Chemical	OSHA	IARC	NTP	ACGIH
af-2[2-(2-furyl)-3-(5-nitro-2-furyl)acrylamide] [3688-53-7]		2B		
acetaldehyde (ethyl aldehyde) [75-07-0]		2B	R	A3
acetamide [60-35-5]		2B		
acetic acid, cobalt(2+) salt		2B		
2-acetylaminofluorene	yes		R	
acrylamide [79-06-1]		2A	R	A3
acrylonitrile [107-13-1]	Yes	2B	R	A3
adriamycin (doxorubicin hydrochloride) [23214-92-8]		2A	R	
aflatoxin B1		1		
aflatoxin M1 [6795-23-9]		2B		
aflatoxins [1402-68-2]		1	K	
alachlor [15972-60-8]				A3
alcoholic beverages, ethanol		1	K	
aldrin (HHDN) [309-00-2]				A3
allyl chloride [107-05-1]				A3
aluminium production		1		
1-amino-2,4-dibromoanthraquinone			R	
2-amino-3,4-dimethylimidazo[4,5-f]quinoline (MelQ)			R	
2-amino-3,8-dimethylimidazo[4,5-f]quinoliine (MelQx)			R	
1-amino-2-methylanthraquinone			R	
2-amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole [712-68-5]		2B		
amino-alpha-c (2-amino-9h-pyrido[2,3-b]indole) [26148-68-5]		2B		
2-aminoanthraquinone			R	
para-aminoazobenzene [60-09-3]		2B		
ortho-aminoazotoluene [97-56-3]		2B	R	
4-aminodiphenyl (4-aminobiphenyl) [92-67-1]	Yes	1	K	A1
2-amino-3-methylimidazo[4,5-f] quinoline (IQ) [76180-96-6]		2A	R	
2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP)			R	
amitrole [61-82-5]			R	A3
ammonium dichromate (VI)		1		
ammonium perfluorooctanoate [3825-26-1]				A3
amsacrine [51264-14-3]		2B		
analgesic mixtures containing phenacetin		1	K	
androgenic (anabolic) steroids		2A		
aniline (aminobenzne) [62-53-3]				A3
o-anisidine [90-04-0], & hydrochloride		2B	R	A3
antimony trioxide [1309-64-4]		2B		A2
aramite [140-57-8]		2B		

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 1 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
areca nut, in preparation		1		
aristolic acid		2A		
aristolochia (genus) with herbal remedies		1		
arsenenous acid, calcium salt (2:1), and potassium salt			K	
arsenic [7440-38-2], elemental and inorganic compounds as As	Yes	1	K	A1
arsenic acid, calcium salt, and calcium salt (2:3)		1	K	
arsenic acid, disodium salt, heptahydrate			K	
arsenic acid, lead (2+) salt (1:1)			K	
arsenic acid, monopotassium salt, and sodium salt			K	
arsenic pentoxide			K	
arsenic trioxide		1	K	
arsenious acid, monosodium salt		1	K	
arsenious acid, calcium salt, and calcium salt (1:1)			K	
art glass, glass containers and pressed ware (manufacture of)		2A		
asbestos [1332-21-4]	Yes	1	K	A1
asbestos, actinolite	Yes	1		A1
asbestos, amosite, anthophyllite, chrysotile, crocidolite	Yes	1	K	A1
asbestos, tremolite	Yes	1		A1
auramine [492-80-8]		2B		
auramine, manufacture of		1		
azacitidine (5-azacitidine, 5-AzaC) [320-67-2]		2A	R	
azaserine [115-02-6]		2B		
azathioprine [446-86-6]		1	K	
azbllen asbestos			K	
aziridine [151-56-4]		2B		
benomyl [17804-35-2]				A3
barium chromate (VI)		1	K	
benz[a]anthracene [56-55-3]		2B	R	A2
benz[j]aceanthrylene [202-33-5]		2B		
benzene [71-43-2]	Yes	1	K	A1
benzidine [92-87-5]	Yes	1	K	A1
benzidine-based dyes			K	
benzo[a]pyrene [50-32-8]		1	R	A2
benzo[b]fluoranthene [205-99-2]		2B	R	A2
benzo[c]phenanthrene [195-19-7]		2B		
benzo[j]fluoranthene [205-82-3], and [k] [207-08-9]		2B	R	
benzofuran [271-89-6]		2B		
benzotrichloride [98-07-7]			R	A2
benzyl chloride [100-44-7]				A3

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 2 Revision 2010

	Table 9	
Carcinogens Table:	OSHA, IARC, NTP, ACGIH (March 2010)	

Chemical	OSHA	IARC	NTP	ACGIH
benzyl violet 4B [1694-09-3]		2B		
beryllium [7440-41-7] and beryllium compounds		1	K	A1
beryllium aluminum alloy		1	K	
beryllium aluminum silicate		1	K	
beryllium chloride		1	K	
beryllium compounds, n.o.s.		1	K	
beryllium phosphate		1	K	
beryllium hydroxide		1	K	
beryllium oxide		1	K	
beryllium oxide carbonate		1	K	
beryllium sulfate		1	K	
beryllium sulfate tetrahydrate		1	K	
beryllium zinc silicate		1	K	
betel quid with tobacco and without tobacco		1		
2-2-bis-(bromomethyl)-1,3-propanediol [3296-90-0]		2B	R	
n,n-bis(2-chloroethyl)-2-naphthylamine				
(chlornaphazine) [494-03-1]		1		
bis(chloromethyl)ether [542-88-1] & technical grade [107-30-2]	Yes	1	K	A1
bischloroethyl nitrosourea (BCNU) [154-93-8]		2A	R	
bitumens [8052-42-4], extracts of steam-refined and air-refined		2B		
bleomycin, chlorohydrate, and sulfate		2B		
bleomycins [11056-06-7]		2B		
boot and shoe manufacture and repair		1		
bracken fern		2B		
bromacil [314-40-9]				A3
bromodichloromethane [75-27-4]		2B	R	
bromoform [75-25-2]				A3
1,3-butadiene [106-99-0]	Yes	1	K	A2
1,4-butanediol dimethanesulfonate (busulphan;myleran) [55-98-1]		1	K	
2-butoxyethanol (EGBE) [111-76-2]				A3
2-butoxyethyl acetate (EGBEA) [112-07-2]				A3
butylated hydroxyanisole (BHA) [25013-16-5]		2B	R	
beta-butyrolactone [3068-88-0]		2B		
CI acid red 114 [6459-94-5]		2B		
CI basic red 9 [596-61-9]		2B	R	
CI direct blue 15 [2429-74-5]		2B		
cadmium [7440-43-9], elemental and compounds, as Cd	Yes	1	K	A2
cadmium carbonate			K	
cadmium chloride		1	K	
cadmium fluoborate			K	

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 3 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
cadmium fume (as Cd)		1	K	
cadmium nitrate			K	
cadmium oxide			K	
cadmium sulfate		1	K	
cadmium sulfide		1	K	
caffeic acid [331-39-5]		2B		
calcium chromate [13765-19-0]		1	K	A2
captafol [2425-06-1]		2A		
captan [133-06-2]				A3
carbon black [1333-86-4]		2B		
carbon electrode manufacture		2A		
carbon tetrachloride [56-23-5]		2B	R	A2
carpentry and joinery		2B		
carrageenan [9000-07-1], degraded		2B		
catechol [120-80-9]		2B		A3
ceramic fibers (respirable size)			R	
chimney sweeping		1		
chlorambucil [305-03-3]		1	K	
chloramphenicol [56-75-7]		2A	R	
alpha-chlordane, and beta, and gamma		2B		
chlordane [57-74-9]		2B		A3
chlordane, technical		2B		
chlordecone (kepone) [143-50-0]		2B	R	
chlorendic acid [115-28-6]		2B	R	
chlorinated camphene [8001-35-2]				A3
chlorinated paraffins (C12 60% and C23, 43% chlorine)		2B	R	
α-chlorinated toluenes (benzal chloride [98-87-3], benzotrichloride [98-07-				
7], benzyl chloride [100-44-7]) and benzoyl chloride [98-88-4] (combined)		2A		
1-chloro-2-methylpropene [513-37-1]		2B		
3-chloro-2-methylpropene			R	
4-chloro-o-toluidine [95-69-2] hydrochloride		2A	R	
4-chloro-ortho-phenylenediamine [95-83-0]		2B	R	
para-chloro-ortho-toluidine, and its strong acid salts		2A		
para-chloroaniline [106-47-8]		2B		
chlorobenzene [108-90-7]				A3
3-chloro-4-(dichloromethyl)-5-hydroxy-2(5h)furanone [77439-76-0]		2B		
chlorodiphenyl (54% chlorine) [11097-69-1]				A3
1-(2-chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea				-
(methyl-CCNU;semustine) [13909-09-6]		1	Κ	

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 4 Revision 2010

	Table 9	
Carcinogens Table:	OSHA, IARC, NTP, ACGIH (March 2010)	

Chemical	OSHA	IARC	NTP	ACGIH
1-(2-chloroethyl)-3-cyclohexyl-1-nitrosourea				
(CCNU) [13010-47-4]		2A	R	
chloroform [67-66-3]		2B	R	A3
chloromethyl methyl ether (CMME) [107-30-2]	Yes		K	A2
chlorophenoxy herbicides		2B		
chloroprene [126-99-8]		2B	R	
chlorothalonil [1897-45-6]		2B		
chlorozotocin [54749-90-5]		2A	R	
chromate(1-), hydroxyoctaoxodizincatedi-, potassium		1		A1
chromic acid, lead(2+) Salt (1:1)		1	K	A2
chromic acid, disodium salt		1	K	
chromite (mineral)			K	A1
chromite ore processing (chromate) as Cr				A1
chromium (VI) chloride		1	K	
chromium (VI) compounds	Yes	1	K	
chromium (VI) dioxychloride		1	K	
chromium and certain chromium compounds			K	
chromium carbamate (6Cl)			K	
chromium phosphate			K	
chromium triacetate			K	
chromium (VI) oxide (1:3)		1	K	
Chromium [7440-47-3], metal & inorganic compounds, as Cr,				
insoluble Cr VI compunds, and water soluble Cr VI compounds			K	A1
chrysene [218-01-9]		2B		A3
cisplatin [15663-27-1]		2A	R	
citrus red number 2 [6358-53-8]		2B		
clonorchis sinensis (infection with)		2A		
coal gasification		1		
coal tar [8007-45-2] and coal tar distillate & coal tar pitches	Yes	1	K	
coal tar pitch [65996-93-2] volatiles, as benzene solubles		1		A1
cobalt [7440-48-4] and cobalt compunds		2B		A3
cobalt metal with tungsten carbide		2A		
cobalt metal without tungsten carbide		2B		
cobalt (II) acetate tetrahydrate				
cobalt (II) chloride, and chloride hexahydrate				
cobalt (II) hydroxide				
cobalt (II) nitrate (1:2)				
cobalt (II) sulfate (1:1) [10026-24-1]		2B	R	
coffee (urinary bladder)		2B		
coke oven emissions	Yes		K	

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 5 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
coke production	Yes	1	K	
conjugated estrogens (sodium [estrone & equilin] sulfate)			K	
creosote [8001-58-9], and creosote wood		2A		
para-cresidine [120-71-8]		2B	R	
crotonaldehyde [4170-30-3]				A3
cupferron			R	
cycasin [14901-08-7]		2B		
cyclohexanone [108-94-1]				A3
cyclopenta[cd]pyrene [27208-37-3]		2A		
cyclophosphamide [50-18-0]		1	K	
cyclophosphamide hydrate		1		
cyclosporin A [79217-60-0]		1	K	
DDT (dichlorodiphenyl trichloroethane) [50-29-3]		2B	R	A3
dacarbazine [4342-03-4]		2B	R	
danthron (chrysazin; 1,8-dihydroxyanthraquinone) [117-10-2]		2B	R	
daunomycin [20830-81-3]		2B		
decabromobiphenyl (under polybrominated biphenyls)			R	
di(2-ethylhexyl)phthalate			R	A3
n,n'-diacetylbenzidine [613-35-4]		2B		
2,4-diaminoanisole [615-05-4]		2B		
2,4-diaminoanisole sulfate			R	
4,4'-diaminodiphenyl ether [101-80-4]		2B		
2,4-diaminotoluene [95-80-7]		2B	R	
diazoaminobenzene			R	
diazomethane [334-88-3]				A2
dibenz[a,h]acridine [226-36-8], and [a,j] [224-42-0]		2B	R	
dibenz[a,h]anthracene [53-70-3]		2A	R	
dibenzo[a,e]pyrene [192-65-4], [a,h] [189-64-0]				
and [a,i] [189-55-9], and [a,l] [191-30-0]		2A	R	
7h-dibenzo[c,g]carbazole [194-59-2]		2B	R	
1,2-dibromo-3-chloropropane (DBCP) [96-12-8]	Yes	2B	R	
2,3-dibromo-1-propanol [96-13-9]		2B	R	
dichloroacetic acid [79-43-6]		2B		A3
dichloroacetylene 7572-29-4]				A3
1,4-dichlorobenzene			R	
1,4-dichloro-2-butene [764-41-0]				A2
3,3'-dichloro-4,4'-diaminodiphenyl ether [28434-86-8]		2B		
para-dichlorobenzene [106-46-7]		2B	R	A3
3,3'-dichlorobenzidine [91-94-1]	Yes	2B	R	A3
3,3'-dichlorobenzidine hydrochloride			R	
1,2-dichloroethane (ethylene dichloride) [107-06-2]		2B	R	

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Chemical	OSHA	IARC	NTP	ACGIH
dichloromethane (methylene chloride) [75-09-2]	Yes	2B	R	A3
1,3-dichloropropene (technical grade) (DCP) [542-75-6]		2B	R	A3
dichlorvos [62-73-7]		2B		_
diepoxybutane [1464-53-5]		2B	R	
diesel engine exhaust, and marine fuel, and distillate (light)		2A	R	
diesel fuel [68334-30-5] [68476-30-2] [68476-31-3] [68476-34-6] [77650-28-				
3] as total hydrocarbons		2B		
diethanolamine [111-42-2]				A3
diethyl sulfate [64-67-5]		2A	R	A3
di(2-ethylhexyl)phthalate (DEHP) [117-81-7]			R	A3
1,2-diethylhydrazine [1615-80-1]		2B		
diethylstilbestrol (DES) [56-53-1]		1	K	
diglycidyl resorcinol ether [101-90-6]		2B	R	
dihydrosafrole [94-58-6]		2B		
diisopropyl sulfate [2973-10-6]		2B		
3,3'-dimethoxybenzidine (ortho-dianisidine) [119-90-4]		2B	R	
3,3'-dimethoxybenzidine dihydrochloride			R	
dimethyl sulfate [77-78-1]		2A	R	A3
trans-2-[(dimethylamino)methylimino]-5-[2-(5-nitro-2-				
furyl)vinyl]-1,3,4-oxadiazole [25962-77-0]		2B		
4-dimethylaminoazobenzene [60-11-7]	Yes	2B	R	
2,6-dimethylaniline (2,6-xylidine) [87-62-7]		2B		
3,3'-dimethylbenzidine (o-tolidine) [119-93-7]		2B	R	A3
dimethylcarbamoyl chloride [79-44-7]		2A	R	A2
1,1-dimethylhydrazine [57-14-7]		2B	R	A3
1,2-dimethylhydrazine [540-73-8]		2A		
dimethylvinyl chloride			R	
3,7-dinitrofluoranthene [105735-71-5]		2B		
3,9-dinitrofluoranthene [22506-53-2]		2B		
1,6-dinitropyrene [42397-64-8], and 1,8 dinitropyrene [42397-65-9]		2B	R	
dinitrotoluene [25321-14-6], 2,4 [121-14-2] and 2,6 [606-20-2]		2B		A3
1,4-dioxane [123-91-1]		2B	R	A3
disperse blue 1 [2475-45-8]		2B	R	
dry cleaning, (occupational exposures in)		2B		
dyes metabolized to benzidine		1		
dyes metabolized to 3,3'-dimethoxybenzidine			R	
dyes metabolized to 3,3'-dimethylbenzidine			R	
engine exhaust, gasoline		2B		
epichlorohydrin [106-89-8]		2A	R	A3
1,2-epoxybutane [106-88-7]		2B		
epstein-barr virus		1		

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Chemical	OSHA	IARC	NTP	ACGIH
erionite [66733-21-9]		1	K	
estrogens (not conjugated), estradiol-17 beta, and estrone, and		-		
ethinylestradiol, and mestranol			Κ	
estrogen-progestogen menopausal therapy and oral				
contraceptives		1		
estrogens, steroidal and nonsteroidal, estrogen therapy-post				
menopausal		1		
ethanol [64-17-5]				A3
ethyl acrylate [140-88-5]		2B		
ethyl benzene [100-41-4]		2B		A3
ethyl bromide [74-96-4]				A3
ethyl chloride (chloroethane) [75-00-3]				A3
ethyl methanesulfonate [62-50-0]		2B	R	
n-ethyl-n-nitrosourea [759-73-9]		2A	R	
ethylene dibromide (1,2-dibromoethane) [106-93-4]		2A	R	A3
ethylene oxide [75-21-8]	Yes	1	K	A2
ethylene thiourea			R	
ethyleneimine (aziridine) [151-56-4]	Yes			A3
etoposide [33419-42-0]		1		
etoposide in combination with cisplatin & bleomycin		1		
firefighter, occupational exposure		2B		
foreign bodies implanted in tissue (polymetric, metallic) surgical		2B		
formaldehyde		1		
formaldehyde gas [50-00-0]	Yes	1	R	A2
2-(2-formylhydrazino)-4-(5-nitro-2-furyl)thiazole [3570-75-0]		2B		
fuel oils, residual (heavy)		2B		
fumonisin B1 [116355-83-0]		2B		
Furan [110-00-9]		2B	R	
furfural [98-01-1]				A3
furniture and cabinet making		1		
fusarium moniliform (toxins from)				
gallium arsenide [1303-00-0]		1		A3
gamma radiation (x-ray)		1	K	
gasoline, including unleaded		2B		A3
glass wool fibers			R	A3
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]		2A	R	A3
griseofulvin [126-07-8]		2B		

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 8 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
		20		
hc blue #1 [2784-94-3]		2B		
hairdresser or barber, occupational exposure		2A		
helicobacter pylori, infection with		1		
hematite mining, underground with exposure to radon		1	17	
hepatitis b and c virus		1	K	1.2
heptachlor [76-44-8], and heptachlor epoxide		2B		A3
hexachlorobenzene [118-74-1]		2B	R	A3
hexachlorobutadiene (HCBD)			_	A3
hexachlorocyclohexanes (all isomers) alpha, beta, gamma		2B	R	
hexachloroethane (perchloroethane) [67-72-1]		2B	R	A3
hexamethylphosphoramide (HMPA) [680-31-9]		2B	R	A3
high temperature frying emissions		2A		
hot mate		2A		
household combustion of coal, indoor emissions		1		
household combustion of wood, indoor emissions		2A		
human t-cell lymphotropic virus type 1		1		
human immunodeficiency virus type 1 (infection with)		1		
human immunodeficiency virus type 2 (infection with)		2B		
human papilloma virus type 16 and 18		1	K	
human papilloma virus type 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66		1	K	
human papilloma virus type other than 16,18, 31 and 33		2B	K	
hydrazine [302-01-2], methyl hydrazine		2B	R	A3
hydrazine sulfate			R	
hydrazobenzene			R	
hydrogen peroxide [7722-84-1]				A3
hydroquinone [123-31-9]				A3
1-hydroxyanthraquinone [129-43-1]		2B		
indeno[1,2,3-cd]pyrene [193-39-5]		2B	R	
indium phosphide [22398-80-7]		2A		
involuntary smoking		1		
iron and steel founding		1		
iron-dextran complex [9004-66-4]		2B	R	
isobutyl nitrite [542-56-3]				A3
isophorone [78-59-1]				A3
isoprene [78-79-5]		2B	R	
isopropanol manufacture (strong acid process)		1		1
kaposi's sarcoma herpes virus/human herpes virus 8	1	2A		1
kepone (chlordecone) [143-50-0]	1		R	1
kerosene / jet fuel as total hydrocarbons [8008-20-6]	1			A3
lasiocarpine [303-34-4]		2B		
lead acetate, lead acetate (II) and trihydrate			R	

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 9 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
lead [7439-92-1] and lead compounds, inorganic		2A	R	A3
lead chromate [7758-97-6]			K	A2
lead chromate (VI) oxide		1	K	
lead phosphate			R	
lindane [58-89-9]			R	A3
MOPP & combined chemotherapy including alkylating agent		1		
magenta [632-99-5], containing Cl basic red 9		2B		
magenta, manufacture of		1		
magnetic fields (very low frequency)		2B		
mea-alpha-c (2-amino-3-methyl-9h-pyrido[2,3-b]indole)				
[68006-83-7]		2B		
medroxyprogesterone acetate [71-58-9]		2B		
MeIQ (2-amino-3,4-dimethylimidazo[4,5f]quinoline [77094-11-2]		2B		
MeIQx (2-amino-3,8-dimethylimidazo[4,5-f]quinoxaline [77500-04-0]		2B		
melphalan [148-82-3]		1	Κ	
merphalan [531-76-0]		2B		
5-methoxypsoralen [484-20-8]		2A		
8-methoxypsoralen (methoxsalen) [298-81-7] with UV A radiation		1	Κ	
methyl hydrazine [60-34-4]				A3
methyl mercury compounds		2B		
methyl methanesulfonate [66-27-3]		2A	R	
2-methyl-1-nitroanthraquinone [129-15-7] (uncertain purity)		2B		
n-methyl-n'-nitro-n-nitrosoguanidine (MNNG) [70-25-7]		2A	R	
n-methyl-n-nitrosourea (n-nitroso-n-methylurea) [684-93-5]		2A	R	
n-methyl-n-nitrosourethane [615-53-2]		2B		
methyl-tert butyl ether (MTBE) [1634-04-4]				A3
2-methylaziridine (propyleneimine) [75-55-8]		2B	R	A3
methylazoxymethanol acetate [592-62-1]		2B		
5-methylchrysene [3697-24-3]		2B	R	
4,4'-methylene bis(2-chloroaniline) (MBOCA) [101-14-4]		1	R	A2
4,4'-methylene bis(2-methylaniline) [838-88-0]		2B		
4,4'-methylene bis(n,n-dimethyl)benzenamine			R	
4,4'-methylenedianiline [101-77-9]	Yes	2B	R	A3
4,4'-methylenedianiline dihydrochloride			R	
methyleugenol			R	
methylthiouracil [56-04-2]		2B		
metronidazole [443-48-1]		2B	R	
michler's base [101-61-1]		2B		
michler's ketone [90-94-8]		2B	R	
microcystin-lr [101043-37-2]		2B		

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 10 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
mineral oils, untreated and mildly treated		1	K	
mirex [2385-85-5]		2B	R	
mitomycin c [50-07-7]		2B		
mitoxantrone [65271-80-9]		2B		
molybdenum as Mo (soluble compounds) [7439-98-7]				A3
monocrotaline [315-22-0]		2B		
5-(morpholinomethyl)-3-[(5-nitrofurfurylidene)amino]-2-				
oxazolidinone [3795-88-8]		2B		
mustard gas (sulfur mustard) [505-60-2]		1	K	
nafenopin [3771-19-5]		2B		
naphthalene [91-20-3]		2B	R	
2-naphthylamine (alpha & beta) (aminonaphthalene) [91-59-8]	Yes	1	K	A1
neutrons		1	K	
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)		2B		
nickel biscyclopentadiene			K	
nickel carbonyl (as Ni)			K	
nickel compounds		1	K	
nickel hydroxide, nickel (II) hydroxide, nickel (III) hydroxide			K	
nickel sulfide (3:2) [12035-72-2]			K	A1
nickel (II) acetate (1:2)			K	
nickel (II) carbonate (1:1)			Κ	
nickel (II) oxide (1:1)			K	
nickel, insoluble compounds, as Ni				A1
nickel, compound with pi-cyclopentadienyl (1:2)			K	
nickel, metallic [7440-02-0] and alloys		2B	R	
niridazole [61-57-4]		2B		
nitrate or nitrite (ingested)		2A		
nitrilotriacetic acid [139-13-9] and its salts		2B	R	
n-[4-(5-nitro-2-furyl)-2-thiazolyl]acetamide [531-82-8]		2B		
5-nitroacenaphthene [602-87-9]		2B		
2-nitroanisole [91-23-6]		2B	R	
nitrobenzene [98-95-3]		2B	R	A3
4-nitrobiphenyl [92-93-3]	Yes			A2
p-nitrochlorobenzene [100-00-5]				A3
6-nitrochrysene [7496-02-8]		2B	R	
nitrofen [1836-75-5], (technical-grade)		2B	R	
2-nitrofluorene [607-57-8]		2B		
1-[(5-nitrofurfurylidene)amino]-2-imidazolidinone [555-84-0]		2B		
nitrogen mustard [51-75-2], and hydrochloride		2A	R	

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The Ohio State University Office of Environmental Health & Safety Chemical Hygiene Plan Table 9 Carcinogens Table: OSHA, IARC, NTP, ACGIH Page 11 Revision 2010

Chemical	OSHA	IARC	NTP	ACGIH
nitrogen mustard n-oxide [126-85-2]		2B		
nitromethane [75-52-5]		2B	R	A3
2-nitropropane [79-46-9]		2B	R	A3
1-nitropyrene [5522-43-0], and 4-nitropyrene [57835-92-4]		2B	R	
n-nitroso-n-ethylurea			R	
n-nitrosobutylbutanolamine			R	
n-nitrosobutylcarboxypropylamine			R	
n-nitrosodi-n-butylamine [924-16-3]		2B	R	
n-nitrosodi-n-propylamine [621-64-7]		2B	R	
n-nitrosodiethanolamine [1116-54-7]		2B	R	
n-nitrosodiethylamine [55-18-5]		2A	R	
n-nitrosodimethylamine [62-75-9]	Yes	2A	R	A3
4-(n-nitrosomethylamino)-1-(3-pyridyl)-1-butanone				
(NNK) [64091-91-4]		1	R	
3-(n-nitrosomethylamino)propionitrile [60153-49-3]		2B		
n-nitrosomethylethylamine [10595-95-6]		2B		
n-nitrosomethylvinylamine [4549-40-0]		2B	R	
n-nitrosomorpholine [59-89-2]		2B	R	
n'-nitrosonornicotine (NNN) [16543-55-8]		1	R	
n-nitrosopiperidine [100-75-4]		2B	R	
n-nitrosopyrrolidine [930-55-2]		2B	R	
n-nitrososarcosine [13256-22-9]		2B	R	
5-nitro-o-toluidine [99-55-8]				A3
non arsenic insecticides		2A		
norethisterone			R	
ochratoxin A [303-47-9]		2B	R	
oestrogen-proestrogen therapy, postmenopausal		1		
oestrogens, steroidal and nonsteroidal		1		
oil orange SS [2646-17-5]		2B		
opisthorchis viverrini (infection with)		1		
oral contraceptives, sequential and combined		1		
oxazepam [604-75-1]		2B		
4,4'-oxydianiline			R	
oxymetholone			R	
painter (occupational exposure as a)		1		
palygorskite (attapulgite) [12174-11-7]				
(long fibers, >5 micrometers		2B		
panfuran S [794-93-4] (containing dihydroxymethylfuratrizine)		2B		
paving and roofing with coal-tar pitch		1		
pentachlorobiphenyl			R	
pentachlorophenol [87-86-5]				A3

		Table 9
Carcinogens Table:	OSHA,	, IARC, NTP, ACGIH (March 2010)

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Chemical	OSHA	IARC	NTP	ACGIH
petroleum refining (occupational exposures in)		2A		
phenotetin [62-44-2] and with anaolgesic mixtures		1	R	
phenazopyridine hydrochloride [136-40-3]		2B	R	
Phenobarbital [50-06-6]		2B	n	
phenolphthalein [77-09-8]		2B	R	
phenoxybenzamine hydrochloride [63-92-3]		2B	R	
phenyl glycidyl ether [122-60-1]		2B	n	A3
o-phenylenediamine [95-54-5]		20		A3
phenylhydrazine [100-63-0]				A3
phenytoin [57-41-0]		2B	R	115
PhIP (2-amino-1-methyl-6-phenyl-imidazo[4,5-b]pyridine		20	R	
[105650-23-5]		2B		
phosphorus-32, as phosphate		1		
pickled vegetables (traditional in Asia)		2B		
piperazine estrone sulfate (conjugated estrogen)		20	K	
plants containing aristolochic acid		1		
plutonium-239 and decay products		1		
polybrominated biphenyl (FF-1), and (PBBs), firemaster BP-6		1		
[59536-65-1], octabromobiphenyl		2B	R	
polychlorinated biphenyl (aroclor 1254)		2A	R	
polychlorinated biphenyl (aroclor 1260), and kanechlor			R	
polychlorinated biphenyl [PCBs] [1336-36-3]		2A	R	
polychlorophenols and their sodium salts (mixed exposures)		2B		
polycyclic aromatic hydrocarbons (PAHs)			R	
ponceau 3r [3564-09-8]		2B		
ponceau mx [3761-53-3]		2B		
potassium bromate [7758-01-2]		2B		
potassium chromate (VI), and dichromate (VI)		1	K	
printing processes (occupational exposures in)		2B		
procarbazine hydrochloride [366-70-1]		2A	R	
progesterone			R	
progestins		2B		
progestrogen-only contraceptives		2B		
1,3-propane sultone [1120-71-4]		2B	R	A3
n-propanol (propyl alcohol)		_		A3
beta-propiolactone [57-57-8]	Yes	2B	R	A3
propoxur (baygon) [114-26-1]		_		A3
propylene oxide [75-56-9]		2B	R	A3
propylthioracil [51-52-5]		2B	R	
pyridine [110-86-1]		_		A3
radionuclides, alpha and beta emitting – internally distributed		1		

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Chemical	OSHA	IARC	NTP	ACGIH
radioiodines, short lived isotopes		1		
radium-224, 226, 228 and decay products		1		
radon-222 [10043-92-2] and its decay products		1	K	
refractory ceramic fibres		2B		
reserpine			R	
riddelliine [23246-96-0]		2B		
rock wool fibers				A3
rubber industry		1		
safrole [94-59-7]		2B	R	
salted fish (Chinese style)		1		
schistosoma haematobium (infection with)		1		
schistosoma japonicum (infection with)		2B		
selenium sulfide			R	
shale-oils [68308-34-9]		1		
shiftwork that involves circadian disruption		2A		
silica [14808-60-7], crystalline (respirable)		1	K	
silica, crystalline cristobalite, tridymite & quartz			K	A2
silicic acid, beryllium salt		1		
silicon carbide (fibrous)				A2
sodium dichromate (VI)		1	K	
sodium ortho-phenylphenate [132-27-4]		2B		
solar radiation		1	K	
soots		1	K	
special-purpose fibres (E-glass, 475 glass fibres)		2B		
sterigmatocystin [10048-13-2]		2B		
streptozotocin [18883-66-4]		2B	R	
strontium chromate (VI) [7789-06-2]		1	K	A2
styrene [100-42-5]		2B		
styrene-7,8-oxide [96-09-3]		2A	R	
sulfallate 95-06-7]		2B	R	
sulfuric acid, strong inorganic mists, occupational exposure to [7664-93-9]		1	К	A2
sunlamps and sunbeds		2A	K	112
synthetic vitreous fibers		20	A	A2
talc (containing asbestos or asbestiform fibers)		1		Al
talc based body powder, perineal use of		B2		111
tamoxifen [10540-29-1]		1	K	
tars		1	K	
teniposide [29767-20-2]		2A	IX.	
2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD)		217		
(dioxin) [1746-01-6]		1	K	

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Chemical	OSHA	IARC	NTP	ACGIH
1,1,2,2-tetrachloroethane [79-34-5]				A3
tetrachloroethylene (perchloroethylene) [127-18-4]		2A	R	A3
tetrafluoroethylene [116-14-3]		2B	R	A3
tetrahydrofuran [109-99-9]				A3
tetranitromethane [509-14-8]		2B	R	A3
textile manufacturing industry (work in)		2B		
thioacetamide [62-55-5]		2B	R	
4,4'-thiodianiline [139-65-1]		2B	R	
thiotepa [52-24-4]		1	K	
thiouracil [141-90-2]		2B		
thiourea			R	
thorium-232 and decay products		1		
thorium dioxide		_	K	
titanium dioxide [13463-67-7]		2B		
tobacco smoke, tobacco products, smokeless		1	К	
o-tolidine [119-93-7]		-		A3
2,6-toluene diisocyanate, and 2,4-		2B		110
toluene diisocyanate [26471-62-5] (mixed isomers)		2B	R	
p-toluidine [106-49-0]				A3
o-toluidine hydrochloride			R	110
ortho-toluidine [95-53-4]		1	R	A3
toxaphene (polychlorinated camphenes) [8001-35-2]		2B	R	A3
treosulphan [299-75-2]		1		
trichlormethine (trimustine hydrochloride) [817-09-4]		2B		
trichloroacetic acid [76-03-9]				A3
1,1,2-trichloroethane [79-00-5]				A3
trichloroethylene (ethylene trichloride) [79-01-6]		2A	R	A2
2,4,6-trichlorophenol			R	
1,2,3-trichloropropane [96-18-4]		2A	R	A3
tris(2,3-dibromopropyl)phosphate [126-72-7]		2A	R	_
trp-P-1(3-amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)				
[62450-06-0]		2B		
trp-P-2(3-amino-1-methyl-5H-pyrido[4,3-b]indole [62450-07-1]		2B		
trypan blue [72-57-1]		2B		
ultraviolet radiation A, and B, and C		2A	R	
ultraviolet radiation, broad spectrum			K	
uracil mustard [66-75-1]		2B		
uranium (as U) [7440-61-1]				A1
urethane [51-79-6]		2A	R	
vanadium pentoxide [1314-62-1]		2B		A3
vm & p naphtha				A3

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Chemical	OSHA	IARC	NTP	ACGIH
vinyl acetate [108-05-4]		2B		A3
vinyl bromide [593-60-2]		2A	R	A2
vinyl chloride [75-01-4]	Yes	1	K	A1
4-vinyl cyclohexene [100-40-3]		2B		A3
vinyl cyclohexene dichloride				A3
vinyl fluoride [75-02-5]		2A	R	A2
4-vinyl-1-cyclohexene diepoxide [106-87-6]		2B	R	
n-vinyl-2-pyrrolidone [88-12-0]				A3
welding fumes		2B		
wood dust (certain hard woods as beech & oak)		1	K	A1
x and gamma radiation		1		
xylidine [1300-73-8] mixed isomers				A3
zalcitabine [7481-89-2]		2B		
zidovudine (AZT) [30516-87-1]		2B		
zinc chromate (VI)		1	K	A1
zinc chromate (VI) hydroxide		1		
zinc chromates as Cr (zinc potassium chromate)				A1
zinc chromates as Cr (zinc yellow)				A1

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