

Summary by Chemical of Carcinogenicity Results in the CPDB from Technical Reports of the National Cancer Institute/National Toxicology Program (NCI/NTP)

Positivity: For each positive chemical in the CPDB, results are included on positivity and target site (by sex-species). A target site is listed for a chemical in a sex-species group if the evaluation in the Technical Report was “carcinogenic” or “clear” or “some” evidence of carcinogenic activity. If the highest level of evidence was “clear” or “carcinogenic” then the target site appears without superscripts. If “some” evidence is the highest level of evidence, an “s” superscript is reported after the target site. An NCI evaluation of “associated with carcinogenicity” or an NTP evaluation of “equivocal evidence of carcinogenicity” are not considered positive. If the highest level of evidence in a sex-species group was “equivocal” then “-^e” appears, and if the highest level was “associated” then “-^a” appears. We use the author’s opinion to classify positivity because it often takes into account more information than statistical significance alone, such as historical control rates for particular strains and sites, survival and latency, and/or dose response. Generally, this designation by author’s opinion corresponds well with the results of statistical tests for the significance of the dose-response effect (two-tailed $p < 0.01$).

If results in the NCI/NTP bioassay are negative in a group, “-” appears. If a sex-species group was not tested by NCI/NTP, “.” appears.

NCI/NTP evaluation of carcinogenic activity in the sex-species group is reported in the columns of target sites

target site	=	The level of evidence for the target site is “carcinogenic” for NCI bioassays or “clear evidence” for NTP, and the target sites are reported in the table.
-	=	No evidence of carcinogenic activity
.	=	Not tested in the sex-species group.
l	=	The NTP evaluation is “inadequate” for experiments in this sex-species, i.e., “studies that, because of major qualitative or quantitative limitations, cannot be interpreted as valid for showing either the presence or absence of carcinogenic activity.”
s	=	The highest level of evidence at the target site is “some evidence of carcinogenic activity” in an NTP bioassay.
- ^a	=	Used for NCI Technical Reports. The “a” indicates that the NCI Technical Report stated that tumors were associated with administration of the compound in the sex-species group. The “a” opinion generally corresponds to an NTP-assigned level of “equivocal” for these NCI bioassays.
- ^{a, u}	=	In these few cases NCI stated that the tumors were “associated” with compound administration, while the NTP later assigned the level of evidence as “positive” rather than “equivocal.” NTP noted that “these experiments were particularly difficult to evaluate based on the wording in the Technical Report Summaries”.
- ^e	=	The highest level of evidence for the sex-species group is “equivocal”.

Tissue codes: adr = adrenal gland; bon = bone; cli = clitoral gland; eso = esophagus; ezy = ear/Zymbal’s gland; hag = harderian gland; hmo = hematopoietic system; kid = kidney; lgi = large intestine; liv = liver; lun = lung; mgl = mammary gland; myc = myocardium; nas = nasal cavity (includes tissues of the nose, nasal turbinates, paranasal sinuses and trachea); nrv = nervous system; orc = oral cavity (includes tissues of the mouth, oropharynx, pharynx, and larynx); ova = ovary; pan = pancreas; per = peritoneal cavity; pit = pituitary gland; pre = preputial gland; ski = skin; smi = small intestine; spl = spleen; sto = stomach; sub = subcutaneous tissue; tes = testes; thy = thyroid gland; ubl = urinary bladder; ute = uterus; vag = vagina; vsc = vascular system.

Mutagenicity: A chemical is classified as mutagenic (“+”) in the *Salmonella* assay if it was evaluated as either “mutagenic” or “weakly mutagenic” by Zeiger (Gold and Zeiger, eds., *Handbook of Carcinogenic Potency and Genotoxicity Databases*, , CRC Press, 1997, pp. 687-729; Zeiger, pers. comm.) or as “positive” by the Gene-Tox Program (Kier et al., *Mutat. Res.* 168: 69-240, 1986; Auletta, pers. comm.). Other chemicals evaluated for mutagenicity by these two sources are reported as “-”. The symbol “.” indicates no evaluation in *Salmonella* in either of these 2 sources.

Superscript following chemical name

*	=	Experiments on this chemical are also included in the Carcinogenic Potency Database from published papers in the general Literature.
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Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Acetaminophen *	103-90-2	-	-	_e	-	-
Acetohexamide	968-81-0	-	-	-	-	-
Acetonitrile	75-05-8	-	_e	-	-	-
Acronycine	7008-42-6	.	bon per	mgl per	l	l
Acrylonitrile *	107-13-1	+	.	.	hag sto	hag sto
Agar	9002-18-0	.	-	-	-	-
Aldicarb	116-06-3	-	-	-	-	-
Aldrin *	309-00-2	-	-	-	liv	-
Allyl chloride	107-05-1	+	l	l	_a	_a
Allyl glycidyl ether	106-92-3	+	_e	-	nas ^s	_e
Allyl isothiocyanate	57-06-7	+	ubl	_a	-	-
Allyl isovalerate	2835-39-4	-	hmo	-	-	hmo
1-Amino-2,4-dibromoanthraquinone	81-49-2	+	kid lgi liv ubl	kid lgi liv ubl	liv lun sto	liv lun sto
3-Amino-4-ethoxyacetanilide	17026-81-2	+	-	-	thy	-
3-Amino-9-ethylcarbazole.HCl	6109-97-3	+	ezy liv ski	ezy liv ute	liv	liv
3-Amino-9-ethylcarbazole mixture	mixture	+	ezy liv ski	ezy	liv	liv
1-Amino-2-methylantraquinone	82-28-0	+	kid liv	liv	-	liv
2-Amino-4-nitrophenol	99-57-0	+	kid ^s	-	-	-
2-Amino-5-nitrophenol	121-88-0	+	pan ^s	-	-	-
4-Amino-2-nitrophenol	119-34-6	+	ubl	_a	-	-
2-Amino-5-nitrothiazole *	121-66-4	+	_a, u	-	-	-
2-Aminoanthraquinone	117-79-3	+	liv	-	liv	hmo liv

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
11-Aminoundecanoic acid	2432-99-7	-	liv ubl	-	-	-
<i>d</i> -Amphetamine sulfate	60-13-9	-	-	-	-	-
Ampicillin trihydrate	7177-48-2	-	_e	-	-	-
Anilazine	101-05-3	-	-	-	-	-
Aniline.HCl	142-04-1	-	per spl vsc	per	-	-
<i>o</i> -Anisidine.HCl	134-29-2	+	kid thy ubl	ubl	ubl	ubl
<i>p</i> -Anisidine.HCl	20265-97-8	+	_a	-	-	-
Anthranilic acid	118-92-3	-	-	-	-	-
Aroclor 1254 *	11097-69-1	-	_a	_a	.	.
<i>l</i> -Ascorbic acid *	50-81-7	-	-	-	-	-
Aspirin, phenacetin, and caffeine *	8003-03-0	-	-	-	-	-
5-Azacytidine *	320-67-2	+	l	l	l	_a, u
Azide, sodium *	26628-22-8	+	-	-	.	.
Azinphosmethyl	86-50-0	+	_a	-	-	-
Azobenzene *	103-33-3	+	spl vsc	spl	-	-
AZT *	30516-87-1	+	.	.	_e	vag
Barium chloride dihydrate	10326-27-9	-	-	-	-	-
Benzaldehyde	100-52-7	-	-	-	sto ^s	sto ^s
Benzene *	71-43-2	-	ezy orc ski	ezy orc sto	ezy hag hmo lun pre	ezy hmo lun mgl ova
Benzofuran	271-89-6	-	-	kid ^s	liv lun sto	liv lun sto
Benzoin	119-53-9	-	-	-	-	-
1 <i>H</i> -Benzotriazole	95-14-7	+	_a	_a	-	_a
Benzyl acetate *	140-11-4	-	_e	-	liv ^s sto ^s	liv ^s sto ^s
Benzyl alcohol	100-51-6	-	-	-	-	-
<i>o</i> -Benzyl- <i>p</i> -chlorophenol	120-32-1	-	-	_e	kid ^s	-
2-Biphenylamine.HCl	2185-92-4	+	-	-	_a	vsc
2,2-Bis(bromomethyl)-1,3-propanediol, technical grade *	3296-90-0	+	eso ezy hmo lgi lun mgl orc per ski smi sto sub tes thy ubl	eso mgl orc thy	hag kid lun	hag lun ski sub

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Bis(2-chloro-1-methylethyl)ether, technical grade	108-60-1	+	-	-	liv lun	lun
Bisphenol A	80-05-7	-	-	-	-	-
C.I. direct black 38 *	1937-37-7	+	liv	liv	.	.
C.I. direct blue 6	2602-46-2	+	liv	liv	.	.
C.I. direct blue 15	2429-74-5	+	ezy lgi liv orc pre ski smi	cli ezy hmo lgi liv orc ski smi ute	.	.
C.I. direct blue 218	28407-37-6	-	orc ^s	-	liv	liv
C.I. disperse blue 1	2475-45-8	+	ubl	ubl	- ^e	-
HC blue no. 1 *	2784-94-3	+	- ^e	lun ^s	liv thy	liv
HC blue no. 2	33229-34-4	+	-	-	-	-
Boric acid	10043-35-3	-	.	.	-	-
Bromodichloromethane *	75-27-4	+	kid lgi	kid lgi	kid	liv
Bromoethane	74-96-4	+	adr ^s lun ^s nrv ^s	- ^e	- ^e	ute
C.I. direct brown 95	16071-86-6	+	-	liv	.	.
1,3-Butadiene *	106-99-0	+	.	.	hag hmo kid liv lun nrv pre sto vsc	hag hmo liv lun mgl ova sto vsc
2-Butoxyethanol	111-76-2	-	-	- ^e	vsc ^s	sto ^s
tert-Butyl alcohol	75-65-0	-	kid ^s	-	- ^e	thy ^s
Butyl benzyl phthalate	85-68-7	-	pan ^s	- ^{a, u}	-	-
n-Butyl chloride	109-69-3	-	-	-	-	-
Butylated hydroxytoluene *	128-37-0	-	-	-	-	-
tert-Butylhydroquinone	1948-33-0	-	.	.	-	-
γ-Butyrolactone	96-48-0	-	-	-	- ^e	-
Caprolactam	105-60-2	-	-	-	-	-
Captan *	133-06-2	+	-	-	- ^{a, u}	- ^{a, u}
Carbromal	77-65-6	-	-	-	-	-
d-Carvone	2244-16-8	-	.	.	-	-
Chloral hydrate *	302-17-0	+	-	.	liv ^s	- ^e
Chloramben	133-90-4	+	-	-	- ^a	liv
Chloraminated water	---	.	-	- ^e	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Chlordane, technical grade *	57-74-9	-	-	-	liv	liv
Chlorendic acid	115-28-6	-	liv pan	liv	liv	-
Chlorinated paraffins (C ₁₂ , 60% chlorine)	63449-39-8	-	kid liv	liv thy	liv	liv thy
Chlorinated paraffins (C ₂₃ , 43% chlorine)	63449-39-8	-	-	- ^e	hmo	-
Chlorinated trisodium phosphate	56802-99-4	+	.	.	-	-
Chlorinated water *	---	.	-	- ^e	-	-
3-Chloro-2-methylpropene, technical grade (containing 5% dimethylvinyl chloride)	563-47-3	+	sto	sto	sto	sto
4-Chloro- <i>m</i> -phenylenediamine	5131-60-2	+	adr	-	-	liv
4-Chloro- <i>o</i> -phenylenediamine	95-83-0	+	sto ubl	sto ubl	liv	liv
2-Chloro- <i>p</i> -phenylenediamine sulfate	61702-44-1	+	-	-	-	-
1-Chloro-2-propanol, technical grade (~75% 1-chloro-2-propanol; ~25% 2-chloro-1-propanol)	127-00-4	+	-	-	-	-
3-Chloro- <i>p</i> -toluidine	95-74-9	-	-	-	-	-
5-Chloro- <i>o</i> -toluidine	95-79-4	-	-	-	liv vsc	liv vsc
4-Chloro- <i>o</i> -toluidine.HCl *	3165-93-3	-	-	-	vsc	vsc
2-Chloroacetophenone	532-27-4	-	-	- ^e	-	-
4'-(Chloroacetyl)-acetanilide	140-49-8	+	-	-	-	- ^a
<i>p</i> -Chloroaniline	106-47-8	+	- ^a	-	- ^a	- ^a
<i>p</i> -Chloroaniline.HCl	20265-96-7	+	spl	- ^e	liv ^s vsc ^s	-
<i>o</i> -Chlorobenzalmalonitrile	2698-41-1	+	-	-	-	-
Chlorobenzene	108-90-7	-	liv ^s	-	-	-
Chlorobenzilate *	510-15-6	-	-	-	liv	liv
Chlorodibromomethane	124-48-1	-	-	-	- ^e	liv ^s
Chloroethane	75-00-3	+	- ^e	- ^e	l	ute
(2-Chloroethyl)trimethylammoni-	999-81-5	-	-	-	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
um chloride *						
Chloroform *	67-66-3	-	kid	-	liv	liv
2-(Chloromethyl)pyridine.HCl	6959-47-3	+	-	-	-	-
3-(Chloromethyl)pyridine.HCl	6959-48-4	+	sto	-	sto	sto
3-(<i>p</i> -Chlorophenyl)-1,1-dimethylurea *	150-68-5	-	kid liv	-	-	-
Chloropicrin	76-06-2	+	l	l	-	-
Chloroprene	126-99-8	-	kid lun orc thy	kid mgl orc thy	hag kid lun sto vsc	ezy hag liv lun mgl per ski sto vsc
Chlorothalonil	1897-45-6	-	kid	kid	-	-
Chlorpheniramine maleate *	113-92-8	-	-	-	-	-
Chlorpropamide	94-20-2	-	-	-	-	-
trans-Cinnamaldehyde	14371-10-9	-	-	-	-	-
Cinnamyl anthranilate	87-29-6	-	kid pan	-	liv	liv
Citral	5392-40-5	-	-	-	-	- ^e
Clonitralid	1420-04-8	.	-	-	l	-
Cobalt sulfate heptahydrate	10026-24-1	+	lun ^s	adr lun	lun	lun
Codeine	76-57-3	-	-	-	-	-
Coumaphos	56-72-4	-	-	-	-	-
Coumarin *	91-64-5	+	kid ^s	- ^e	lun ^s	liv lun
<i>m</i> -Cresidine	102-50-1	+	ubl	ubl	l	-
<i>p</i> -Cresidine	120-71-8	+	liv nas ubl	nas ubl	ubl	liv ubl
Cupferron	135-20-6	+	liv sto vsc	ezy liv sto vsc	vsc	ezy hag liv vsc
Cyanamide, calcium *	156-62-7	+	-	-	-	-
Cytembena	16170-75-5	+	per	mgl	-	-
Daminozide *	1596-84-5	-	-	ute	- ^a	-
Dapsone	80-08-0	-	per spl	-	-	-
<i>p,p'</i> -DDD *	72-54-8	-	- ^a	-	-	-
<i>p,p'</i> -DDE *	72-55-9	-	-	-	liv	liv
DDT *	50-29-3	-	-	-	-	-
Decabromodiphenyl oxide	1163-19-5	-	liv ^s	liv ^s	- ^e	-
Diallyl phthalate	131-17-9	-	-	- ^e	- ^e	- ^a

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
4,4'-Diamino-2,2'-stilbenedisulfonic acid, disodium salt	7336-20-1	-	-	-	-	-
2,4-Diaminoanisole sulfate *	39156-41-7	+	ezy pre ski thy	ezy thy	thy	thy
2,4-Diaminophenol.2HCl	137-09-7	+	-	-	kid ^s	-
2,4-Diaminotoluene	95-80-7	+	liv	liv mgl	-	liv
2,6-Diaminotoluene.2HCl	15481-70-6	+	-	-	-	-
2,5-Diaminotoluene sulfate	6369-59-1	+	-	-	-	-
Diazinon	333-41-5	-	-	-	-	-
Dibenzo- <i>p</i> -dioxin	262-12-4	-	-	-	-	-
1,2-Dibromo-3-chloropropane	96-12-8	+	nas orc sto	adr mgl nas orc sto	lun nas sto	lun nas sto
1,2-Dibromoethane *	106-93-4	+	nas per pit sto vsc	liv lun mgl nas pit sto vsc	lun sto vsc	lun mgl nas sto sub vsc
Dibutyltin diacetate	1067-33-0	-	-	l	-	-
2,6-Dichloro- <i>p</i> -phenylenediamine	609-20-1	+	-	-	liv	liv
1,2-Dichlorobenzene	95-50-1	-	-	-	-	-
1,4-Dichlorobenzene *	106-46-7	-	kid	-	liv	liv
2,7-Dichlorodibenzo- <i>p</i> -dioxin	33857-26-0	-	-	-	_a	-
<i>p,p'</i> -Dichlorodiphenyl sulfone	80-07-9	-	-	-	-	-
1,1-Dichloroethane	75-34-3	-	-	_a	-	_a
1,2-Dichloroethane *	107-06-2	+	sto sub vsc	mgl	lun	lun mgl ute
2,4-Dichlorophenol	120-83-2	-	-	-	-	-
1,2-Dichloropropane	78-87-5	+	-	_e	liv ^s	liv ^s
Dichlorvos *	62-73-7	+	hmo ^s pan ^s	_e	sto ^s	sto
Dicofol	115-32-2	-	-	-	liv	-
<i>N,N'</i> -Dicyclohexylthiourea	1212-29-9	-	-	-	-	-
Dieldrin *	60-57-1	-	-	-	_a	-
Dieldrin, photo-	13366-73-9	+	-	-	-	-
<i>N,N'</i> -Diethylthiourea *	105-55-5	-	thy	thy	-	-
Diglycidyl resorcinol ether, technical grade	101-90-6	+	sto	sto	sto	sto
3,4-Dihydrocoumarin	119-84-6	-	kid ^s	-	-	liv ^s

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Dimethoate *	60-51-5	+	-	-	-	-
Dimethoxane, commercial grade	828-00-2	+	-	-	_e	-
2,4-Dimethoxyaniline.HCl	54150-69-5	+	-	-	-	-
3,3'-Dimethoxybenzidine-4,4'- diisocyanate	91-93-0	+	hmo ski	hmo ute	-	-
3,3'-Dimethoxybenzidine.2HCl *	20325-40-0	+	ezy hmo lgi liv orc pre ski smi	cli ezy lgi liv mgl orc ski ute	.	.
Dimethyl hydrogen phosphite	868-85-9	+	lun sto	_e	-	-
Dimethyl methylphosphonate	756-79-6	-	kid ^s	-	l	-
Dimethyl morpholinophosphora- midate	597-25-1	-	hmo ^s	hmo ^s	-	-
Dimethyl terephthalate	120-61-6	-	-	-	-	-
N,N-Dimethylaniline	121-69-7	-	bon ^s	-	-	_e
3,3'-Dimethylbenzidine.2HCl *	612-82-8	+	ezy lgi liv lun orc per pre ski smi	cli ezy lgi liv lun mgl orc ski smi	.	.
Dimethylvinyl chloride	513-37-1	+	eso nas orc ski sto	eso nas orc sto	pre sto	sto
2,4-Dinitrotoluene, practical grade	121-14-2	+	_{a, u}	_{a, u}	-	-
1,4-Dioxane *	123-91-1	-	nas	liv nas	liv	liv
Dioxathion	78-34-2	+	-	-	-	-
Diphenhydramine.HCl *	147-24-0	-	_e	_e	-	-
5,5-Diphenylhydantoin *	57-41-0	-	_e	-	-	liv
2,5-Dithiobiurea	142-46-1	-	-	-	-	_a
EDTA, trisodium salt trihydrate	150-38-9	-	-	-	-	-
Elmiron	37319-17-8	-	-	-	vsc ^s	liv vsc ^s
Emetine.2HCl	316-42-7	-	l	l	l	l
Emodin	518-82-1	+	-	_e	_e	-
Endosulfan *	115-29-7	-	l	-	l	-
Endrin *	72-20-8	-	-	-	-	-
Ephedrine sulphate	134-72-5	-	-	-	-	-
l-Epinephrine.HCl	55-31-2	-	l	l	l	l
1,2-Epoxybutane	106-88-7	+	lun nas	_e	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Erythromycin stearate	643-22-1	-	-	-	-	-
Estradiol mustard	22966-79-6	.	-	-	hmo lun myc sto	hmo lun myc sto
Ethionamide *	536-33-4	-	-	-	-	-
Ethyl acrylate *	140-88-5	-	sto	sto	sto	sto
p,p'-Ethyl-DDD *	72-56-0	+	-	-	-	- ^a
Ethyl tellurac *	20941-65-5	-	- ^a	-	- ^a	-
Ethylbenzene *	100-41-4	-	kid tes	kid ^s	lun ^s	liv ^s
Ethylene glycol	107-21-1	-	.	.	-	-
Ethylene oxide *	75-21-8	+	.	.	hag lun	hag hmo ^s lun mgl ^s ute ^s
Ethylene thiourea *	96-45-7	+	thy	thy	liv pit thy	liv pit thy
di(2-Ethylhexyl)adipate	103-23-1	-	-	-	liv	liv
di(2-Ethylhexyl)phthalate *	117-81-7	-	liv	liv	liv	liv
Eugenol *	97-53-0	-	-	-	- ^e	- ^e
Fenamiosulf, formulated	140-56-7	+	-	-	-	-
Fenthion	55-38-9	-	-	-	- ^a	-
Fluometuron	2164-17-2	-	-	-	- ^a	-
Fluoride, sodium *	7681-49-4	-	- ^e	-	-	-
Fumonisin B ₁ *	116355-83-0	-	kid	-	-	liv
Furan	110-00-9	-	hmo liv	hmo liv	adr liv	adr liv
Furfural *	98-01-1	+	liv ^s	-	liv	liv ^s
Furfuryl alcohol	98-00-0	-	nas ^s	- ^e	kid ^s	-
Furosemide	54-31-9	-	- ^e	-	-	mgl ^s
Geranyl acetate, food grade (71% geranyl acetate, 29% citronellyl acetate)	mixture	-	- ^e	-	-	-
Glutaraldehyde	111-30-8	+	-	-	-	-
Glycidol *	556-52-5	+	ezy lgi mgl nrv per ski sto thy	cli hmo mgl nrv orc sto thy	hag liv lun ski sto	hag mgl ski sub ute
Guar gum	9000-30-0	-	-	-	-	-
Gum arabic	9000-01-5	-	-	-	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
HCDD mixture	mixture	.	-	liv	liv	liv
Heptachlor *	76-44-8	-	-	-	liv	liv
γ-1,2,3,4,5,6-Hexachlorocyclohexane *	58-89-9	-	-	-	-	-
Hexachlorocyclopentadiene	77-47-4	-	-	-	-	-
Hexachloroethane	67-72-1	-	kid	-	liv	liv
Hexachlorophene *	70-30-4	-	-	-	.	.
2,4-Hexadienal (89% trans,trans-, 11% cis,trans-)	142-83-6	+	sto	sto	sto	sto
4-Hexylresorcinol	136-77-6	-	-	-	- ^e	-
Hydrazobenzene	122-66-7	+	ezy liv	liv mgl	-	liv
Hydrochlorothiazide *	58-93-5	-	-	-	- ^e	-
Hydroquinone *	123-31-9	-	kid ^s	hmo ^s	-	liv ^s
8-Hydroxyquinoline *	148-24-3	+	-	-	-	-
ICRF-159	21416-87-5	.	-	ute	-	hmo
3,3'-Iminobis-1-propanol dimethanesulfonate(ester).HCl	3458-22-8	.	- ^a	- ^a	-	-
Iodinated glycerol	5634-39-9	+	hmo ^s thy ^s	-	-	hag ^s pit ^s
Iodoform	75-47-8	+	-	-	-	-
Isobutene	115-11-7	-	thy ^s	-	-	-
Isobutyl nitrite	542-56-3	+	lun	lun	lun ^s	lun ^s
Isobutyraldehyde	78-84-2	-	-	-	-	-
Isophorone	78-59-1	-	kid ^s pre ^s	-	- ^e	-
Isophosphamide	3778-73-2	+	-	ute	-	hmo
Isoprene *	78-79-5	-	kid mgl tes	mgl ^s	hag liv lun sto	.
Kepone *	143-50-0	-	-	liv	liv	liv
Lasiocarpine *	303-34-4	+	liv vsc	hmo liv vsc	.	.
Lead dimethyldithiocarbamate *	19010-66-3	+	-	-	-	-
α-Limonene	5989-27-5	-	kid	-	-	-
Lithocholic acid	434-13-9	-	-	-	-	-
Locust bean gum	9000-40-2	-	-	-	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Malaoxon	1634-78-2	-	-	-	-	-
Malathion	121-75-5	-	-	-	-	-
Malonaldehyde, sodium salt *	24382-04-5	-	pan thy	thy	-	-
Manganese (II) sulfate mono- hydrate	10034-96-5	-	-	-	- ^e	- ^e
<i>d</i> -Mannitol	69-65-8	-	-	-	-	-
Melamine	108-78-1	-	ubl	-	-	-
<i>d</i> -Menthol	15356-70-4	-	-	-	-	-
2-Mercaptobenzothiazole *	149-30-4	-	adr ^s hmo ^s pan ^s pre ^s	adr ^s pit ^s	-	- ^e
Mercuric chloride *	7487-94-7	-	sto ^s	- ^e	- ^e	-
Methacrylonitrile	126-98-7	-	-	-	-	-
Methoxychlor *	72-43-5	-	-	-	-	-
8-Methoxypsoralen *	298-81-7	+	ezy kid	-	.	.
Methyl bromide *	74-83-9	+	.	.	-	-
Methyl carbamate	598-55-0	-	liv	liv	-	-
Methyl methacrylate	80-62-6	-	-	-	-	-
2-Methyl-1-nitroanthraquinone	129-15-7	+	liv	liv	vsc	vsc
Methyl parathion	298-00-0	+	-	-	-	-
α -Methylbenzyl alcohol	98-85-1	-	kid ^s	-	-	-
α -Methyldopa sesquihydrate	41372-08-1	-	-	-	- ^e	-
Methylene chloride *	75-09-2	+	mgl ^s	mgl	liv lun	liv lun
4,4'-Methylenebis(<i>N,N</i> -dimethyl) benzenamine	101-61-1	+	thy	thy	-	liv
4,4'-Methylenedianiline.2HCl	13552-44-8	+	liv thy	thy	adr liv thy	hmo liv thy
Methyleugenol	93-15-2	-	kid liv mgl per sto sub	liv sto	liv sto ^s	liv
2-Methylimidazole	693-98-1	-	thy ^s	thy	liv ^s thy ^s	liv ^s
<i>N</i> -Methylolacrylamide	924-42-5	-	-	-	hag liv lun	hag liv lun ova
Methylphenidate.HCl	298-59-9	-	-	-	liv ^s	liv ^s
Mexacarbate *	315-18-4	.	-	-	-	-
Michler's ketone	90-94-8	+	liv	liv	vsc	liv

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Mirex *	2385-85-5	-	adr kid liv	hmo liv	.	.
Molybdenum trioxide	1313-27-5	-	_e	-	lun ^S	lun ^S
Monochloroacetic acid *	79-11-8	-	-	-	-	-
Nalidixic acid *	389-08-2	-	pre	cli	_e	-
Naphthalene	91-20-3	-	nas	nas	-	lun ^S
1,5-Naphthalenediamine	2243-62-1	+	-	cli ute	thy	liv lun thy
<i>N</i> -(1-Naphthyl)ethylenedia- mine.2HCl	1465-25-4	+	-	-	-	-
Nickel (II) sulfate hexahydrate	10101-97-0	-	-	-	-	-
Nithiazide	139-94-6	+	-	mgl	liv	-
Nitrilotriacetic acid *	139-13-9	-	kid	kid ubl	kid	kid
Nitrilotriacetic acid, trisodium salt, monohydrate *	18662-53-8	-	kid	kid ubl	-	-
Nitrite, sodium *	7632-00-0	+	-	-	-	_e
3-Nitro- <i>p</i> -acetophenetide	1777-84-0	+	-	-	liv	-
5-Nitro- <i>o</i> -anisidine	99-59-2	+	ezy ski	cli ski	-	liv
5-Nitro-2-furaldehyde semicarbazone *	59-87-0	+	_e	mgl	-	ova
3-Nitro-4-hydroxyphenylarsonic acid *	121-19-7	-	_e	-	-	-
2-Nitro- <i>p</i> -phenylenediamine	5307-14-2	+	-	-	-	liv
4-Nitro- <i>o</i> -phenylenediamine	99-56-9	+	-	-	-	-
5-Nitro- <i>o</i> -toluidine	99-55-8	+	-	-	liv vsc	liv vsc
5-Nitroacenaphthene *	602-87-9	+	ezy lun	cli ezy lun mgl	-	liv ova
<i>p</i> -Nitroaniline *	100-01-6	+	.	.	_e	-
<i>o</i> -Nitroanisole	91-23-6	+	hmo ^S kid lgi ubl	hmo ^S kid lgi ubl	liv	liv ^S
4-Nitroanthranilic acid	619-17-0	+	-	-	-	-
6-Nitrobenzimidazole	94-52-0	+	-	-	liv	liv
<i>p</i> -Nitrobenzoic acid	62-23-7	+	-	cli ^S	-	-
Nitrofen	1836-75-5	+	-	pan	liv vsc	liv
1-[(5-Nitrofurfurylidene)amino]hy- dantoin *	67-20-9	+	kid ^S	-	-	ova

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Nitromethane *	75-52-5	-	-	mgl	hag lun ^S	hag liv lun ^S
1-Nitronaphthalene	86-57-7	+	-	-	-	-
3-Nitropropionic acid	504-88-1	+	- ^a	-	-	-
<i>N</i> -Nitrosodiphenylamine *	86-30-6	-	ubl	ubl	-	-
<i>p</i> -Nitrosodiphenylamine	156-10-5	+	liv	-	liv	-
<i>o</i> -Nitrotoluene	88-72-2	-	liv lun ^S mgl per ski sub	liv ^S mgl sub	lgi vsc	lgi liv vsc
<i>p</i> -Nitrotoluene	99-99-0	-	- ^e	cli ^S	- ^e	-
Ochratoxin A *	303-47-9	-	kid	kid mgl	.	.
Oil, corn	8001-30-7	-	pan ^x	.	.	.
Oil, safflower	8001-23-8	-	pan ^x	.	.	.
C.I. acid orange 3	6373-74-6	+	-	kid	-	-
C.I. acid orange 10	1936-15-8	-	-	-	-	-
Oxazepam	604-75-1	-	- ^e	-	liv	liv thy ^S
4,4'-Oxydianiline	101-80-4	+	liv thy	liv thy	hag liv	hag liv thy
Oxytetracycline.HCl	2058-46-0	-	- ^e	- ^e	-	-
Ozone *	10028-15-6	+	-	-	- ^e	lun ^S
Oxymetholone	434-07-1	-	- ^e	liv lun ski	.	.
Parathion	56-38-2	-	- ^a	- ^a	-	-
Penicillin VK	132-98-9	-	-	-	-	-
Pentachloroanisole	1825-21-4	+	adr ^S	- ^e	adr ^S vsc ^S	-
Pentachloroethane	76-01-7	-	- ^a	-	liv	liv
Pentachloronitrobenzene *	82-68-8	-	-	-	-	-
2,3,4,5,6-Pentachlorophenol *	87-86-5	-	nas ^S per ^S	-	.	.
2,3,4,5,6-Pentachlorophenol (Dowicide EC-7) *	87-86-5	-	.	.	adr liv	adr liv vsc
2,3,4,5,6-Pentachlorophenol, tech- nical grade *	87-86-5	-	.	.	adr liv	liv ^S vsc ^S
Pentaerythritol tetranitrate with 80% α -lactose monohydrate	78-11-5	-	- ^e	- ^e	-	-
Phenazopyridine.HCl	136-40-3	-	lgi	lgi	-	liv

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Phenesterin	3546-10-9	-	-	mgl	hmo lun myc	hmo lun myc
Phenformin.HCl	834-28-6	-	-	-	-	-
Phenol	108-95-2	-	-	-	-	-
Phenolphthalein	77-09-8	-	adr kid	adr ^s	hmo	hmo ova
Phenoxybenzamine.HCl	63-92-3	+	per	per	per	per
1-Phenyl-3-methyl-5-pyrazolone	89-25-8	-	-	-	-	-
Phenyl-β-naphthylamine *	135-88-6	-	-	-	-	- ^e
<i>N</i> -Phenyl- <i>p</i> -phenylenediamine.HCl	2198-59-6	-	-	-	-	-
1-Phenyl-2-thiourea	103-85-5	-	-	-	-	-
1-Phenylazo-2-naphthol *	842-07-9	+	liv	liv	-	-
Phenylbutazone *	50-33-9	-	- ^e	kid ^s	liv ^s	-
<i>p</i> -Phenylenediamine.2HCl	624-18-0	+	-	-	-	-
Phenylephrine.HCl	61-76-7	-	-	-	-	-
Phosphamidon	13171-21-6	+	l	l	-	-
Phthalamide	88-96-0	-	-	-	-	-
Phthalic anhydride	85-44-9	-	-	-	-	-
Picloram, technical grade *	1918-02-1	-	-	- ^a	-	-
Piperonyl butoxide *	51-03-6	-	-	-	-	-
Piperonyl sulfoxide *	120-62-7	-	-	-	liv	-
Pivalolactone	1955-45-9	+	sto	sto	-	-
Polybrominated biphenyl mixture	67774-32-7	.	liv	liv	liv	liv
Polysorbate 80	9005-65-6	-	- ^e	-	-	-
Primidone	125-33-7	+	- ^e	-	liv thy ^s	liv
Probenecid	57-66-9	-	-	-	-	liv ^s
Procarbazine.HCl *	366-70-1	-	hmo mgl nrv	hmo mgl nrv	hmo lun nrv	hmo lun nrv ute
Proflavine.HCl hemihydrate	952-23-8	+	l	l	l	l
Promethazine.HCl	58-33-3	-	-	-	-	-
Propyl gallate *	121-79-9	-	-	-	-	-
Propylene *	115-07-1	+	-	-	-	-
Propylene glycol mono- <i>t</i> -butyl ether	57018-52-7	+	- ^e	-	liv	liv
1,2-Propylene oxide *	75-56-9	+	nas ^s	nas ^s	nas	nas

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Pyrazinamide	98-96-4	-	-	-	-	l
Pyridine	110-86-1	-	kid ^s	_e	liv	liv
Pyrimethamine	58-14-0	-	-	-	l	-
Quercetin *	117-39-5	+	kid ^s	-	.	.
p-Quinone dioxime	105-11-3	+	-	ubl	-	-
C.I. acid red 114	6459-94-5	+	ezy liv ski	cli ezy lgi liv lun orc ski smi	.	.
C.I. food red 3 *	3567-69-9	+	-	-	-	-
C.I. pigment red 3	2425-85-6	+	adr ^s	liv ^s	kid ^s thy ^s	-
C.I. pigment red 23	6471-49-4	+	_e	-	-	-
D & C red no. 9 *	5160-02-1	+	liv spl	_a	-	-
HC red no. 3	2871-01-4	+	-	-	_e	l
Reserpine *	50-55-5	-	adr	-	tes	mgl
Resorcinol	108-46-3	-	-	-	-	-
Rhodamine 6G	989-38-8	-	_e	_e	-	-
Riddelliine	23246-96-0	+	hmo ^s liv vsc	hmo ^s liv vsc	vsc	lun
p-Rosaniline.HCl *	569-61-9	+	ezy liv ski sub thy	ezy sub thy	liv	adr liv
Rotenone *	83-79-4	-	_e	-	-	-
Salicylazosulfapyridine	599-79-1	-	ubl ^s	kid ^s ubl ^s	liv	liv
Scopolamine hydrobromide tri- hydrate	6533-68-2	-	-	-	-	-
Selenium sulfide	7446-34-6	+	liv	liv	-	liv lun
Sodium diethyldithiocarbamate tri- hydrate *	148-18-5	-	-	-	-	-
Stoddard solvent IIC	64742-88-7	-	adr ^s	-	-	_e
Styrene *	100-42-5	+	-	-	_a	-
Styrene and β-nitrostyrene mixture	mixture	.	-	-	-	-
Succinic anhydride	108-30-5	-	-	-	-	-
Sulfallate	95-06-7	+	sto	mgl	lun	mgl
Sulfisoxazole	127-69-5	-	-	-	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
3-Sulfolene	77-79-2	-	-	-	-	-
Tara gum	39300-88-4	-	-	-	-	-
Telone II, technical grade (with 1% epichlorohydrin)	542-75-6	+	liv sto	sto ^S	l	lun sto ubl
2,3,5,6-Tetrachloro-4-nitroanisole	2438-88-2	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin *	1746-01-6	-	thy	liv	liv	liv thy
1,1,1,2-Tetrachloroethane	630-20-6	-	-	-	liv	liv
1,1,2,2-Tetrachloroethane	79-34-5	-	-	-	liv	liv
Tetrachloroethylene	127-18-4	-	hmo kid	hmo ^S	liv	liv
Tetrachlorvinphos *	961-11-5	-	-	_a, u	liv	_a, u
Tetracycline.HCl	64-75-5	-	-	-	-	-
Tetraethylthiuram disulfide *	97-77-8	-	-	-	-	-
Tetrafluoroethylene	116-14-3	.	kid liv	hmo kid liv vsc	hmo liv vsc	hmo liv vsc
1-trans- Δ^9 -Tetrahydrocannabinol	1972-08-3	-	-	-	- ^e	- ^e
Tetrahydrofuran	109-99-9	-	kid ^S	-	-	liv
Tetrakis(hydroxymethyl)phosphonium chloride	124-64-1	-	-	-	-	-
Tetrakis(hydroxymethyl)phosphonium sulfate	55566-30-8	-	-	-	-	-
Tetranitromethane	509-14-8	+	lun	lun	lun	lun
Theophylline	58-55-9	-	-	-	-	-
Thio-tepa *	52-24-4	+	ezy hmo ski	ezy	hmo pre ski	hmo
4,4'-Thiobis(6- <i>tert</i> -butyl- <i>m</i> -cresol)	96-69-5	-	-	-	-	-
4,4'-Thiodianiline *	139-65-1	+	ezy lgi liv thy	ezy thy ute	liv thy	liv thy
β -Thioguanine deoxyriboside	789-61-7	.	_a	ezy	l	l
Tin (II) chloride *	7772-99-8	-	-	-	-	-
Titanium dioxide	13463-67-7	-	-	-	-	-
Titanocene dichloride	1271-19-8	+	- ^e	- ^e	.	.
Tolazamide	1156-19-0	-	-	-	-	-
Tolbutamide	64-77-7	-	-	-	-	-
Toluene *	108-88-3	-	-	-	-	-

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Toluene diisocyanate, commercial grade (2,4 (80%)- and 2,6 (20%)-) *	26471-62-5	+	pan sub	liv mgl pan sub	-	liv vsc
o-Toluidine.HCl *	636-21-5	+	per spl sub vsc	bon mgl ubl vsc	vsc	liv
Toxaphene *	8001-35-2	+	_a	_a	liv	liv
Triamterene	396-01-0	-	_e	-	liv ^s	liv ^s
Tribromomethane	75-25-2	+	lgi ^s	lgi	-	-
Tricaprylin	538-23-8	+	pan ^x	.	.	.
1,1,2-Trichloroethane	79-00-5	-	-	-	adr liv	adr liv
1,1,1-Trichloroethane, technical grade *	71-55-6	+	l	l	l	l
Trichloroethylene *	79-01-6	-	-	-	liv	liv
Trichloroethylene (without epichlorohydrin) *	79-01-6	-	-	-	liv	liv
Trichlorofluoromethane *	75-69-4	-	l	l	-	-
2,4,6-Trichlorophenol *	88-06-2	-	hmo	-	liv	liv
1,2,3-Trichloropropane	96-18-4	+	ezy kid orc pan pre sto	cli ezy mgl orc sto	hag liv sto	hag liv orc sto ute
Tricresyl phosphate	1330-78-5	-	-	-	-	-
Trifluralin, technical grade *	1582-09-8	+	-	-	-	liv lun sto
2,4,5-Trimethylaniline	137-17-7	+	liv	liv lun	-	liv
Trimethylphosphate	512-56-1	+	_a, u	-	-	ute
Trimethylthiourea	2489-77-2	-	-	thy	-	-
Triphenyltin hydroxide	76-87-9	-	-	-	-	-
Tris(2-chloroethyl)phosphate *	115-96-8	-	kid	kid	_e	_e
Tris(2,3-dibromopropyl)phosphate *	126-72-7	+	kid	kid	kid lun sto	liv lun sto
Tris(2-ethylhexyl)phosphate	78-42-2	-	_e	-	-	liv ^s
L-Tryptophan *	73-22-3	-	-	-	-	-
Turmeric oleoresin (79%-85% curcumin)	8024-37-1	-	-	_e	_e	_e

Chemical name	CAS	Salmo- nella	Rat target sites		Mouse target sites	
			Male	Female	Male	Female
Vinyl toluene (65-71% <i>m</i> - and 32-35% <i>p</i> -)	25013-15-4	-	-	-	-	-
4-Vinylcyclohexene	100-40-3	-	l	l	l	ova
Vinylidene chloride *	75-35-4	+	-	-	-	-
Xylene mixture (60% <i>m</i> -xylene, 9% <i>o</i> -xylene, 14% <i>p</i> -xylene, 17% ethylbenzene)	1330-20-7	-	-	-	-	-
C.I. disperse yellow 3	2832-40-8	+	liv	-	-	liv
C.I. pigment yellow 12 *	6358-85-6	-	-	-	-	-
C.I. vat yellow 4	128-66-5	-	-	-	hmo	-
FD & C yellow no. 6 *	2783-94-0	-	-	-	-	-
HC yellow 4	59820-43-8	+	- ^e	-	-	-
Zearalenone	17924-92-4	-	-	-	pit	liv pit
Zinc dimethyldithiocarbamate *	137-30-4	+	thy	-	-	- ^e

* NTP reported that corn oil, safflower oil and tricaprylin each induced tumors of the exocrine pancreas, but NTP did not assign a level of evidence of carcinogenicity.