

OSHA SELECT CARCINOGENS

IARC - International Agency for Research on Cancer

1 = Carcinogenic to humans

2A = Probably carcinogenic to humans

2B = Possibly carcinogenic to humans

NTP - National Toxicology Program

K = Known to be Human Carcinogens

R = Reasonably Anticipated to be Human Carcinogens

CHEMNAME	CASNUM	NTP	IARC	OSHA
A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole)	26148-68-5		2B	
Acetaldehyde	75-07-0	R	2B	
Acetaldehyde associated with consumption of alcoholic beverages	75-07-0		1	
Acetamide	60-35-5		2B	
Acetylaminofluorene, 2-	53-96-3	R		Y
Acid mists, strong inorganic			1	
Acrylamide	79-06-1	R	2A	
Acrylonitrile	107-13-1	R	2B	Y
Adriamycin	23214-92-8	R	2A	
AF-2 [2-(2-Furyl)-3-(5-nitro-2-furyl)acrylamide]	3688-53-7		2B	
Aflatoxin M1	6795-23-9		2B	
Aflatoxins	1402-68-2	K	1	
Alcoholic Beverage Consumption		K	1	
Aloe vera, whole leaf extract			2B	
Aluminium production			1	
Amino-1-methyl-6-phenylimidazo[4,5-b]pyridine, 2- (PhIP) (see Heterocyclic Amines [Selected])	105650-23-5	R	2B	
Amino-2,4-dibromoanthraquinone, 1-	81-49-2	R	2B	
Amino-2-methylanthraquinone, 1-	82-28-0	R	3	
Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole, 2-	712-68-5		2B	
Aminoanthraquinone, 2-	117-79-3	R	3	
Aminoazobenzene, para-	60-09-3		2B	

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Aminoazotoluene, ortho-	97-56-3	R	2B	
Aminobiphenyl, 4-	92-67-1	K	1	Y
Amitrole	61-82-5	R	3	
Amsacrine	51264-14-3		2B	
Analgesic Mixtures Containing Phenacetin (see Phenacetin and Analgesic Mixtures containing Phenacetin)		K		
Androgenic (anabolic) steroids			2A	
Anisidine Hydrochloride, o- (see o-Anisidine and Its Hydrochloride)	134-29-2	R		
Anisidine, ortho-	90-04-0	R	2B	
Anthraquinone	84-65-1		2B	
Antimony trioxide	1309-64-4		2B	
Apholate	52-46-0		2	
Aramite®	140-57-8		2B	
Areca nut			1	
Aristolochic Acids		K	1	
Arsenic (see Arsenic and Inorganic Arsenic Compounds)	7440-38-2	K	1	Y
Art glass, glass containers and pressed ware (manufacture of)			2A	
Asbestos (all forms)	1332-21-4	K	1	Y
Auramine	492-80-8		2B	
Auramine production			1	
Azacitidine	320-67-2	R	2A	
Azaserine	115-02-6		2B	
Azathioprine	446-86-6	K	1	
Benz[a]anthracene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	56-55-3	R	2B	
Benz[j]aceanthrylene	202-33-5		2B	
Benzene	71-43-2	K	1	Y
Benzidine (see Benzidine and Dyes Metabolized to Benzidine)	92-87-5	K	1	Y
Benzo[a]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	50-32-8	R	1	
Benzo[b]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	205-99-2	R	2B	

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Benzo[c]phenanthrene	195-19-7		2B	
Benzo[j]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	205-82-3	R	2B	
Benzo[k]fluoranthene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	207-08-9	R	2B	
Benzofuran	271-89-6		2B	
Benzophenone	119-61-9		2B	
Benzotrichloride	98-07-7	R		
Benzoyl chloride	98-88-4		2A	
Benzyl chloride	100-44-7		2A	
Benzyl violet 4B	1694-09-3		2B	
Beryllium (see Beryllium and Beryllium Compounds)	7440-41-7	K	1	
Betel quid with tobacco			1	
Betel quid without tobacco			1	
Biomass fuel (primarily wood), indoor emission from household combustion of			2A	
Bis(2-chloroethyl)-2-naphthylamine, N,N- (Chlornaphazine)	494-03-1		1	
Bis(2-ethylhexyl) phthalate; Di(2-ethylhexyl) Phthalate phthalate)	117-81-7	R	2B	
Bis(chloroethyl) Nitrosourea; Nitrosourea Chemotherapeutic Agents; BCNU	154-93-8	R	2A	
Bis(chloromethyl) Ether; Bis(chloromethyl) Ether; Technical-Grade Chloromethyl Methyl Ether)	542-88-1	K	1	Y
Bitumens, extracts of steam-refined and air-refined; steam-refined, cracking-residue and air-refined bitumens (see Bitumens, occupational exposures)	8052-42-4		2B	
Bitumens, occupational exposure to oxidized bitumens and their emissions during roofing	64742-93-4		2A	
BK polyomavirus (BKV)			2B	
Bleomycins	11056-06-7		2B	
Bracken fern			2B	
Bromochloroacetic acid	5589-96-8		2B	
Bromodichloromethane	75-27-4	R	2B	
Bromomethyl)-1,3-propanediol, 2,2-Bis(-; Technical Grade	3296-90-0	R	2B	
Bromopropane, 1-	106-94-5	R	2B	
Butadiene, 1,3-	106-99-0	K	1	Y
Butanediol Dimethanesulfonate, 1,4-; Busulfan	55-98-1	K	1	

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Butoxypropan-2-ol, 1-tert-	57018-52-7		2B	
Butylated Hydroxyanisole (BHA)	25013-16-5	R	2B	
Butyrolactone, beta-	3068-88-0		2B	
Cadmium	7440-43-9	K	1	Y
Caffeic acid	331-39-5		2B	
Captafol	2425-06-1	R	2A	
Carbazole	86-74-8		2B	
Carbon black	1333-86-4		2B	
Carbon electrode manufacture			2A	
Carbon nanotubes, multiwalled MWCNT-7	308068-56-6		2B	
Carbon Tetrachloride	56-23-5	R	2B	
Carpentry and joinery			2B	
Carrageenan, degraded (Poligeenan)	53973-98-1		2B	
Catechol	120-80-9		2B	
Ceramic Fibers (Respirable Size)		R		
Certain Glass Wool Fibers (Inhalable)		R		
Chloral	75-87-6		2A	
Chloral hydrate	302-17-0		2A	
Chlorambucil	305-03-3	K	1	
Chloramphenicol	56-75-7	R	2A	
Chlordane	57-74-9		2B	
Chlorendic Acid	115-28-6	R	2B	
Chlorinated Paraffins (C12, 60% Chlorine)	108171-26-2	R	2B	
Chlorinated toluenes, alpha- (benzal chloride, benzotrichloride, benzyl chloride)	98-87-3		2A	
Chloro-2-methylpropene, 1-; Dimethylvinyl Chloride	513-37-1	R	2B	
Chloro-2-methylpropene, 3-	563-47-3	R	2B	
Chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone, 3-	77439-76-0		2B	
Chloroaniline, para-	106-47-8		2B	
Chloroethyl)-3-cyclohexyl-1-Nitrosourea, 1-(2-; (see Nitrosourea Chemotherapeutic Agents)	13010-47-4	R	2A	

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Chloroform	67-66-3	R	2B	
Chloromethyl Methyl Ether (see Bis(chloromethyl) Ether and Technical-Grade Chloromethyl Methyl Ether)	107-30-2	K	1	Y
Chloro-ortho-phenylenediamine, 4-	95-83-0	R	2B	
Chloro-ortho-toluidine, 4-	95-69-2	R	2A	
Chloro-o-toluidine Hydrochloride, p- (see p-Chloro-o-toluidine and Its Hydrochloride)	3165-93-3	R		
Chlorophenoxy herbicides			2B	
Chloroprene	126-99-8	R	2B	
Chlorothalonil	1897-45-6		2B	
Chlorozotocin (see Nitrosourea Chemotherapeutic Agents)	54749-90-5	R	2A	
Chromium (VI) (see Chromium Hexavalent Compounds)	18540-29-9	K	1	Y
Chrysene	218-01-9		2B	
CI Acid Red 114	6459-94-5		2B	
CI Basic Red 9; Basic Red 9 Monohydrochloride	569-61-9	R	2B	
CI Direct Blue 15	2429-74-5		2B	
Cisplatin	15663-27-1	R	2A	
Citrus Red No. 2	6358-53-8		2B	
Clonorchis sinensis (infection with)			1	
Coal gasification			1	
Coal Tars and Coal Tar Pitches	65996-93-2	K	1	Y
Cobalt and cobalt compounds	7440-48-4	R	2B	
Cobalt metal with tungsten carbide	12070-12-1	R	2A	
Cobalt metal without tungsten carbide	7440-48-4		2B	
Cobalt sulfate and other soluble cobalt(II) salts	10026-24-1		2B	
Coconut oil diethanolamine condensate	68603-42-9		2B	
Coffee			3	
Coke Oven Emissions		K		Y
Coke production			1	
Creosotes	8001-58-9		2A	

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Cresidine, para-	120-71-8	R	2B	
Cumene	98-82-8	R	2B	
Cupferron	135-20-6	R		
Cycasin	14901-08-7		2B	
Cyclopenta[cd]pyrene	27208-37-3		2A	
Cyclophosphamide	50-18-0	K	1	
Cyclosporin A; Ciclosporin	59865-13-3	K	1	
Cyclosporine	79217-60-0		1	
Dacarbazine	4342-03-4	R	2B	
Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone)	117-10-2	R	2B	
Daunomycin	20830-81-3		2B	
DDT (4,4'-Dichlorodiphenyltrichloroethane)	50-29-3	R	2A	
Decabromobiphenyl (under Polybrominated Biphenyls)	13654-09-6	R		
Diacetylbenzidine, N,N'-	613-35-4		2B	
Diaminoanisole Sulfate, 2,4-	39156-41-7	R		
Diaminoanisole, 2,4-	615-05-4		2B	
Diaminodiphenyl ether, 4,4'-; Oxydianiline, 4,4'-	101-80-4	R	2B	
Diaminotoluene, 2,4-	95-80-7	R	2B	
Diazinon	333-41-5		2A	
Diazoaminobenzene	136-35-6	R		
Dibenz[a,h]acridine (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	226-36-8	R	2B	
Dibenz[a,h]anthracene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	53-70-3	R	2A	
Dibenz[a,j]acridine (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	224-42-0	R	2A	
Dibenz[c,h]acridine	224-53-3		2B	
Dibenzo[a,e]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	192-65-4	R	3	
Dibenzo[a,h]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	189-64-0	R	2B	
Dibenzo[a,i]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	189-55-9	R	2B	
Dibenzo[a,l]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	191-30-0	R	2A	
Dibenzo[c,g]carbazole, 7H- (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	194-59-2	R	2B	

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Dibromo-3-chloropropane, 1,2-	96-12-8	R	2B	Y
Dibromoacetic acid	631-64-1		2B	
Dibromoacetonitrile	3252-43-5		2B	
Dibromopropan-1-ol, 2,3-	96-13-9	R	2B	
Dichloro-2-propanol, 1,3-	96-23-1		2B	
Dichloro-4,4'-diaminodiphenyl ether, 3,3'-	28434-86-8		2B	
Dichloroacetic acid	79-43-6		2B	
Dichlorobenzene, para-	106-46-7	R	2B	
Dichlorobenzidine Dihydrochloride, 3,3'- (see 3,3'-Dichlorobenzidine and Its Dihydrochloride)	612-83-9	R		
Dichlorobenzidine, 3,3'- (see 3,3'-Dichlorobenzidine and Its Dihydrochloride)	91-94-1	R	2B	Y
Dichloroethane, 1,2-	107-06-2	R	2B	
Dichloromethane (Methylene chloride)	75-09-2	R	2A	Y
Dichlorophenoxyacetic acid, 2,4-; 2,4-D (see also Chlorophenoxy herbicide)	94-75-7		2B	
Dichloropropane, 1,2-	78-87-5		1	
Dichloropropene, 1,3- (see 1,3-Dichloropropene [Technical Grade])	542-75-6	R	2B	
Dichlorvos	62-73-7		2B	
Dieldrin, and aldrin metabolized to dieldrin	60-57-1		2A	
Diepoxybutane	1464-53-5	R		
Diesel Exhaust Particulates		R	1	
Diesel fuel, marine			2B	
Diethanolamine	111-42-2		2B	
Diethyl Sulfate	64-67-5	R	2A	
Diethylhydrazine, 1,2-	1615-80-1		2B	
Diethylstilbestrol (DES)	56-53-1	K	1	
Diglycidyl Resorcinol Ether	101-90-6	R	2B	
Digoxin	20830-75-5		2B	
Dihydrosafrole	94-58-6		2B	
Diisopropyl sulfate	2973-10-6		2B	

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Dimethoxybenzidine, 3,3'- (see 3,3'-Dimethoxybenzidine and Dyes Metabolized to 3,3'-Dimethoxybenzidine)	119-90-4	R	2B	
Dimethyl Sulfate	77-78-1	R	2A	
Dimethylamino)methylimino]-5-[2-(5-nitro-2-furyl)-vinyl]-1,3,4-oxadiazole, trans-2-[(25962-77-0		2B	
Dimethylaminoazobenzene, 4-	60-11-7	R	2B	Y
Dimethylaniline, 2,6- (2,6-Xylidine)	87-62-7		2B	
Dimethylarsinic acid	75-60-5		2B	
Dimethylbenzidine, 3,3'- (see 3,3'-Dimethylbenzidine and Dyes Metabolized to 3,3'-Dimethylbenzidine)	119-93-7	R	2B	
Dimethylcarbamoyl Chloride	79-44-7	R	2A	
Dimethylformamide, N,N-	68-12-2		2A	
Dimethylhydrazine, 1,1-	57-14-7	R	2B	
Dimethylhydrazine, 1,2-	540-73-8		2A	
Dimethyl-p-toluidine, N,N-	99-97-8		2B	
Dinitrofluoranthene, 3,7-	105735-71-5		2B	
Dinitrofluoranthene, 3,9-	22506-53-2		2B	
Dinitropyrene, 1,3-	75321-20-9		2B	
Dinitropyrene, 1,6- (see Nitroarenes [Selected])	42397-64-8	R	2B	
Dinitropyrene, 1,8- (see Nitroarenes [Selected])	42397-65-9	R	2B	
Dinitrotoluene, 2,4-	121-14-2		2B	
Dinitrotoluene, 2,6-	606-20-2		2B	
Dioxane, 1,4-	123-91-1	R	2B	
Disperse Blue 1	2475-45-8	R	2B	
Doxorubicin Hydrochloride (see Adriamycin)	25136-40-9	R		
Dry cleaning (occupational exposures in)			2B	
Dyes Metabolized to 3,3'-Dimethoxybenzidine (see 3,3'-Dimethoxybenzidine and Dyes Metabolized to 3,3'-Dimethoxybenzidine)		R		
Dyes Metabolized to 3,3'-Dimethylbenzidine (see 3,3'-Dimethylbenzidine and Dyes Metabolized to 3,3'-Dimethylbenzidine)		R		
Dyes Metabolized to Benzidine (see Benzidine and Dyes Metabolized to Benzidine)		K		
Engine exhaust, diesel			1	

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Engine exhaust, gasoline			2B	
Epichlorohydrin	106-89-8	R	2A	
Epoxybutane, 1,2-	106-88-7		2B	
Epstein-Barr Virus		K	1	
Erionite	66733-21-9	K	1	
Estrogen-only menopausal therapy			1	
Estrogen-progestogen menopausal therapy (combined)			1	
Estrogen-progestogen oral contraceptives (combined)			1	
Estrogens, Steroidal		K		
Ethanol in alcoholic beverages	64-17-5		1	
Ethyl acrylate	140-88-5		2B	
Ethyl carbamate (Urethane)	51-79-6	R	2A	
Ethyl methanesulfonate	62-50-0	R	2B	
Ethylbenzene	100-41-4		2B	
Ethylene dibromide; Dibromoethane, 1,2-	106-93-4	R	2A	
Ethylene Oxide	75-21-8	K	1	Y
Ethylene Thiourea	96-45-7	R		
Ethyleneimine (see Aziridine)	151-56-4		2B	Y
Etoposide	33419-42-0		1	
Etoposide in combination with cisplatin and bleomycin	11056-06-7		1	
Etoposide in combination with cisplatin and bleomycin	15663-27-1		1	
Firefighter (occupational exposure as a)			2B	
Fission products, including strontium-90			1	
Fluoro-edenite fibrous amphibole			1	
Formaldehyde	50-00-0	K	1	Y
Formylhydrazino)-4-(5-nitro-2-furyl)Thiazole, 2-(2-	3570-75-0		2B	
Frying, emissions from high-temperature			2A	
Fuel oils, residual (heavy)			2B	
Furan	110-00-9	R	2B	

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Furfuryl alcohol	98-00-0		2B	
Fusarium moniliforme, toxins derived from (fumonisin B1, fumonisin B2, and fusarin C)	116355-83-0		2B	
Gasoline			2B	
Gasoline engine exhaust (see Engine exhaust, gasoline)			2B	
Ginkgo biloba extract	90045-36-6		2B	
Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole)	67730-11-4		2B	
Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)	67730-10-3		2B	
Glycidaldehyde	765-34-4		2B	
Glycidol	556-52-5	R	2A	
Glyphosate	1071-83-6		2A	
Goldenseal root powder			2B	
Griseofulvin	126-07-8		2B	
Haematite mining (underground)			1	
Hairdresser or barber (occupational exposure as a)			2A	
HC Blue No. 1	2784-94-3		2B	
Helicobacter pylori (infection with)			1	
Hepatitis B Virus		K	1	
Hepatitis C Virus		K	1	
Heptachlor	76-44-8		2B	
Hexabromobiphenyl (under Polybrominated Biphenyls)	36355-01-8	R		
Hexachlorobenzene	118-74-1	R	2B	
Hexachlorocyclohexane (Technical Grade) (see Lindane, Hexachlorocyclohexane [Technical Grade], and Other Hexachlorocyclohexane Isomers)		R	2B	
Hexachloroethane	67-72-1	R	2B	
Hexadienal, 2,4-	142-83-6		2B	
Hexamethylphosphoramide	680-31-9	R	2B	
Human Immunodeficiency Virus Type 1		K	1	
Human Immunodeficiency Virus Type 2			2B	
Human papillomavirus type 68			2A	

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Human papillomavirus types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59			1	
Human papillomavirus types 26, 53, 66, 67, 70, 73, 82			2B	
Human papillomavirus types 30, 34, 69, 85, 97			2B	
Human papillomavirus types 5 and 8 (in patients with epidermodysplasia verruciformis)			2B	
Human Papillomaviruses: Some Genital Mucosal Type		K		
Human T-cell lymphotropic virus type I		K	1	
Hydrazine (see Hydrazine and Hydrazine Sulfate)	302-01-2	R	2A	
Hydrazine Sulfate (see Hydrazine and Hydrazine Sulfate)	10034-93-2	R		
Hydrazobenzene	122-66-7	R		
Hydrochlorothiazide	58-93-5		2B	
Hydroxyanthraquinone, 1-	129-43-1		2B	
Implanted foreign bodies of metallic cobalt, metallic nickel, and an alloy powder containing 66–67% nickel, 13–16% chromium, and 7% iron			2B	
Indeno[1,2,3-cd]pyrene (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	193-39-5	R	2B	
Indium phosphide	22398-80-7		2A	
Indium tin oxide	50926-11-9		2B	
Iron and steel founding (occupational exposure during)			1	
Iron Dextran Complex	9004-66-4	R	2B	
Isoprene	78-79-5	R	2B	
Isopropyl alcohol manufacture using strong acids			1	
JC polyomavirus (JCV)			2B	
Kaposi Sarcoma-Associated Herpesvirus		K	1	
Kava extract	9000-38-8		2B	
Kepone (Chlordecone)	143-50-0	R	2B	
Lasiocarpine	303-34-4		2B	
Lead (see Lead and Lead Compounds)	7439-92-1	R	2B	Y
Lead compounds, inorganic			2A	
Leather dust			1	
Lindane (see Lindane, Hexachlorocyclohexane [Technical Grade], and Other Hexachlorocyclohexane Isomers)	58-89-9	R	1	

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Magenta	632-99-5		2B	
Magenta production			1	
Magnetic fields, extremely low-frequency			2B	
Malaria (caused by infection with Plasmodium falciparum in holoendemic areas)			2A	
Malathion	121-75-5		2A	
MeA-alpha-C (2-Amino-3-methyl-9H-pyrido[2,3-b]indole)	68006-83-7		2B	
Medroxyprogesterone acetate	71-58-9		2B	
MelQ (2-Amino-3,4-dimethylimidazo[4,5-f]quinoline)	77094-11-2	R	2B	
MelQ (2-Amino-3-methylimidazo[4,5-f]quinoline)	76180-96-6	R	2A	
MelQx (2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline)	77500-04-0	R	2B	
Melamine	108-78-1		2B	
Melphalan (4-[Bis(2-chloroethyl)amino]-L-phenylalanine)	148-82-3	K	1	
Mercaptobenzothiazole, 2-	149-30-4		2A	
Merkel Cell Polyomavirus (MCV)		K	2A	
Merphalan [4-[bis(2-chloroethyl)amino]-DL-Phenylalanine or Sarcosylsinum]	531-76-0		2B	
Metallic implants prepared as thin smooth films			2B	
Metallic Nickel (see Nickel Compounds and Metallic Nickel)	7440-02-0	R	2B	
Methoxsalen (8-methoxypsoralen) plus ultraviolet A radiation	298-81-7	K	1	
Methoxypsoralen, 5-	484-20-8		2A	
Methyl isobutyl ketone	108-10-1		2B	
Methyl Methanesulfonate	66-27-3	R	2A	
Methyl-1-nitroanthraquinone, 2- (uncertain purity)	129-15-7		2B	
Methylarsonic acid (Monomethylarsonic acid)	124-58-3		2B	
Methylaziridine, 2- (Propyleneimine)	75-55-8	R	2B	
Methylazoxymethanol acetate	592-62-1		2B	
Methylchrysene, 5- (see Polycyclic Aromatic Hydrocarbons: 15 Listings)	3697-24-3	R	2B	
Methylene bis(2-methylaniline), 4,4'-	838-88-0		2B	
Methylenebis(2-chloraniline), 4,4'-	101-14-4	R	1	
Methylenedianiline Dihydrochloride, 4,4'- (see 4,4'-Methylenedianiline and Its Dihydrochloride)	13552-44-8	R		

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Methylenedianiline, 4,4'- (see 4,4'-Methylenedianiline and Its Dihydrochloride)	101-77-9	R	2B	Y
Methyleugenol	93-15-2	R	2B	
Methylimidazole, 2-	693-98-1		2B	
Methylimidazole, 4-	822-36-6		2B	
Methylmercury compounds			2B	
Methyl-N'-nitro-N-nitrosoguanidine, N- (see N-Nitrosamines: 15 listings)	70-25-7	R	2A	
Methyl-N-nitrosourethane, N-	615-53-2		2B	
Methylstyrene, Alpha-	98-83-9		2B	
Methylthiouracil	56-04-2		2b	
Metronidazole	443-48-1	R	2B	
Michler's ketone [4,4'-Bis(dimethylamino)benzophenone]	90-94-8	R	2B	
Michler's base (Methylenebis(N,N-dimethyl)benzenamine, 4,4'-)	101-61-1	R	2b	
Microcystin-LR	101043-37-2		2B	
Mineral Oils: Untreated and Mildly Treated		K		
Mirex	2385-85-5	R	2B	
Mitomycin C	50-07-7		2B	
Mitoxantrone	65271-80-9		2B	
Molybdenum trioxide	1313-27-5		2B	
Monochloro-1,2-propanediol, 3-	96-24-2		2B	
Monocrotaline	315-22-0		2B	
MOPP and other combined chemotherapy including alkylating agents			1	
Morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-oxazolidinone, 5-(3795-88-8		2B	
Mustard Gas (Sulfur Mustard)	505-60-2	K	1	
Myrcene, β-	123-35-3		2B	
Nafenopin	3771-19-5		2B	
Naphthalene	91-20-3	R	2B	
Naphthylamine, 1-	134-32-7		3	Y
Naphthylamine, 2-	91-59-8	K	1	Y
Neutrons (see Ionizing Radiation)		K	1	Y

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Nickel Compounds (see Nickel Compounds and Metallic Nickel)		K	1	
Niridazole	61-57-4		2B	
Nitrate or nitrite (ingested) under conditions that result in endogenous nitrosation			2A	
Nitrilotriacetic Acid	139-13-9	R	2B	
Nitro-2-furyl)-2-thiazolyl]acetamide, N-[4-(5-	531-82-8		2B	
Nitroacenaphthene, 5-	602-87-9		2B	
Nitroanisole, 2-	91-23-6	R	2B	
Nitrobenzanthrone, 3-	17117-34-9		2B	
Nitrobenzene	98-95-3	R	2B	
Nitrobiphenyl, 4-	92-93-3		3	Y
Nitrochrysene, 6- (see Nitroarenes [Selected])	7496-02-8	R	2A	
Nitrofen	1836-75-5	R	2B	
Nitrofluorene, 2-	607-57-8		2b	
Nitrofurfurylidene)amino]-2-Imidazolidinone, 1-[(5-	555-84-0		2B	
Nitrogen mustard	51-75-2		2A	
Nitrogen Mustard Hydrochloride	55-86-7	R		
Nitrogen mustard N-oxide	126-85-2		2B	
Nitromethane	75-52-5	R	2B	
Nitropropane, 2-	79-46-9	R	2B	
Nitropyrene, 1- (see Nitroarenes [Selected])	5522-43-0	R	2A	
Nitropyrene, 4- (see Nitroarenes [Selected])	57835-92-4	R	2B	
Nitrosodiethanolamine, N- (see N-Nitrosamines: 15 listings)	1116-54-7	R	2B	
Nitrosodiethylamine, N- (see N-Nitrosamines: 15 listings)	55-18-5	R	2A	
Nitrosodimethylamine, N- (see N-Nitrosamines: 15 listings)	62-75-9	R	2A	Y
Nitrosodi-n-butylamine, N- (see N-Nitrosamines:15 listings)	924-16-3	R	2B	
Nitrosodi-n-propylamine, N- (see N-Nitrosamines: 15 listings)	621-64-7	R	2B	
Nitrosomethylamino)-1-(3-pyridyl)-1-butanone.4-(N- (see N-Nitrosamines: 15 listings)	64091-91-4	R	1	
Nitrosomethylamino)propionitrile, 3-(N-	60153-49-3		2B	
Nitrosomethylethylamine, N-	10595-95-6		2B	

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Nitrosomethylvinylamine, N- (see N-Nitrosamines: 15 listings)	4549-40-0	R	2B	
Nitrosomorpholine, N- (see N-Nitrosamines: 15 listings)	59-89-2	R	2B	
Nitroso-N-ethylurea, N-; N-Ethyl-N-nitrosoarea (see N-Nitrosamines:15 listings)	759-73-9	R	2A	
Nitroso-N-methylurea, N- (see N-Nitrosamines:15 listings)	684-93-5	R	2A	
Nitrosornicotine, N- (see N-Nitrosamines: 15 listings)	16543-55-8	R	1	
Nitrosopiperidine, N- (see N-Nitrosamines: 15 listings)	100-75-4	R	2B	
Nitrosopyrrolidine, N- (see N-Nitrosamines: 15 listings)	930-55-2	R	2B	
Nitrososarcosine, N- (see N-Nitrosamines: 15 listings)	13256-22-9	R	2B	
Nitrotoluene, 2-	88-72-2	R	2A	
Non-arsenical insecticides (occupational exposures in spraying and application of)			2A	
Norethisterone	68-22-4	R		
Ochratoxin A	303-47-9	R	2B	
Octabromobiphenyl (under Polybrominated Biphenyls)	61288-13-9	R		
Oil Orange SS	2646-17-5		2B	
Opisthorchis viverrini (infection with)			1	
Outdoor air pollution			1	
Oxazepam	604-75-1		2B	
Oxymetholone	434-07-1	R		
Paint manufacture (occupational exposure in)			1	
Painter (occupational exposure as a)			1	
Palygorskite (Attapulgate) (long fibres, > 5 micrometres)	12174-11-7		2B	
Panfuran S (containing dihydroxymethylfuratrizine)	794-93-4		2B	
Parathion	56-38-2		2B	
Pentachlorobiphenyl, 3,4,5,3',4'- (PCB-126)	57465-28-8		1	
Pentachlorodibenzofuran, 2,3,4,7,8-	57117-31-4		1	
Pentachlorophenol (see Pentachlorophenol and By-products of Its Synthesis)	87-86-5	R	1	
Pentachlorophenol, Sodium Salt (see Pentachlorophenol and By-products of Its Synthesis)	131-52-2	R		
Pentosan polysulfate sodium	37319-17-8		2B	
Perfluorooctanoic acid (PFOA)	335-67-1		2B	

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Petroleum refining (occupational exposures in)			2A	
Phenacetin (see Phenacetin and Analgesic Mixtures Containing Phenacetin)	62-44-2	R	1	
Phenazopyridine Hydrochloride	136-40-3	R	2B	
Phenobarbital	50-06-6		2B	
Phenolphthalein	77-09-8	R	2B	
Phenoxybenzamine Hydrochloride	63-92-3	R	2B	
Phenyl glycidyl ether	122-60-1		2B	
Phenylphenol, ortho-	90-43-7		2B	
Phenytoin (see Phenytoin and Phenytoin Sodium)	57-41-0	R	2B	
Phenytoin Sodium (see Phenytoin and Phenytoin Sodium)	630-93-3	R		
Phosphorus-32, as phosphate	14596-37-3		1	
Pickled vegetables (traditional Asian)			2B	
Pioglitazone	111025-46-8		2A	
Plutonium	7440-07-5		1	
Polybrominated biphenyls (PCBs)	59536-65-1	R	2A	
Polychlorinated Biphenyls	1336-36-3	R	1	
Polychlorinated biphenyls, dioxin-like, with a Toxicity Equivalency Factor (TEF) according to WHO (PCBs 77, 81, 105, 114, 118, 123, 126, 156, 157, 167, 169, 189)			1	
Polychlorophenols and their sodium salts (mixed exposures) (see also Pentachlorophenol; 2,4,6-Trichlorophenol)			2B	
Polycyclic Aromatic Hydrocarbons (PAHs)		R		
Polymeric implants prepared as thin smooth films (with the exception of poly(glycolic acid))			2B	
Ponceau 3R	3564-09-8		2B	
Ponceau MX	3761-53-3		2B	
Potassium bromate	7758-01-2		2B	
Primidone	125-33-7		2B	
Printing processes (occupational exposures in)			2B	
Procarbazine (see Procarbazine and Its Hydrochloride)	671-16-9	R		
Procarbazine Hydrochloride (see Procarbazine and Its Hydrochloride)	366-70-1	R	2A	
Processed meat (consumption of)			1	

CHEMNAME	CASNUM	NTP	IARC	OSHA
Progesterone	57-83-0	R		
Progestins			2B	
Progestogen-only contraceptives			2B	
Propane Sultone, 1,3-	1120-71-4	R	2A	
Propiolactone, beta-	57-57-8	R	2B	Y
Propylene Oxide	75-56-9	R	2B	
Propylthiouracil	51-52-5	R	2B	
Pulegone	89-82-7		2B	
Pyridine	110-86-1		2B	
Radiation, X- and Gamma		K	1	Y
Radiofrequency electromagnetic fields ²			2B	
Radioiodines, including iodine-131			1	
Radionuclides, alpha-particle-emitting, internally deposited			1	
Radionuclides, beta-particle-emitting, internally deposited			1	
Radium-224 and its decay products	13233-32-4		1	
Radium-226 and its decay products	13982-63-3		1	
Radium-228 and its decay products	15262-20-1		1	
Radon (see Ionizing Radiation)	10043-92-2	K	1	Y
Radon-222 and its decay products	10043-92-2	K	1	Y
Red meat (consumption of)			2A	
Refractory ceramic fibres			2B	
Reserpine	50-55-5	R	3	
Riddelliine	23246-96-0	R	2B	
Rubber manufacturing industry			1	
Safrole	94-59-7	R	2B	
Salted fish, Chinese-style			1	
Schistosoma haematobium (infection with)			1	
Schistosoma japonicum (infection with)			2B	
Selenium Sulfide	7446-34-6	R		

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Semustine [1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea; [Methyl-CCNU]	13909-09-6	K	1	
Shale oils	68308-34-9		1	
Shiftwork that involves circadian disruption			2A	
Silica dust, crystalline, in the form of quartz or cristobalite	14808-60-7	K	1	
Silicon carbide whiskers	409-21-2		2A	
Silicon carbide, fibrous	308076-74-6		2B	
Sodium ortho-phenylphenate	132-27-4		2B	
Solar Radiation (see Ultraviolet-Radiation-Related Exposures)		K	1	
Soot (as found in occupational exposure of chimney sweeps)		K	1	
Special-purpose fibres such as E-glass and '475' glass fibres			2B	
Sterigmatocystin	10048-13-2		2B	
Streptozotocin (see Nitrosourea Chemotherapeutic Agents)	18883-66-4	R	2B	
Strong Inorganic Acid Mists Containing Sulfuric Acid		K		
Styrene	100-42-5	R	2B	
Styrene-7,8-oxide	96-09-3	R	2A	
Sulfallate	95-06-7	R	2B	
Sulfasalazine	599-79-1		2B	
Sulfuric Acid (see Strong Inorganic Acid Mists Containing Sulfuric Acid)	7664-93-9	K		
Sunlamps and Sunbeds (see Ultraviolet-Radiation-Related Exposures)		K		
Talc-based body powder (perineal use of)	14807-96-6		2B	
Tamoxifen	10540-29-1	K	1	
Teniposide	29767-20-2		2A	
Tetrabromobisphenol A	79-94-7		2A	
Tetrachloroazobenzene, 3,3',4,4'-	14047-09-7		2A	
Tetrachlorodibenzo-p-dioxin, 2,3,7,8-	1746-01-6	K	1	
Tetrachloroethane, 1,1,1,2-	630-20-6		2B	
Tetrachloroethane, 1,1,2,2-	79-34-5		2B	
Tetrachloroethylene	127-18-4	R	2A	
Tetrachlorvinphos	22248-79-9		2B	

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Tetrafluoroethylene	116-14-3	R	2A	
Tetrahydrofuran	109-99-9		2B	
Tetranitromethane	509-14-8	R	2B	
Textile manufacturing industry (work in)			2B	
Thioacetamide	62-55-5	R	2B	
Thiodianiline, 4,4'-	139-65-1	R	2B	
Thiotepa	52-24-4	K	1	
Thiouracil	141-90-2		2B	
Thiourea	62-56-6	R	3	
Thorium Dioxide (see Ionizing Radiation)	1314-20-1	K	1	
Thorium-232 and its decay products	7440-29-1		1	
Titanium dioxide	13463-67-7		2B	
Tobacco smoke, second-hand		K	1	
Tobacco smokeless		K	1	
Tobacco smoking		K	1	
Toluene Diisocyanate, 2,4- (see Toluene Diisocyanates)	584-84-9	R		
Toluene Diisocyanate, 2,6- (see Toluene Diisocyanates)	91-08-7	R		
Toluene Diisocyanates	26471-62-5	R	2B	
Toluidine, ortho- (see o-Toluidine and Its Hydrochloride)	95-53-4	K	1	
Toxaphene	8001-35-2	R	2B	
Treosulfan	299-75-2		1	
Triamterene	396-01-0		2B	
Trichlormethine (Trimustine hydrochloride)	817-09-4		2B	
Trichloroacetic acid	76-03-9		2B	
Trichloroethylene	79-01-6	K	1	
Trichlorophenol, 2,4,6-	88-06-2	R	2B	
Trichloropropane, 1,2,3-	96-18-4	R	2A	
Tris(2,3-dibromopropyl) Phosphate	126-72-7	R	2A	
Trp-P-1 (3-Amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)	62450-06-0		2B	

<u>CHEMNAME</u>	<u>CASNUM</u>	<u>NTP</u>	<u>IARC</u>	<u>OSHA</u>
Trp-P-2 (3-Amino-1-methyl-5H-pyrido[4,3-b]indole)	62450-07-1		2B	
Trypan blue	72-57-1		2B	
Tungsten carbide with cobalt metal (see Cobalt metal with tungsten carbide)	12070-12-1, 7440-48-4			
Ultraviolet radiation (wavelengths 100-400 nm, encompassing UVA, UVB, and UVC)			1	
Ultraviolet Radiation A (see Ultraviolet-Radiation-Related Exposures)		R		
Ultraviolet Radiation B (see Ultraviolet-Radiation-Related Exposures)		R		
Ultraviolet Radiation C (see Ultraviolet-Radiation-Related Exposures)		R		
Ultraviolet Radiation, Broad Spectrum (see Ultraviolet-Radiation-Related Exposures)		K		
Ultraviolet-emitting tanning devices			2B	
Uracil mustard	66-75-1		2B	
Vanadium pentoxide	1314-62-1		2B	
Very hot beverages at above 65 °C (drinking)			2A	
Vinyl acetate	108-05-4		2B	
Vinyl Bromide (see Vinyl Halides [Selected])	593-60-2	R	2A	
Vinyl Chloride (see Vinyl Halides [Selected])	75-01-4	K	1	Y
Vinyl Fluoride (see Vinyl Halides [Selected])	75-02-5	R	2A	
Vinylcyclohexene diepoxide, 4-	106-87-6	R	2B	
Vinylcyclohexene, 4-	100-40-3		2B	
Vinylidene chloride	75-35-4		2B	
Welding fumes			1	
Wood Dust		K	1	
Zalcitabine	7481-89-2		2B	
Zidovudine (AZT)	30516-87-1		2B	

OSHA Select Carcinogens are defined as any substance that meets one of the following criteria:

1. Regulated by OSHA as a carcinogen
2. Listed under Group 1 "Carcinogenic to Humans" by IARC (International Agency for Research on Cancer)
3. Listed in either Group 2a "Probably Carcinogenic to Humans" or 2b "Possibly Carcinogenic to Humans" by IARC
4. Listed as Group K "Known to be a Human Carcinogen" by NTP (National Toxicology Program)
5. NTP lists Group R "Reasonably Anticipated to be a Human Carcinogen",

and causes statistically significant tumor incidence in experimental animals in accordance with one of the following dosage criteria:

- inhalation exposures of <10 mg/m³, 6-7 hours per day, 5 days per week, for a significant portion of a lifetime; or
- skin application of <300 mg/kg body weight per week; or
- oral doses of <50 mg/kg body weight per day

This list of Select Carcinogens takes a conservative approach by listing all substances classified as known, probable, or possible human carcinogens by NTP and IARC; no effort was made to differentiate known from potential carcinogens. Researchers may take a conservative approach as well and treat these compounds as Select Carcinogens. Those who choose not to use this approach are tasked with documenting that the dosing regimen for a particular compound disqualifies it as an OSHA Select Carcinogen in accordance with the above listed criteria.

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