-9
Norethisterone (norethindrone)/ethinyl estradiol	68-22-4/57-63-6
Norethisterone (norethindrone)/mestranol	68-22-4/72-33-3
Norgestrel	6533-00-2
Oxazepam	604-75-1
Oxytetracycline (internal use)	79-57-2
Oxytetracycline hydrochloride (internal use)	2058-46-0
Paramethadione	115-67-1
Penicillamine	52-67-5
Phenacemide	63-98-9
Phenprocoumon	435-97-2
Pipobroman	54-91-1
Plicamycin	18378-89-7
Polychlorinated biphenyls	
Procarbazine hydrochloride	366-70-1
Propylthiouracil	51-52-5
Ribarvirin	36791-04-5
Secobarbital sodium	309-43-3
Streptomycin sulfate	3810-74-0
Tamoxifen citrate	54965-24-1
Temazepam	846-50-4
Testosterone cyoionate	846-50-4
Testosterone enanthate	315-37-7
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6
Tetracycline (internal use)	
Thalidomide	50-35-1
Thioguanine	154-42-7
Tobacco smoke (primary)	
Tobramycin sulfate	49842-07-1
Toluene	108-88-3
Triazolam	28911-01-5
Trilostane	13647-35-3
Uracil mustard	66-75-1
Urofollitropin	26995-91-5
Valproate (valproic acid)	99-66-1

Female and Male Reproductive Toxins

CHEMICAL NAME	CAS NUMBER
FEMALE REPRODUCTIVE TOXINS	
Anabolic steroids	
Carbon disulfide	75-15-0
Cocaine	50-36-2
Cyclophosphamide (anhydrous)	50-18-0
Cyclophosphamide (hydrated)	6055-19-2
Ethylene oxide	75-21-8
Lead	
Tobacco smoke (primary)	
Uracil mustard	66-75-1
MALE REPRODUCTIVE TOXINS	
Benomyl	17804-35-2
Carbon disulfide	75-15-0
Colchicine	64-86-8
Cyclophosphamide (anyhdrous)	50-18-0
Cyclophosphamide (hydrated)	6055-19-2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8
m-Dinitrobenzene	99-65-0
o-Dinitrobenzene	528-29-0
p-Dinitrobenzene	100-25-4
Dinoseb	88-85-7
Ethylene glycol monoethyl ether	110-80-5
Ethylene glycol monomethyl ether	109-86-4
Lead	
Nitrofurantoin	67-20-9
Tobacco smoke (primary)	
Uracil mustard	66-75-1

Lists taken from:

<http://www.hawaii.edu/ehso/lab/list.htm>

Highly Acute Toxins

Abrin
N-Acetoxy-2-acetylaminofluorene
Actinomycin D
Aldicarb
o-Aminoazobenzene
2-Aminofluorene
Anabasine
Apholate
Arsenious Acid, Monosodium Salt
Arsenic trioxide
Atropine
N,N-bis(2-chloromethyl)-2-Naphthylamine
Bromoethyl methanesulfonate
1,4-Butanediol dimethylsulfonate
Canthardin
2-Chloro-4-dimethyl-amino-6-methylpyrimidine
Cyanogen Bromide
Cyclophosphamide (2-bis(2-chloroethyl)-aminotetrahydro-2*H*-1,3,2-oxazaphosphorine-2-oxide)
Diazomethane
Digalen
Digifolin
Digoxin
7,12-Dimethylbenze[a]anthracene
3,3'-Dimethoxybenzidine
3,3'-Dimethylbenzidine
Dimethylethylenimine
1,2-Dimethylhydrazine
3,3'-Dimethoxybenzidine dihydrochloride
1,4-Dinitrosopiperazine
Duboisine
Ethionine
Ethylenimine
Ethylene glycol dinitrate
Ethyl methanesulfonate
Fluroactetic acid
Gitalin
Heroin
Hexaethyl tetraphosphate
Hydrazoic acid
Hydrocyanic acid
N-Hydroxy-2-acetylaminofluorene

Hyoscyamine
 Inorganic arsenic
 Isobenzan
 K-Strophanthin
 Lanatoside
 Lysergic acid diethylamide
 3-Methylcholanthrene
 Methyl chloromethyl ether
 4,4'-Methylene bis-(2-chloraniline)
 Methylhydrazine
 Methyl methanesulfonate
 Nicotine salicylate
 N-[4-(5-Nitr o-2-furyl)-2-thiazoly]-formamide
 Nitroglycerin
 N-Nitroquinoline-1-oxide
 N-Nitrosodimethylamine
 N-Nitroso-N-methylurethane
 Pantopon
 Parathion
 Paroxon
 Phosphine
 Phosphorodithioic acid
 Phosphorous (Yellow)
 Propylenimine
 2-Propylpiperidine
 Ricin
 Scopolamine
 Sarin
 Sodium Azide
 Sodium Selenate
 Sulfotepp
 Tabun
 Tepp
 2,3,7,8-Tetrachlorodibenzofuran
 Thimet
 m-Toluenediamine
 Uracil mustard

Compounds with a high level of acute toxicity are defined by LD50 and LC50 levels.

Oral LD50 (Rats, per kg)	Skin Contact LD50 (Rabbits, per kg)	Inhalation LC50 (Rats, ppm for 1 h)	Inhalation LC50 (Rats, mg/m ³ 1 h)
< 50 mg	< 200 mg	< 200	< 2000

SELECT CARCINOGENS

*This list is based on the OSHA Select Carcinogen definition at the bottom of this document as of October 2009.

OSHA - Occupational Safety and Health Administration, U.S. Department of Labor

Group ORC: OSHA Regulated Carcinogen

Group S: OSHA Select Carcinogen

IARC - International Agency for Research on Cancer

Group 1: Carcinogenic to humans

Group 2A: Probably carcinogenic to humans

Group 2B: Possibly carcinogenic to humans

NTP - National Toxicology Program, Public Health Service, U.S. Department of Health and Human Services

Group 1: Known to be Human Carcinogens (K)

Group 2: Reasonably Anticipated to be Human Carcinogens (R)

CHEMICAL NAME	CAS NUMBER	OSHA	IARC	NTP
AF-2[2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide]	3688-53-7	S	2B	
Acetaldehyde	75-07-0	S	2B	2
Acetamide	60-35-5	S	2B	
Acetic acid, cobalt(2+) salt	71-48-7	S	2B	
2-Acetylaminofluorene	53-96-3	ORC		2
Acrylamide	79-06-1	S	2A	2
Acrylonitrile	107-13-1	ORC	2B	2
Adriamycin	023214-92-8	S	2A	2
Adriamycin hydrochloride	025316-40-9	S		2
Aflatoxin B1	1162-65-8	S	1	
Aflatoxin M1	6795-23-9	S	2B	
Aflatoxins	1402-68-2	S	1	1
1-Amino-2-methylantraquinone	82-28-0	S		2
2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	712-68-5	S	2B	
Amino-alpha-C (2-Amino-9h-pyrido[2,3-b]indole)	026148-68-5	S	2B	
2-Aminoanthraquinone	117-79-3	S		2
para-Aminoazobenzene	60-09-3	S	2B	
ortho-Aminoazotoluene	97-56-3	S	2B	2
4-Aminodiphenyl	92-67-1	ORC	1	1
Amitrole	61-82-5	S	2B	2
Ammonium dichromate (VI)	07789-09-5	S	1	
Anaesthetics, volatile	--	S	2A	
Analgesic mixtures containing phenacetin	--	S	1	1
Androgenic (anabolic) steroids	--	S	2A	
Aniline	62-53-3			
ortho-Anisidine	90-04-0	S	2B	2
o-Anisidine hydrochloride	134-29-2	S	2B	2
Antimony trioxide production	1309-64-4	S	2B	
Aramite	140-57-8	S	2B	
Arsenous acid, calcium salt (2:1)	015194-98-6	S		1

Arsenous acid, potassium salt	013464-35-2	S		1
Arsenic acid, calcium salt	010103-62-5	S	1	1
Arsenic acid, calcium salt (2:3)	7778-44-1	S	1	1
Arsenic acid, disodium salt, heptahydrate	010048-95-0	S		1
Arsenic acid, lead(2+) salt(1:1)	7784-40-9	S		1
Arsenic acid, monopotassium salt	7784-41-0	S		1
Arsenic acid, sodium salt	7631-89-2	S		1
Arsenic pentoxide	1303-28-2	S		1
Arsenic trioxide	1327-53-3	S	1	1
Arsenic, elemental, and inorganic compounds, as As	7440-38-2	R	1	1
Arsenious acid, monosodium salt	7784-46-5	S	1	1
Arsenious acid, calcium salt	027152-57-4	S		1
Arsenic acid, calcium salt (1:1)	052740-16-6	S		1
Asbestos	1332-21-4	R	1	1
Asbestos, Actinolite	077536-66-4	R	1	
Asbestos, Amosite	012172-73-5	R	1	1
Asbestos, Anthophyllite	077536-67-5	R	1	1
Asbestos, Chrysotile	012001-29-5	R	1	1
Asbestos, Crocidolite	012001-28-4	R	1	1
Asbestos, Tremolite	077536-68-6	R	1	
Atrazine	1912-24-9	S	2B	
Auramine	492-80-8	S	2B	
Azacitidine	320-67-2	S	2A	2
Azaserine	115-02-6	S	2B	
Azathioprine	446-86-6	S	1	1
Azblen asbestos	017068-78-9	S		1
Barium chromate(VI)	010294-40-3	S	1	1
Benz[a]anthracene	56-55-3	S	2A	2
Benzal chloride	98-87-3	S	2A	
Benzene	71-43-2	ORC	1	1
Benzidine	92-87-5	ORC	1	1
Benzidine-based dyes	--	S	2A	
Benzo[a]pyrene	50-32-8	S	2A	2
Benzo[b]fluoranthene	205-99-2	S	2B	2
Benzo[j]fluoranthene	205-82-3	S	2B	2
Benzo[k]fluoranthene	207-08-9	S	2B	2
Benzofuran	271-89-6	S	2B	
Benzotrichloride	98-07-7	S	2A	2
Benzoyl chloride	98-88-4	S	2A	
Benzyl chloride	100-44-7	S	2A	
Benzyl violet 4B	1694-09-3	S	2B	
Beryllium aluminum alloy	012770-50-2	S	1	2
Beryllium aluminum silicate	1302-52-9	S	1	2
Beryllium and beryllium compounds	7440-41-7	S	1	2
Beryllium chloride	7787-47-5	S	1	2
Beryllium fluoride	7787-49-7	S	1	2
Beryllium phosphate	013598-15-7	S	1	2
Beryllium hydroxide	013327-32-7	S	1	2
Beryllium oxide	1304-56-9	S	1	2
Beryllium oxide carbonate	066104-24-3	S	1	2
Beryllium sulfate	013510-49-1	S	1	2

Beryllium sulfate tetrahydrate	7787-56-6	S	1	2
Beryllium zinc silicate	039413-47-3	S	1	2
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)	494-03-1	S	1	
Bis(chloromethyl)ether	542-88-1	ORC	1	1
Bischloroethyl nitrosourea (BCNU)	154-93-8	S	2A	2
Bitumens, extracts of steam-refined and air-refined	8052-42-4	S	2B,3	
Bleomycin, chlorohydrate	067763-87-5	S	2B	
Bleomycin, sulfate	9041-93-4	S	2B	
Bleomycins	011056-06-7	S	2B	
Bracken fern	--	S	2B	
Bromacil	314-40-9	S		
Bromodichloromethane	75-27-4	S	2B	2
Bromoform	75-25-2	S		
1,3-Butadiene	106-99-0	ORC	2A	2
1,4-Butanediol dimethanesulfonate (Busulphan;Myleran)	55-98-1	S	1	1
Butylated hydroxyanisole (BHA)	025013-16-5	S	2B	2
beta-Butyrolactone	3068-88-0	S	2B	
CI Acid Red 114	6459-94-5	S	2B	
CI Basic Red 9	569-61-9	S	2B	2
CI Direct blue 15	2429-74-5	S	2B	
Cadmium carbonate	513-78-0	S		2
Cadmium chloride	010108-64-2	S	1	2
Cadmium fluoborate	014486-19-2	S		2
Cadmium fume (as Cd)	1306-19-0	S	1	2
Cadmium nitrate	010325-94-7	S		2
Cadmium oxide	1306-19-0	S		2
Cadmium sulfate	010124-36-4	S	1	2
Cadmium sulfide	1306-23-6	S	1	2
Cadmium, elemental, and compounds, as Cd	7440-43-9	ORC	1	2
Caffeic acid	331-39-5	S	2B	
Calcium chromate (VI)	013765-19-0	S	1	1
Captafol	0612-42-5	S	2A	
Carbon black	1333-86-4	S	2B	
Carbon tetrachloride	56-23-5	S	2B	2
Carrageenan, degraded	972-00-1	S	2B	
Catechol	120-80-9	S	2B	
Ceramic fibers	--	S		2
Ceramic fibres	--	S	2B	
Chlorambucil	305-03-3	S	1	1
Chloramphenicol	56-75-7	S	2A	
alpha-Chlordane	5103-71-9	S	2B	
beta-Chlordane	5103-74-2	S	2B	
Chlordane	57-74-9	S	2B	
gamma-Chlordane	5566-34-7	S	2B	
Chlordecone (Kepone)	143-50-0	S	2B	2
Chlorendic acid	115-28-6	S	2B	2
Chlorinated paraffins (C12, 60% Chlorine)	108171-26-2	S	2B	2
Chlorinated paraffins (C23, 43% chlorine)	108171-27-3	S		2
alpha-Chlorinated toluenes (Benzal chloride, Benzyl	--	S	2A	

chloride, Benzotrichloride)and bonzoyl chloride (combined exposures)				
2-(4-Chloro-2-methyl phenoxy) propionic acid (Mecoprop)	93-65-2	S	2B	
1-Chloro-2-methyl propene	513-37-1	S	2B	2
3-Chloro-2-methylpropene	563-47-3	S		2
4-Chloro-o-toluidine hydrochloride	3165-93-3	S	2A	2
4-Chloro-ortho-phenylenediamine	95-83-0	S	2B	2
para-Chloro-ortho-toluidine	95-69-2	S	2A	
para-Chloro-ortho-toluidine and its strong acid salts	--	S	2A	2
para-Chloroaniline	106-47-8	S	2B	
1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1- nitrosourea (Methyl-CCNU; Semustine)	013909-09-6	S	1	1
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	013010-47-4	S	2A	2
Chloroform	67-66-3	S	2B	2
Chloromethyl methyl ether	107-30-2	ORC	1	1
Chlorophenols	95-57-8	S	2B	
Polychlorophenols and their sodium salts (mixed exposures)	--	S	2B	
Chlorophenoxy herbicides	--	S	2B	
2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1,1- trichloroethane	789-02-6	S	2B	
2-(o-Chlorophenyl)-2-(p-chlorophenyl)-1,1- dichloroethane	53-19-0	S	2B	
Chloroprene	126-99-8	S	2B	
Chlorothalonil	1897-45-6	S	2B	
Chlorozotocin	054749-90-5	S	2A	2
Chromate(1-), Hydroxyoctaoxodizincatedi-, Potassium	011103-86-9	S	1	
Chromic acid, Lead(2+) Salt (1:1)	7758-97-6	S	1	1
Chromic acid, disodium salt	01137-77-5	S	1	1
Chromite (mineral)	1308-31-2	S		1
Chromium (VI) chloride	014986-48-2	S	1	
Chromium (VI) compounds	--	S	1	1
Chromium (VI) dioxychloride	014977-61-8	S	1	
Chromium and certain chromium compounds	--	S		1
Chromium carbamate (6Cl)	029689-14-3	S		1
Chromium phosphate	7789-04-0	S		1
Chromium triacetate	1066-30-4	S		1
Chromium(VI) oxide (1:3)	1333-82-0	S	1	1
Ciclosporin	079217-60-0	S	1	
Cisplatin	015663-27-1	S	2A	2
Citrus red no.2	6358-53-8	S	2B	
Coal gasification	--	S	1	
Coal tar	065996-89-6	S		1
Coal tar distillate	065996-92-1	S		1
Coal tar pitch volatiles, as benzene solubles	065996-93-2	S	1	
Coal tars	87-45-2	S	1	1
Cobalt (II) carbonate hydroxide (2:3) monohydroxide	051839-24-8	S	2B	
Cobalt alloy, Co,Cr	011114-92-4	S	2B	1
Cobalt and cobalt compounds	7440-48-4	S	2B	

Cobalt carbonate (1:1)	513-79-1	S	2B	
Cobalt carbonate, Cobalt dihydroxide (2:3)	012602-23-2	S	2B	
Cobalt carbonyl (co4(CO)12)	017786-31-1	S	2B	
Cobalt dinitrate hexahydrate	010026-22-9	S	2B	
Cobalt hydroxide	1307-86-4	S	2B	
Cobalt hydroxide oxide	012016-80-7	S	2B	
Cobalt molybdate (VI)	013762-14-6	S	2B	
Cobalt naphthanate	061789-51-3	S	2B	
Cobalt oxide	1308-06-1	S	2B	
Cobalt triacetate	917-69-1	S	2B	
Cobalt(2+) oxide	1307-96-6	S	2B	
Cobalt(2+) sulfide	1317-42-6	S	2B	
Cobalt(II) acetate tetrahydrate	6147-53-1	S	2B	
Cobalt(II) chloride	7646-79-9	S	2B	
Cobalt(II) chloride, hexahydrate	7791-13-1	S	2B	
Cobalt(II) hydroxide	021041-93-0	S	2B	
Cobalt(II) nitrate (1:2)	010141-05-6	S	2B	
Cobalt(II) sulfate (1:1)	010124-43-3	S	2B	
Cobalt(III) oxide	1308-04-9	S	2B	
Cobalt, (mu-(Carbonato(2-)-O:O'))Dihydroxydi	012069-68-0	S	2B	
Cobalt, di-mu-carbonylhexacarbonyldi-, (Co-Co)	010210-68-1	S	2B	
Cobalt-aluminium-chromium spinel	--	S	2B	
Cobalt-chromium-molybdenum-alloy	012629-02-6	S	2B	
Cobalt-chromium-nickel-tungsten alloy	012638-07-2	S	2B	
Coke oven emissions	--	ORC		1
Coke production	--	ORC	1	1
Conjugated estrogens	012126-59-9	S		1
Conjugated estrogens	--	S		1
Creosote	81-58-9	S	2A	1
para-Cresidine	120-71-8	S	2B	2
Creosote, wood	8021-39-4	S		1
Crotonaldehyde	4170-30-3			
Cupferron	135-20-6	S		2
Cycasin	014901-08-7	S	2B	
Cyclophosphamide	50-18-0	S	1	1
Cyclophosphamide hydrate	6055-19-2	S	1	
Cyclosporin A	059865-13-3	S	1	1
DDD (dichlorodiphenyldichloroethane)	72-54-8	S	2B	
DDE (dichlorodiphenyldichloroethylene)	72-55-9	S	2B	
DDT	50-29-3	S	2B	2
Dacarbazine	0344-34-2	S	2B	2
Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone, Danthron)	117-10-2	S	2B	2
Daunomycin	020830-81-3	S	2B	
Decabromobiphenyl (under polybrominated biphenyls)	013654-09-6	S		2
Di(2-ethylhexyl) phthalate	117-81-7	S	2B	2
N,N'-Diacetylbenzidine	613-35-4	S	2B	
2,4-Diaminoanisole (and its salts)	615-05-4	S	2B	
2,4-Diaminoanisole sulfate	039156-41-7	S		2
4,4'-Diaminodiphenyl ether	101-80-4	S	2B	2

2,4-Diaminotoluene	95-80-7	S	2B	2
Dibenz[a,h]acridine	226-36-8	S	2B	2
Dibenz[a,h]anthracene	53-70-3	S	2A	2
Dibenz[a,j]acridine	224-42-0	S	2B	2
Dibenzo[a,e]pyrene	192-65-4	S	2B	2
Dibenzo[a,h]pyrene	189-64-0	S	2B	2
Dibenzo[a,i]pyrene	189-55-9	S	2B	2
Dibenzo[a,l]pyrene	191-30-0	S	2B	2
7H-Dibenzo[c,g]carbazole	194-59-2	S	2B	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	ORC	2B	2
3,3'-Dichloro-4,4'-diaminodiphenyl ether	028434-86-8	S	2B	
para-Dichlorobenzene	106-46-7	S	2B	2
3,3'-Dichlorobenzidine	91-94-1	ORC	2B	2
3,3'-Dichlorobenzidine and 3,3'-Dichlorobenzidine hydrochloride	--	S		2
3,3'-Dichlorobenzidine dihydrochloride	612-83-9	S		2
1,2-Dichloroethane	107-06-2	S	2B	2
Dichloromethane (Methylene Chloride)	75-09-2	ORC	2B	2
2-(2,4-Dichlorophenoxy)propionic acid	120-36-5	S	2B	
1,3-Dichloropropene (technical-grade)	542-75-6	S	2B	2
Dichlorvos	62-73-7	S	2B	
Diepoxybutane	1464-53-5	S		2
1-1,2:3,4-Diepoxybutane	030031-64-2	S	2B	
Diepoxybutane, (+-)-1,2:3,4-	--	S	2B	
Diesel engine exhaust	--	S	2A	
Diesel fuels	--	S	2B	
Diethyl sulfate	64-67-5	S	2A	2
1,2-Diethylhydrazine	1615-80-1	S	2B	
Diethylstilbesterol (DES)	56-53-1	S	1	1
Diglycidyl resorcinol ether	101-90-6	S	2B	2
Dihydrosafrole	94-58-6	S	2B	
Dihydroxymethylfuratrizine	794-93-4	S	2B	
Diisopropyl sulfate	01062-97-3	S	2B	
3,3'-Dimethoxybenzidine (ortho-Dianisidine)	119-90-4	S	2B	2
3,3'-dimethoxybenzidine dihydrochloride	020325-40-0	S		2
Dimethyl sulfate	77-78-1	S	2A	2
trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazole	025962-77-0	S	2B	
para-Dimethylaminoazobenzene	60-11-7	ORC	2B	2
2,6-Dimethylaniline (2,6-Xylidine)	87-62-7	S	2B	
3,3'-Dimethylbenzidine (o-Tolidine)	119-93-7	S	2B	2
Dimethylcarbamoyl chloride	79-44-7	S	2A	2
1,1-Dimethylhydrazine	57-14-7	S	2B	2
1,2-Dimethylhydrazine	540-73-8	S	2A	
3,7-Dinitrofluorantene	105735-71-5	S	2B	
3,9-Dinitrofluoranthene	022506-53-2	S	2B	
1,6-Dinitropyrene	042397-64-8	S	2B	2
1,8-Dinitropyrene	042397-65-9	S	2B	2
2,4-Dinitrotoluene	121-14-2	S	2B	
2,6-Dinitrotoluene	606-20-2	S	2B	
1,4-Dioxane	123-91-1	S	2B	2

Direct black 38	1937-37-7	S		2
Direct blue 6	2602-46-2	S		2
Disperse blue 1	2475-45-8	S	2B	2
Engine exhaust, gasoline	--	S	2B	
Epichlorohydrin	106-89-8	S	2A	2
1,2-Epoxybutane	106-88-7	S	2B	
Erionite	066733-21-9	S	1	1
Estrogens (not conjugated) Estradiol-17 beta	50-28-2	S		2
Estrogens (not conjugated) Estrone	53-16-7	S		2
Estrogens (not conjugated) Ethinylestradiol	57-63-6	S		2
Estrogens (not conjugated) Mestranol	72-33-3	S		2
Ethyl acrylate	140-88-5	S	2B	2
Ethyl bromide	74-96-4			
Ethyl methanesulfonate	62-50-0	S	2B	2
n-Ethyl-N-nitrosourea	759-73-9	S	2A	2
Ethylene dibromide	106-93-4	S	2A	2
Ethylene oxide	75-21-8	ORC	1	2
Ethylene thiourea	96-45-7	S	2B	2
Ethyleneimine (Aziridine)	151-56-4	ORC	2B	
FireMaster BP-6 (under polybrominated biphenyls)	--	S	2B	2
Formaldehyde	50-00-0	ORC	2A	2
2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole	3570-75-0	S	2B	
Fowler's solution	1332-10-1	S	1	
Fuel oil, residual	068476-33-5	S	2B	
Furan	110-00-9	S	2B	2
Gasoline	86-61-9	S	2B	
Gasoline, unleaded	--	S	2B	
Glass wool fibers	--	S	2B	2
Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole)	067730-11-4	S	2B	
Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)	067730-10-3	S	2B	
Glycidaldehyde	765-34-4	S	2B	
Glycidol	556-52-5	S		2
Griseofulvin	126-07-8	S	2B	
HC Blue No. 1	2784-94-3	S	2B	
Heptachlor	76-44-8	S	2B	
Heptachlor epoxide	1024-57-3	S	2B	
Hexachlorobenzene	118-74-1	S	2B	2
Hexachlorocyclohexanes (all isomers)	608-73-1	S	2B	2
gamma-Hexachlorocyclohexane	58-89-9	S		2
beta-Hexachlorocyclohexane	319-85-7	S		2
alpha-Hexachlorocyclohexane	319-84-6	S		2
Hexachloroethane	67-72-1	S	2B	2
Hexamethyl phosphoramidate	680-31-9	S	2B	2
Hot mate	--	S	2A	
Hydrazine	302-01-2	S	2B	2
Hydrazine sulfate	010034-93-2	S		2
Hydrazobenzene	122-66-7	S		2
IQ (2-Amino-3-methylimidazo[4,5-f]quinoline)	076180-96-6	S	2A	
Indeno[1,2,3-cd]pyrene	193-39-5	S	2B	2
Iron-dextran complex	94-66-4	S	2B	2

Isoprene	78-79-5	S	2B	
Kanechlor (under polychlorinated biphenyls)	037317-41-2	S		2
Lasiocarpine	303-34-4	S	2B	
Lead acetate	301-04-2	S		2
Lead acetate (II), trihydrate	6080-56-4	S		2
Lead and lead compounds, inorganic	7439-92-1	S	2B	
Lead chromate	7758-97-6	S		1
Lead chromate(VI) oxide	018454-12-1	S	1	1
Lead phosphate	7446-27-7	S	2B	2
Lindane	58-89-9			
Magenta (containing CI basic red 9)	632-99-5	S	2B	
Mea-alpha-c (2-Amino-3-methyl-9H-pyrido[2,3-b]indole)	068006-83-7	S	2B	
Medroxyprogesterone acetate	71-58-9	S	2B	
MelQ (2-Amino-3,4-dimethylimidazo[4,5f]quinoline	077094-11-2	S	2B	
MelQx (2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline	077500-04-0	S	2B	
Melphalan	148-82-3	S	1	1
Merphalan	531-76-0	S	2B	
Meso-1,2:3,4-Diepoxybutane	564-00-1	S	2B	
5-Methoxypsoralen	484-20-8	S	2A	
Methyl mercury compounds	--	S	2B	
Methyl methanesulfonate	66-27-3	S	2A	2
2-Methyl-1-nitroanthraquinone (uncertain purity)	129-15-7	S	2B	
n-Methyl-N'-nitro-N-nitrosoguanidine (MNNG)	70-25-7	S	2A	2
n-Methyl-N-nitrosoourea	684-93-5	S	2A	2
n-Methyl-N-nitrosoourethane	615-53-2	S	2B	
2-Methylaziridine (Propyleneimine)	75-55-8	S	2B	2
Methylazoxymethanol acetate	592-62-1	S	2B	
Methylazoxymethanol and its acetate	590-96-5	S	2B	
5-Methylchrysene	3697-24-3	S	2B	2
4,4'-Methylene bis(2-chloroaniline)	101-14-4	S	2A	2
4,4'-Methylene bis(2-methylaniline)	838-88-0	S	2B	
4,4'-Methylene bis(n,n-dimethyl)benzenamine	101-61-1	S		2
4,4'-Methylenedianiline	101-77-9	ORC	2B	2
4,4'-Methylenedianiline dihydrochloride	013552-44-8	S		2
Methylthiouracil	56-04-2	S	2B	
Metronidazole	443-48-1	S	2B	2
Michler's ketone	90-94-8	S		2
Mineral Oil, petroleum distillates with certain solvent and hydrotreatments. Consult MSDS for product status	064742-03-6	S	1	
Mirex	2385-85-5	S	2B	2
Mitomycin C	50-07-7	S	2B	
Molybdate orange	012656-85-8	S	1	
Monocrotaline	315-22-0	S	2B	
5-(Morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone	3795-88-8	S	2B	
Mustard gas	505-60-2	S	1	1
Nafenopin	3771-19-5	S	2B	
2-Naphthylamine	91-59-8	ORC	1	1

alpha-Naphthylamine	134-32-7	ORC		
Nickel alloy, Ni 47-59,Co 17-20,Cr 13-17,Mo 4.5-5.7,Al 3.7-4.7,Ti 3-4,Fe 0-1,C 0- 0.1 (AISI 687)	011068-91-0	S	2B	
Nickel biscyclopentadiene	1271-28-9	S		2
Nickel carbonyl (as Ni)	013463-39-3	S		2
Nickel compounds	--	S	1	
Nickel hydroxide	11113-74-9	S		2
Nickel sulfide (3:2)	012035-72-2	S		2
Nickel(II) acetate (1:2)	373-02-4	S		2
Nickel(II) carbonate (1:1)	3333-67-3	S		2
Nickel(II) hydroxide	012054-48-7	S		2
Nickel(II) oxide (1:1)	1313-99-1	S		2
Nickel(III) hydroxide	012125-56-3	S		2
Nickel, compd with pi-Cyclopentadienyl (1:2)	--	S		2
Nickel, metallic and alloys	7440-02-0	S	2B	2
Niridazole	61-57-4	S	2B	
Nitrilotriacetic acid and its salts	139-13-9	S	2B	2
Nitrilotriacetic acid disodium salt monohydrate	023255-03-0	S	2B	
Nitrilotriacetic acid monosodium salt	018994-66-6	S	2B	
Nitrilotriacetic acid sodium salt	010042-84-9	S	2B	
Nitrilotriacetic acid trisodium salt monohydrate	018662-53-8	S	2B	
Nitrilotriacetic acid, disodium salt	015467-20-6	S	2B	
Nitrilotriacetic acid, trisodium salt	5064-31-3	S	2B	
N-[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide	531-82-8	S	2B	
5-Nitroacenaphthene	602-87-9	S	2B	
2-Nitroanisole	91-23-6	S	2B	2
Nitrobenzene	98-95-3	S	2B	
4-Nitrobiphenyl	92-93-3	ORC		
6-Nitrochrysene	0287-49-6	S	2B	2
Nitrofen, (technical-grade)	1836-75-5	S	2B	2
2-Nitrofluorene	607-57-8	S	2B	
1-[(5-Nitrofurfurylidene)amino]-2-imidazolidinone	555-84-0	S	2B	
Nitrogen mustard	51-75-2	S	2A	2
Nitrogen mustard N-oxide	126-85-2	S	2B	
Nitrogen mustard N-oxide hydrochloride	302-70-5	S	2B	
Nitrogen mustard hydrochloride	55-86-7	S	2A	2
2-Nitropropane	79-46-9	S	2B	2
1-Nitropyrene	5522-43-0	S	2B	2
4-Nitropyrene	057835-92-4	S	2B	2
n-Nitrosobutylbutanolamine	01163-81-7	S		2
n-Nitrosobutylcarboxypropylamine	038252-74-3	S		2
N-Nitrosodi-n-butylamine	924-16-3	S	2B	2
N-Nitrosodi-n-propylamine	621-64-7	S	2B	2
N-Nitrosodiethanolamine	1116-54-7	S	2B	2
n-Nitrosodiethylamine	55-18-5	S	2A	2
n-Nitrosodimethylamine	62-75-9	ORC	2A	2
4-(N-Nitrosomethylamino)-1-(3-pyridyl)-1-butanone (NNK)	064091-91-4	S	2B	2
3-(N-Nitrosomethylamino)propionitrile	060153-49-3	S	2B	
N-Nitrosomethylethylamine	010595-95-6	S	2B	
N-Nitrosomethylvinylamine	4549-40-0	S	2B	2

N-Nitrosomorpholine	59-89-2	S	2B	2
N'-Nitrosonornicotine	016543-55-8	S	2B	2
N'-Nitrosonornicotine, (+-)	084237-38-7	S	2B	
N-Nitrosopiperidine	100-75-4	S	2B	2
N-Nitrosopyrrolidine	930-55-2	S	2B	2
N-Nitrososarcosine	013256-22-9	S	2B	2
Norethisterone	68-22-4	S		2
Ochratoxin A	303-47-9	S	2B	2
Octabromobiphenyl (under polybrominated biphenyls)	061288-13-9	S		2
Oestrogens, nonsteroidal	--	S	1	
Oestrogens, steroidal	--	S	1	
Oil orange SS	2646-17-5	S	2B	
Oxazepam	604-75-1	S	2B	
Oxymetholone	434-07-1	S		2
Palygorskite (attapulgite) (long fibres, > 5 micrometers)	012174-11-7	S	2B	
Panfuran S (containing dihydroxymethylfuratrizine)	794-93-4	S	2B	
Pentachlorobiphenyl	025429-29-2	S		2
Petroleum Residues , Thermal Cracked	064741-80-6	S	2A	
Phenacetin	62-44-2	S	2A	2
Phenazopyridine hydrochloride	136-40-3	S	2B	2
Phenobarbital	50-06-6	S	2B	
Phenoxybenzamine hydrochloride	63-92-3	S	2B	2
Phenyl glycidyl ether	122-60-1	S	2B	
o-Phenylenediamine	95-54-5			
Phenylhydrazine	100-63-0			
Phenytoin	57-41-0	S	2B	2
PhIP (2-Amino-1-methyl-6-phenyl-imidazo[4,5-b]pyridine)	105650-23-5	S	2B	
Piperazine Estrone Sulfate (under conjugated estrogens)	7280-37-7	S		1
Polybrominated biphenyl (FF-1)	067774-32-7	S	2B	2
Polybrominated biphenyls (PBBs)	059536-65-1	S	2B	2
Polychlorinated biphenyl (Aroclor 1254)	011097-69-1	S	2A	2
Polychlorinated biphenyl (Aroclor 1260)	011096-82-5	S		2
Polychlorinated biphenyls [PCBs]	1336-36-3	S	2A	2
Polychlorophenols and their sodium salts (mixed exposures)	--	S	2B	
Polycyclic aromatic hydrocarbons (PAHs)	--	S		2
Ponceau 3R	0983-56-4	S	2B	
Ponceau MX	3761-53-3	S	2B	
Potassium bromate	127-75-8	S	2B	
Potassium chromate (VI)	7789-00-6	S	1	1
Potassium dichromate (VI)	7778-50-9	S	1	1
Procarbazine hydrochloride	366-70-1	S	2A	2
Progesterone	57-83-0	S		2
Progestins	--	S	2B	
1,3-Propane sultone	1120-71-4	S	2B	2
beta-Propiolactone	57-57-8	ORC	2B	2
Propoxur (Baygon)	114-26-1	S		

Propylene oxide	75-56-9	S	2B	2
Propylthiouracil	51-52-5	S	2B	2
Radon and its decay products	010043-92-2	S	1	1
Reserpine	50-55-5	S		2
Rock wool fibers	--	S	2B	
Saccharin	81-07-2	S	2B	2
Saccharin calcium	6485-34-3	S		2
Saccharin, sodium salt	128-44-9	S	2B	2
Safrole	94-59-7	S	2B	2
Selenium sulfide	7446-34-6	S		2
Senarmontite	012412-52-1	S	2B	
Shale-oils	068308-34-9	S	1	
Silica, crystalline	014808-60-7	S	1	2
Silica, crystalline cristobalite	014464-46-1	S	2A	2
Silica, crystalline tridymite	015468-32-3	S	2A	2
Silica, crystalline tripoli	1317-95-9	S	2A	
Silicic acid, Beryllium salt	015191-85-2	S	1	
Slag wool fibers	--	S	2B	
Sodium dichromate (VI)	010588-01-9	S	1	1
Sodium estrone sulfate (under conjugated estrogens)	438-67-5	S		1
Sodium equilin sulfate (under conjugated estrogens)	016680-47-0	S		1
Sodium ortho-phenylphenate	132-27-4	S	2B	
Soots	--	S	1	1
Sterigmatocystin	010048-13-2	S	2B	
Streptozotocin	018883-66-4	S	2B	2
Strontium chromate (VI)	627-78-9	S	1	1
Styrene	100-42-5	S	2B	
Styrene-7,8-oxide	96-09-3	S	2A	
Sulfallate	95-06-7	S	2B	2
Sulfur trioxide	01197-44-6	S	1	
Talc (containing asbestos fibers)	--	S	1	
Talc containing asbestiform fibres	--	S	1	
Tamoxifen	010540-29-1	S	1	
Tars	--	S		1
2,3,7,8-Tetrachlorodibenzo-para-dioxin (TCDD)	1746-01-6		1	2
Tetrachloroethylene	127-18-4	S	2A	2
Tetrafluoroethylene	116-14-3	S	2B	
Tetranitromethane	509-14-8	S	2B	2
Thioacetamide	62-55-5	S	2B	2
4,4'-Thiodianiline	139-65-1	S	2B	
Thiotepa	52-24-4	S	2A	1
Thiourea	62-56-6	S	2B	2
Thorium dioxide	1314-20-1	S		1
2,6-Toluene diisocyanate	91-08-7	S	2B	
2,4-Toluene diisocyanate	584-84-9	S	2B	
Toluene diisocyanate (mixed isomers)	026471-62-5	S	2B	2
o-Toluenesulfonamide	88-19-7	S	2B	
o-Toluidine hydrochloride	636-21-5	S		2
ortho-Toluidine	95-53-4	S	2B	2
Toxaphene (Polychlorinated camphenes)	81-35-2	S	2B	2

Toxins derived from <i>Fusarium moniliforme</i>	--	S	2B	
Treosulphan	299-75-2	S	1	
Trichlormethine (trimustine hydrochloride)	817-09-4	S	2B	
Trichloroethylene	79-01-6	S	2A	
2,4,6-Trichlorophenol	88-06-2	S		2
1,2,3-Trichloropropane	96-18-4	S	2A	2
Tris(2,3-dibromopropyl)phosphate	126-72-7	S	2A	2
Trp-P-1 (3-Amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)	062450-06-0	S	2B	
Trp-P-2(3-Amino-1-methyl-5H-pyrido[4,3-b]indole)	062450-07-1	S	2B	
Trypan blue	72-57-1	S	2B	
Uracil mustard	66-75-1	S	2B	
Urethane	51-79-6	S	2B	2
VM & P Naphtha	8032-32-4	S		
Valentinite	1317-98-2	S	2B	
Vinyl acetate	108-05-4	S	2B	
Vinyl bromide	593-60-2	S	2A	
Vinyl chloride	75-01-4	ORC	1	1
4-Vinyl cyclohexene	100-40-3	S	2B	
Vinyl fluoride	75-02-5	S	2A	
4-Vinyl-1-cyclohexene diepoxide	106-87-6	S		2
4-Vinylcyclohexene diepoxide	106-87-6	S	2B	
Zinc chromate (VI)	013530-65-9	S	1	1
Zinc chromate (VI) hydroxide	015930-94-6	S	1	

Select Carcinogens Definition

A carcinogen is any substance or agent that is capable of causing cancer – the abnormal or uncontrolled growth of new cells in any part of the body in humans or animals. Carcinogens are chronic toxins with long latency periods that can cause damage after repeated or long duration exposures and often do not have immediate apparent harmful effects.

The OSHA Lab Standard defines a “Select Carcinogen” as any substance, which meets one of the following criteria:

- (i) It is regulated by OSHA as a carcinogen; or
- (ii) It is listed under the category, "known to be carcinogens," in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or
- (iii) It is listed under Group 1 ("carcinogenic to humans") by the International Agency for Research on Cancer Monographs (IARC) (latest editions); or
- (iv) It is listed in either Group 2A or 2B by IARC or under the category, "reasonably anticipated to be carcinogens" by NTP, and causes statistically significant tumor incidence in experimental animals in accordance with any of

the following criteria:

(A) After inhalation exposure of 6-7 hours per day, 5 days per week, for a significant portion of a lifetime to dosages of less than 10 mg/m³;

(B) After repeated skin application of less than 300 (mg/kg of body weight) per week; or

(C) After oral dosages of less than 50 mg/kg of body weight per day.

With regard to mixtures, OSHA requires that a mixture, “shall be assumed to present a carcinogenic hazard if it contains a component in concentrations of 0.1% or greater, which is considered to be carcinogenic.”

Note that the potential for carcinogens to result in cancer can also be dependent on other “lifestyle” factors such as:

- Cigarette smoking
- Alcohol consumption
- Consumption of high fat diet
- Geographic location – industrial areas and UV light exposure
- Therapeutic drugs
- Inherited conditions

More information on carcinogens, including numerous useful web links such as a listing of OSHA regulated carcinogens, can be found on the [OSHA Safety and Health Topics for Carcinogens webpage](#).

The State of California has developed an extensive list of “[Carcinogens Known to the State of California through Prop 65](#).”

Cal/OSHA Regulated Carcinogens

Asbestos
2-Acetylaminofluorene
Acrylonitrile
4-Aminodiphenyl
Benzene
Benzidine and its salts
1,3-Butadiene
Cadmium
bis-Chloromethyl Ether
Coke oven emissions
Chromium(IV) compounds
1,2-Dibromo-3-chloropropane
3,3'-Dichlorobenzidine and its salts
4-Dimethylaminoazobenzene
Ethylene dibromide
Ethyleneimine
Ethylene oxide
Formaldehyde
Inorganic arsenic
Lead
Methyl Chloromethyl Ether
Methylene chloride
Methylenedianiline
4,4'-Methylene bis(2-chloroaniline)
alpha-Naphthylamine
beta-Naphthylamine
4-Nitrobiphenyl
N-Nitrosodimethylamine
beta-Propiolactone
Vinyl Chloride

Potentially Explosive Lab Chemicals

Acetyl peroxide
Acetylene
Ammonium nitrate
Ammonium perchlorate
Ammonium picrate
Ba/Pb/Hg azide (heavy metal azides)
Li/K/Na azide
Organic azides
Benzoyl peroxide
Bromopropyne
Butanone peroxide
Cumene peroxide
Diazodinitrophenol
Dinitrophenol
Dinitrophenylhydrazine
Dinitroresorcinol
Dipicryl amine
Dipicryl sulphide
Dodecanoyl peroxide
Ethylene oxide
Lauric peroxide
MEK peroxide
Mercury fulminate, Silver fulminate
Nitrocellulose
Nitrogen trifluoride
Nitrogen triiodide
Nitroglycerine
Nitroguanidine
Nitromethane
Nitrourea
Picramide
Picric acid (trinitrophenol)
Picryl chloride
Picryl sulphonic acid
Propargyl bromide (neat)
Sodium dinitrophenate
Succinic peroxide
Tetranitroaniline
Trinitroaniline
Trinitroanisole
Trinitrobenzene
Trinitrobenzenesulphonic acid
Trinitrobenzoic acid
Trinitrocresol
Trinitronaphthalene
Trinitrophenol (picric acid)
Trinitroresorcinol
Trinitrotoluene
Urea nitrate

Potentially Explosive Compound Classes

Functional Groups:

Acetylene (-C=C-)

Acyl hypohalites (RCO-OX)

Azide Organic (R-N₃)

Azide Metal (M-N₃)

Azo (-N=N-)

Diazo (=N=N)

Diazosulphide (-N=N-S-N=N-)

Diazonium salts (R-N₂⁺)

Fulminate (-CNO)

Halogen Amine (=N-X)

Nitrate (-ONO₂)

Nitro (-NO₂)

Aromatic or Aliphatic Nitramine (=N-NO₂) (-NH-NO₂)

Nitrite (-ONO)

Nitroso (-NO)

Ozonides

Peracids (-CO-O-O-H)

Peroxide (-O-O-)

Hydroperoxide (-O-O-H)

Metal peroxide (M-O-O-M)

Explosive Salts:

Bromate salts (BrO₃⁻)

Chlorate salts (ClO₃⁻)

Chlorite salts (ClO₂⁻)

Perchlorate salts (ClO₄⁻)

Picrate salts (2,4,6-trinitrophenoxide)

Picramate salts (2-amino-4,6-dinitrophenoxide)

Hypohalite salts (XO⁻)

Iodate salts (IO₃⁻)

Pyrophoric Lab Chemicals

Aluminum alkyls: R_3Al , R_2AlCl , $RAICl_2$
Examples: Et_3Al , Et_2AlCl , $EtAlCl_2$, Me_3Al , Diethylethoxyaluminium

Grignard Reagents: $RMgX$ (R=alkyl, aryl, vinyl X=halogen)

Lithium Reagents: RLi (R = alkyls, aryls, vinyls)
Examples: Butyllithium, Isobutyllithium, sec-Butyllithium, tert-Butyllithium, Ethyllithium, Hexyllithium, Isopropyllithium, Methyllithium, (Trimethylsilyl)methyllithium, Phenyllithium, 2-Thienyllithium, Vinylithium, Lithium acetylide ethylenediamine complex, Lithium (trimethylsilyl)acetylide, Lithium phenylacetylide

Zinc Alkyl Reagents: $RZnX$, R_2Zn
Examples: Et_2Zn

Metal carbonyls: Lithium carbonyl, Nickel tetracarbonyl, Dicobalt octacarbonyl

Metal powders (finely divided): Bismuth, Calcium, Cobalt, Hafnium, Iron, Magnesium, Titanium, Uranium, Zinc, Zirconium

Low Valent Metals: Titanium dichloride

Metal hydrides: Potassium Hydride, Sodium hydride, Lithium Aluminum Hydride, Diethylaluminium hydride, Diisobutylaluminum hydride, Dichloro(methyl)silane

Nonmetal hydrides: Arsine, Boranes, Diethylarsine, diethylphosphine, Germane, Phosphine, phenylphosphine, Silane, Methanetellurol (CH_3TeH)

Non-metal alkyls: R_3B , R_3P , R_3As ; Tetramethylsilane, Tributylphosphine

Used hydrogenation catalysts: Raney nickel, Palladium, Platinum

Activated Copper fuel cell catalysts, e.g. $Cu/ZnO/Al_2O_3$

Finely Divided Iron Sulfides (FeS , FeS_2 , Fe_3S_4), and Potassium Sulfide (K_2S),

Elements:

- Phosphorus
- Cesium
- Lithium
- Potassium
- Sodium
- Sodium Potassium Alloy (NaK)
- Aluminum Phosphide (AlP)