

IRIS Chemical Search

Downloaded 3/15/2017

Chemical Name	CASRN	Exposure Route	Assessment Type	Critical Effect or Tumor Type	WOE Characterization	Systems Affected or Tumor Site	Toxicity Value Type	Toxicity Value
Acephate	30560-19-1	Oral	Noncancer	Inhibition of brain ChE	n/a	Nervous	RfD	4x10 ⁻³ mg/kg-day
Acetaldehyde	75-07-0	Inhalation	Noncancer	Degeneration of olfactory epithelium	n/a	Nervous	RfC	9x10 ⁻³ mg/m ³
Acetochlor	34256-82-1	Oral	Noncancer	Salivation, increased ALT and ornithine carbamyl transferase; significant increases in triglyceride and decreased blood glucose levels; histopathological changes in kidneys and testes of males	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
Acrylamide	79-06-1	Oral	Noncancer	Degenerative nerve changes	n/a	Nervous	RfD	2x10 ⁻³ mg/kg-day
Acrylamide	79-06-1	Inhalation	Noncancer	Degenerative nerve changes	n/a	Nervous	RfC	6x10 ⁻³ mg/m ³
Acrylic acid	79-10-7	Inhalation	Noncancer	Degeneration of the nasal olfactory epithelium	n/a	Nervous	RfC	1x10 ⁻³ mg/m ³
Acrylonitrile	107-13-1	Oral	Cancer	Brain and spinal cord astrocytomas, Zymbal gland carcinomas and stomach papillomas/carcinomas	B1 (Probable human carcinogen - based on limited evidence of carcinogenicity in humans) (1986 guidelines)	Nervous	Oral Slope Factor	5.4x10 ⁻¹ per mg/kg-day
Aldicarb	116-06-3	Oral	Noncancer	Sweating as clinical sign of AChE inhibition	n/a	Nervous	RfD	1x10 ⁻³ mg/kg-day
Aldicarb sulfone	1646-88-4	Oral	Noncancer	Brain ChE inhibition in females	n/a	Nervous	RfD	1x10 ⁻³ mg/kg-day
Allyl chloride	107-05-1	Inhalation	Noncancer	Functional and histological peripheral neurotoxicity	n/a	Nervous	RfC	1x10 ⁻³ mg/m ³
Baygon	114-26-1	Oral	Noncancer	Mild cholinergic symptoms and RBD ChE inhibition	n/a	Nervous	RfD	4x10 ⁻³ mg/kg-day
Benzidine	92-87-5	Oral	Noncancer	Brain cell vacuolization; liver cell alterations in females	n/a	Nervous	RfD	3x10 ⁻³ mg/kg-day
Benzo[a]pyrene	50-32-8	Oral	Noncancer	Neurobehavioral changes	n/a	Developmental	RfD	3x10 ⁻⁴ mg/kg-day
Biphenthrin	82657-04-3	Oral	Noncancer	Tremors	n/a	Nervous	RfD	1.5x10 ⁻² mg/kg-day
Bromomethane	74-83-9	Inhalation	Noncancer	Degenerative and proliferative lesions of the olfactory epithelium of the nasal cavity	n/a	Nervous	RfC	5x10 ⁻³ mg/m ³
n-Butanol	71-36-3	Oral	Noncancer	Hypoactivity and ataxia	n/a	Nervous	RfD	1x10 ⁻¹ mg/kg-day
Carbofuran	1563-66-2	Oral	Noncancer	RBC and plasma cholinesterase inhibition, and testicular and uterine effects	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
Carbon disulfide	75-15-0	Inhalation	Noncancer	Peripheral nervous system dysfunction	n/a	Nervous	RfC	7x10 ⁻¹ mg/m ³
Chloral hydrate	302-17-0	Oral	Noncancer	CNS depression and GI irritation in humans	n/a	Nervous	RfD	1x10 ⁻¹ mg/kg-day
Chlorine cyanide	506-77-4	Oral	Noncancer	Weight loss, thyroid effects, and myelin degeneration	n/a	Nervous	RfD	5x10 ⁻² mg/kg-day
Chlorine dioxide	10049-04-4	Oral	Noncancer	Neurodevelopmental effects	n/a	Nervous	RfD	3x10 ⁻² mg/kg-day
Chlorite (sodium salt)	7758-19-2	Oral	Noncancer	Neurodevelopmental effects	n/a	Nervous	RfD	3x10 ⁻² mg/kg-day
Chlorobenzilate	510-15-6	Oral	Noncancer	Decreased stool quantity, food consumption and body weight gains hyperirritability (maternal effects)	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
Chloroprene	126-99-8	Inhalation	Noncancer	Increase in incidence of olfactory atrophy, alveolar hyperplasia, and splenic hematopoietic proliferation in male F344/N rats, female F344/N rats, and female B6C3F1 mice, respectively	n/a	Nervous	RfC	2x10 ⁻² mg/m ³
Cyanogen bromide	506-68-3	Oral	Noncancer	Weight loss, thyroid effects and myelin degeneration	n/a	Nervous	RfD	9x10 ⁻² mg/kg-day
Danitol	39515-41-8	Oral	Noncancer	Tremors	n/a	Nervous	RfD	2.5x10 ⁻² mg/kg-day
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (BDE-209)	1163-19-5	Oral	Noncancer	Neurobehavioral effects	n/a	Nervous	RfD	7x10 ⁻³ mg/kg-day
Demeton	8065-48-3	Oral	Noncancer	ChE inhibition, optic nerve degeneration	n/a	Nervous	RfD	4x10 ⁻⁵ mg/kg-day
Dichloroacetic acid	79-43-6	Oral	Noncancer	Lesions observed in the testes, cerebrum, cerebellum, and liver.	n/a	Nervous	RfD	4x10 ⁻³ mg/kg-day

Dichlorvos	62-73-7	Oral	Noncancer	Plasma and RBC ChE inhibition in males and females brain ChE inhibition in males	n/a	Nervous	RfD	5x10 ⁻⁴ mg/kg-day
Dichlorvos	62-73-7	Inhalation	Noncancer	Decreased brain cholinesterase activity	n/a	Nervous	RfC	5x10 ⁻⁴ mg/m ³
Dimethoate	60-51-5	Oral	Noncancer	Brain ChE inhibition	n/a	Nervous	RfD	2x10 ⁻⁴ mg/kg-day
2,4-Dimethylphenol	105-67-9	Oral	Noncancer	Clinical signs (lethargy, prostration, and ataxia) and hematological changes	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
2,4-Dinitrotoluene	121-14-2	Oral	Noncancer	Neurotoxicity, Heinz bodies and biliary tract hyperplasia	n/a	Nervous	RfD	2x10 ⁻³ mg/kg-day
1,4-Dioxane	123-91-1	Inhalation	Noncancer	Atrophy and respiratory metaplasia of the olfactory epithelium	n/a	Nervous	RfC	3x10 ⁻² mg/m ³
Disulfoton	298-04-4	Oral	Noncancer	ChE inhibition, optic nerve degeneration	n/a	Nervous	RfD	4x10 ⁻⁵ mg/kg-day
1,4-Dithiane	505-29-3	Oral	Noncancer	Nasal olfactory lesions	n/a	Nervous	RfD	1x10 ⁻² mg/kg-day
Endrin	72-20-8	Oral	Noncancer	Mild histological lesions in liver, occasional convulsions	n/a	Nervous	RfD	3x10 ⁻⁴ mg/kg-day
Ethephon	16672-87-0	Oral	Noncancer	Plasma ChE inhibition	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
Ethion	563-12-2	Oral	Noncancer	Plasma cholinesterase inhibition	n/a	Nervous	RfD	5x10 ⁻⁴ mg/kg-day
Ethyl p-nitrophenyl phenylphosphorothioate (EPN)	2104-64-5	Oral	Noncancer	Neurotoxicity	n/a	Nervous	RfD	1x10 ⁻⁵ mg/kg-day
Fenamiphos	22224-92-6	Oral	Noncancer	ChE inhibition	n/a	Nervous	RfD	2.5x10 ⁻⁴ mg/kg-day
Fonofos	944-22-9	Oral	Noncancer	Cholinesterase inhibition, cholinergic symptoms, and increased liver weight	n/a	Nervous	RfD	2x10 ⁻³ mg/kg-day
2,2',4,4',5,5'-Hexabromodiphenyl ether (BDE-153)	68631-49-2	Oral	Noncancer	Neurobehavioral effects	n/a	Nervous	RfD	2x10 ⁻⁴ mg/kg-day
Hexachloroethane	67-72-1	Inhalation	Noncancer	Neurotoxicity (tremors and ruffled pelt)	n/a	Nervous	RfC	3x10 ⁻² mg/m ³
Hexachlorophene	70-30-4	Oral	Noncancer	Swollen salivary glands, status spongiosis in brain and optic nerve	n/a	Nervous	RfD	3x10 ⁻⁴ mg/kg-day
1,6-Hexamethylene diisocyanate	822-06-0	Inhalation	Noncancer	Degeneration of olfactory epithelium	n/a	Nervous	RfC	1x10 ⁻⁵ mg/m ³
n-Hexane	110-54-3	Inhalation	Noncancer	Peripheral neuropathy (decreased MCV at 12 weeks)	n/a	Nervous	RfC	7x10 ⁻¹ mg/m ³
2-Hexanone	591-78-6	Oral	Noncancer	Axonal swelling of the peripheral nerve	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
2-Hexanone	591-78-6	Inhalation	Noncancer	Motor conduction velocity of the sciatic-tibial nerve	n/a	Nervous	RfC	3x10 ⁻² mg/m ³
Hydrogen sulfide	6/4/7783	Inhalation	Noncancer	Nasal lesions of the olfactory mucosa	n/a	Nervous	RfC	2x10 ⁻³ mg/m ³
Isobutyl alcohol	78-83-1	Oral	Noncancer	Hypoactivity and ataxia	n/a	Nervous	RfD	3x10 ⁻¹ mg/kg-day
Malathion	121-75-5	Oral	Noncancer	RBC ChE depression	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
Manganese	7439-96-5	Inhalation	Noncancer	Impairment of neurobehavioral function	n/a	Nervous	RfC	5x10 ⁻⁵ mg/m ³
Manganese	7439-96-5	Oral	Noncancer	CNS effects	n/a	Nervous	RfD	1.4x10 ⁻¹ mg/kg-day
Mepiquat chloride	24307-26-4	Oral	Noncancer	Sedation and tonic spasms decreased food intake and body weights hematologic effects	n/a	Nervous	RfD	3x10 ⁻² mg/kg-day
Mercury, elemental	7439-97-6	Inhalation	Noncancer	Hand tremor; increases in memory disturbances; slight subjective and objective evidence of autonomic dysfunction	n/a	Nervous	RfC	3x10 ⁻⁴ mg/m ³
Merphos	150-50-5	Oral	Noncancer	Ataxia, delayed neurotoxicity and weight loss	n/a	Nervous	RfD	3x10 ⁻⁵ mg/kg-day
Merphos oxide	78-48-8	Oral	Noncancer	Ataxia, delayed neurotoxicity and weight loss	n/a	Nervous	RfD	3x10 ⁻⁵ mg/kg-day
Methamidophos	10265-92-6	Oral	Noncancer	ChE inhibition	n/a	Nervous	RfD	5x10 ⁻⁵ mg/kg-day
Methanol	67-56-1	Inhalation	Noncancer	Reduced brain weight in rat pups at 6 weeks of age	n/a	Nervous	RfC	2x10 ⁻¹ mg/m ³
Methyl chloride	74-87-3	Inhalation	Noncancer	Cerebellar lesions	n/a	Nervous	RfC	9x10 ⁻² mg/m ³
Methyl methacrylate	80-62-6	Inhalation	Noncancer	Degeneration/ atrophy of olfactory epithelium (male rats)	n/a	Nervous	RfC	7x10 ⁻¹ mg/m ³
Methyl parathion	298-00-0	Oral	Noncancer	RBC, ChE inhibition; reduced hemoglobin, hematocrit and RBCs	n/a	Nervous	RfD	2.5x10 ⁻⁴ mg/kg-day

Methylene Diphenyl Diisocyanate (monomeric MDI) and polymeric MDI (PMDI)	101-68-8	Inhalation	Noncancer	Hyperplasia of olfactory epithelium	n/a	Nervous	RfC	6x10 ⁻⁴ mg/m ³
Methylmercury (MeHg)	22967-92-6	Oral	Noncancer	Developmental neuropsychological impairment	n/a	Nervous	RfD	1x10 ⁻⁴ mg/kg-day (High end of BMDL05 range)
Methylmercury (MeHg)	22967-92-6	Oral	Noncancer	Developmental neuropsychological impairment	n/a	Nervous	RfD	1x10 ⁻⁴ mg/kg-day (Low end of BMDL05 range)
2-Methylphenol	95-48-7	Oral	Noncancer	Decreased body weights and neurotoxicity	n/a	Nervous	RfD	5x10 ⁻² mg/kg-day
3-Methylphenol	108-39-4	Oral	Noncancer	Decreased body weights and neurotoxicity	n/a	Nervous	RfD	5x10 ⁻² mg/kg-day
Naled	300-76-5	Oral	Noncancer	Brain ChE inhibition	n/a	Nervous	RfD	2x10 ⁻³ mg/kg-day
Naphthalene	91-20-3	Inhalation	Noncancer	Nasal effects: hyperplasia and metaplasia in respiratory and olfactory epithelium, respectively	n/a	Nervous	RfC	3x10 ⁻³ mg/m ³
Nitrobenzene	98-95-3	Inhalation	Noncancer	Bronchiolization of the alveoli and olfactory degeneration	n/a	Nervous	RfC	9x10 ⁻³ mg/m ³
2,2',4,4',5-Pentabromodiphenyl ether (BDE-99)	60348-60-9	Oral	Noncancer	Neurobehavioral effects	n/a	Nervous	RfD	1x10 ⁻⁴ mg/kg-day
Phosmet	732-11-6	Oral	Noncancer	Reduced body weight (males), liver cell vacuolation, cholinesterase inhibition	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
Pirimiphos-methyl	29232-93-7	Oral	Noncancer	Transient plasma ChE depression	n/a	Nervous	RfD	1x10 ⁻² mg/kg-day
Propham	122-42-9	Oral	Noncancer	Increase in male spleen weight and ChE depression in females	n/a	Nervous	RfD	2x10 ⁻² mg/kg-day
Propionaldehyde	123-38-6	Inhalation	Noncancer	Atrophy of olfactory epithelium	n/a	Nervous	RfC	8x10 ⁻³ mg/m ³
Propylene glycol monomethyl ether (PGME)	107-98-2	Inhalation	Noncancer	Mild reversible sedation	n/a	Nervous	RfC	2 mg/m ³
Pydrin	51630-58-1	Oral	Noncancer	Neurological dysfunction	n/a	Nervous	RfD	2.5x10 ⁻² mg/kg-day
Selenious acid	7783-00-8	Oral	Noncancer	Clinical selenosis	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
Selenium and Compounds	7782-49-2	Oral	Noncancer	Clinical selenosis	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
Silver cyanide	506-64-9	Oral	Noncancer	Weight loss, thyroid effects, and myelin degeneration	n/a	Nervous	RfD	1x10 ⁻¹ mg/kg-day
Styrene	100-42-5	Inhalation	Noncancer	CNS effects	n/a	Nervous	RfC	1 mg/m ³
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	5436-43-1	Oral	Noncancer	Neurobehavioral effects	n/a	Nervous	RfD	1x10 ⁻⁴ mg/kg-day
Tetrachloroethylene	127-18-4	Oral	Noncancer	Neurotoxicity (reaction time, cognitive effects)	n/a	Nervous	RfD	6x10 ⁻³ mg/kg-day
Tetrachloroethylene	127-18-4	Oral	Noncancer	Neurotoxicity (color vision)	n/a	Nervous	RfD	6x10 ⁻³ mg/kg-day
Tetrachloroethylene	127-18-4	Inhalation	Noncancer	Neurotoxicity (reaction time, cognitive effects)	n/a	Nervous	RfC	4x10 ⁻² mg/m ³
Tetrachloroethylene	127-18-4	Inhalation	Noncancer	Neurotoxicity (color vision)	n/a	Nervous	RfC	4x10 ⁻² mg/m ³
Tetrachlorovinphos	961-11-5	Oral	Noncancer	Reduced body weight gain, increased liver and kidney weights, and RBC ChE inhibition	n/a	Nervous	RfD	3x10 ⁻² mg/kg-day
Tetraethyldithiopyrophosphate	3689-24-5	Oral	Noncancer	Depressed RBC and plasma cholinesterase activity	n/a	Nervous	RfD	5x10 ⁻⁴ mg/kg-day
Tetrahydrofuran	109-99-9	Inhalation	Noncancer	Increased liver weight and centrilobular cytomegaly, CNS effects (narcosis)	n/a	Nervous	RfC	2 mg/m ³
Thiram	137-26-8	Oral	Noncancer	Neurotoxicity	n/a	Nervous	RfD	5x10 ⁻³ mg/kg-day
Toluene	108-88-3	Inhalation	Noncancer	Neurological effects in occupationally-exposed workers	n/a	Nervous	RfC	5 mg/m ³
1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)	76-13-1	Oral	Noncancer	Psychomotor impairment	n/a	Nervous	RfD	3x10 ¹ mg/kg-day
1,1,1-Trichloroethane	71-55-6	Inhalation	Noncancer	Performance on neurobehavioral tests	n/a	Nervous	RfC	6 mg/m ³ (Acute: 24 hours)
1,1,1-Trichloroethane	71-55-6	Inhalation	Noncancer	Performance on neurobehavioral tests	n/a	Nervous	RfC	7 mg/m ³ (Acute: 8 hours)
1,1,1-Trichloroethane	71-55-6	Inhalation	Noncancer	Performance on neurobehavioral tests	n/a	Nervous	RfC	7 mg/m ³ (Acute: 4 hours)
1,1,1-Trichloroethane	71-55-6	Inhalation	Noncancer	Performance on neurobehavioral tests	n/a	Nervous	RfC	9 mg/m ³ (Acute: 1 hour)
1,1,1-Trichloroethane	71-55-6	Inhalation	Noncancer	Performance on neurobehavioral tests	n/a	Nervous	RfC	5 mg/m ³ (Short-term)
1,2,3-Trimethylbenzene	526-73-8	Oral	Noncancer	Decreased pain sensitivity in male Wistar rats	n/a	Nervous	RfD	1x10 ⁻² mg/kg-day

1,2,3-Trimethylbenzene	526-73-8	Inhalation	Noncancer	Decreased Pain sensitivity	n/a	Nervous	RfC	6×10^{-2} mg/m ³
1,2,4-Trimethylbenzene	95-63-6	Oral	Noncancer	Decreased pain sensitivity in male Wistar rats	n/a	Nervous	RfD	1×10^{-2} mg/kg-day
1,2,4-Trimethylbenzene	95-63-6	Inhalation	Noncancer	Decreased Pain sensitivity	n/a	Nervous	RfC	6×10^{-2} mg/m ³
1,3,5-Trimethylbenzene	108-67-8	Oral	Noncancer	Decreased pain sensitivity in male Wistar rats	n/a	Nervous	RfD	1×10^{-2} mg/kg-day
Vinyl acetate	108-05-4	Inhalation	Noncancer	Nasal epithelial lesions	n/a	Nervous	RfC	2×10^{-1} mg/m ³
Xylenes	1330-20-7	Inhalation	Noncancer	Impaired motor coordination (decreased rotarod performance)	n/a	Nervous	RfC	1×10^{-1} mg/m ³
Zinc cyanide	557-21-1	Oral	Noncancer	Weight loss, thyroid effects, and myelin degeneration	n/a	Nervous	RfD	5×10^{-2} mg/kg-day