

Selection Criteria Decision Rules Tables 5\_6

	A	B
1	<b>Decision Rule 5—Carcinogens</b>	<b>Decision Rule 6 (in part) — Persistent, Bioaccumulative Toxins</b>
	Pesticide active ingredients that are or are likely to be carcinogenic to humans, or for which evidence suggests carcinogenicity to humans, per definitions (p3) in the 1999 Draft US EPA "Chemicals Evaluated for Carcinogenic Potential" (EPA Cancer 02). Som	Source: US EPA PBT Final Rule Summary. Following are the chemicals on this list that were evaluated. Note that dioxins are PBT, but are byproducts. Degradation, esp by improper incineration, of many seemingly innocuous products can produce dioxins.
2		
3	<b>Active Ingredients Evaluated by US EPA for Carcinogenicity Potential to Humans</b>	
4	2-Benzyl-4-chlorophenol 120-32-1 062201 Group COPP (9/5/95)	pendimethalin CAS 40487-42-1 100 lb reporting threshold
5	Acephate 30560-19-1 103301 Group C (OPP (5/8/85)	
6	Acetaldehyde 75-07-0 202300 Group B2--Probable Human CRAVE)† (1/13/88)	
7	Acetamide 60-35-5 n/a Group C--Possible Human OPP (5/29/90)	
8	Acetochlor 34256-82-1 121601 Group B2-OPP (1/27/92)	
9	Acifluorfen, sodium 62476-59-9 114402 Group B2-OPP (3/17/88)	
10	Acrolein 107-02-8 000701 Group C--CRAVE (12/2/87)	
11	Acrylamide 79-06-1 600008 Group B2--CRAVE (5/25/88)	
12	Acrylonitrile 107-13-1 000601 Group B1--CRAVE (2/11/87)	
13	Alachlor 15972-60-8 090501 Likely to be carcinogenic to humans(high doses); Not Likely at low doses)OPP (6/27/97)	
14	Aldrin 309-00-2 045101 Group B2--CRAVE (3/22/87)	
15	Amitraz (Baam) 33089-61-1 106201 Group C--OPP (10/31/90)	
16	Amitrole 61-82-5 004401 Group B2--OPP (11/30/92)	
17	Aniline 62-53-3 251400 Group B2--CRAVE (6/3/87)	
18	Aramite 140-57-8 062501 Group B2--CRAVE (1/10/91)	
19	Arsenic acid, arsenate, i: Group A--Human Carcinogen IRIS (04/10/1998)	
20	Assert (with 128841) 69969-22-8 128843 Group D--Not Classifiable OPP (6/11/87)	
21	Asulam 3337-71-1 106901 Group C--OPP (2/17/88)	
22	Azafenidin 68049-83-2 119016 Data inadequate for assessment of human carcinogenicity OPP (10/18/99)	
23	Azobenzene 103-33-3 007401 Group B2-CRAVE (2/3/88)	
24	Baygon (Propoxur) 114-26-1 047802 Group B2--OPP (6/17/96)	
25	Benfluralin 1861-40-1 084301 Not yet evaluated	
26	Benomyl 17804-35-2 099101 Group C--OPP (09/21/2000)n	
27	Benoxacor 98730-04-2 911508 Cannot be determined OPP (11/20/97)	
28	Benzene 71-43-2 008801 Carcinogenic to Humans IRIS (1/19/00)	
29	Benzoic acid 65-85-0 009101 Group D--Not Classifiable CRAVE (3/1/89)	
30	Bifenthrin (Talstar) 82657-04-3 128825 Group C--Possible Human (OPP (4/29/92)	
31	Bioallethrin 584-79-2 004003 Not yet evaluated OPP (2/12/98)	
32	Biphenyl, 1,1- 92-52-4 017002 Group D--Not Classifiable CRAVE (12/6/90)	
33	Bis(chloroethyl)ether (BCEE) 111-44-4 029501 Group B2--Probable	
34	Bromacil 314-40-9 012301 Group C--OPP (1/13/93)	
35	Bromoacetoxy-2-butene, 1,4(bis) (BBAB) 20679-58-7 035605 No data available N/A	
36	Bromotrachloromethane 75-62-7 008708 Group D--Not Classifiable CRAVE (1/10/91)	
37	Bromoxynil 1689-84-5 035301 Group C--Possible Human OPP (3/12/97)	
38	Buprofezin 69327-76-0 275100 Suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential OPP (3/15/00)	
39	Butachlor (Machete) 23184-66-9 112301 Likely to be carcinogenic to humans OPP (2/26/99)	
40	Cacodylic acid 75-60-5 012501 Group B2--Probable Human OPP (7/27/94)	
41	Cadmium 7440-43-9 n/a Group B1--Probable Human CRAVE (11/12/86)	
42	Captafol 2939-80-2 081701 Group B2--Probable Human OPP (5/19/89)	
43	Captan 133-06-2 081301 Group B2--Probable Human OPP (09/04/98)	
44	Carbaryl 63-25-2 056801 Group C- Possible Human OPP (12/08/01)	
45	Carbon tetrachloride 56-23-5 016501 Group B2--CRAVE (12/4/86)	
46	Chloramben 133-90-4 029901 Not yet evaluated	
47	Chlordane 57-74-9 058201 Group B2--CRAVE (4/1/87)	
48	Chlordimeform 6164-98-3 059701 Group B2-OPP (12/20/85)	
49	Chlorethoxyfos 54593-83-8 129006 No data available N/A	
50	Chlorfenapyr (Pirate) 122453-73-0 129093 Cannot be determined OPP (1/9/97)	
51	Chlorine Dioxide 10049-04-4 020503 No data available N/A	
52	Chloroaniline, p- 106-47-8 017203 Group B2--OPP (4/27/95)	
53	Chlorothalonil 1897-45-6 081901 Likely to be carcinogenic to humans OPP (10/27/97)	
54	Chromic Acid 7738-94-5 and Sodium dichromate 7738-94-5 10588-01-9 021101, Group A--Human Carcinogen by Inhalation Group D--Not Classifiable as to Human Carcinogenicity by oral route IRIS (09/03/98)	
55	Cinch (Cinmethylin) 87818-31-3 128837 Group D--Not Classifiable OPP (4/7/89)	
56	Clethodim 99129-21-2 121011 No data available N/A	
57	Clodinafop-propargyl 105512-06-9 125203 Likely to be carcinogenic to humans OPP (12/7/99)	
58	Clofentezine (Apollo) 74115-24-5 125501 Group C--OPP (4/3/90)	
59	Cocamide Diethanolamine 68603-42-9 224600 Likely to be carcinogenic to humans OPP (7/25/01)	
60	Creosote 8001-58-9 025004 Group B1--CRAVE (5/13/87)	
61	Cresol, p-Chloro-m- 59-50-7 064206 Group D--Not Classifiable OPP (11/28/95)	
62	Cryolite (Kryocide) 15096-52-3 075101 Group D--Not Classifiable OPP (1/26/93)	
63	Cyanazine (Bladex) 21725-46-2 100101 Group C--Possible Human OPP (7/30/91)	
64	Cyhalofop butyl 2818-16-8 082503 No data available OPP (8/10/01)	

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	A	B
1	<p><b>Decision Rule 5—Carcinogens</b></p> <p>Pesticide active ingredients that are or are likely to be carcinogenic to humans, or for which evidence suggests carcinogenicity to humans, per definitions (p3) in the 1999 Draft US EPA "Chemicals Evaluated for Carcinogenic Potential" (EPA Cancer 02). Som</p>	<p><b>Decision Rule 6 (in part) — Persistent, Bioaccumulative Toxins</b></p> <p>Source: US EPA PBT Final Rule Summary. Following are the chemicals on this list that were evaluated. Note that dioxins are PBT, but are byproducts. Degradation, esp by improper incineration, of many seemingly innocuous products can produce dioxins.</p>
2		
3	<p><b>Active Ingredients Evaluated by US EPA for Carcinogenicity Potential to Humans</b></p>	
65	Cypermethrin & Cypermethrin 52315-07-8 109702, 129064 Group C--OPP (9/27/88)	
66	Cyproconazole (SAN 619F) 94361-06-5 128993 Group B2--OPP (12/04/92)	
67	Dacthal (DCPA) 1861-32-1 078701 Group C--OPP (2/10/95)	
68	Daminozide (Alar) 1596-84-5 035101 Group B2-OPP (7/26/91)	
69	Dazomet 533-74-4 035602 Group D--Not Classifiable OPP (12/7/93)	
70	DDD 72-54-8 029101 Group B2--CRAVE (6/24/87)	
71	DDE 72-55-9 n/a Group B2--Probable Human CRAVE (6/24/87)	
72	DDT 50-29-3 029201 Group B2--CRAVE (6/24/87)	
73	DEET 134-62-3 080301 Group D--Not Classifiable OPP (1/4/96)	
74	Di(2-ethylhexyl)phthalate 117-81-7 295200 Group B2--CRAVE (10/7/87)	
75	Dibromochloropropane (DBCP) 96-12-8 011301 Group B2--Probable Human	
76	Dibromoethane, 1,2- 106-93-4 042002 Group B2--CRAVE (5/13/87)	
77	Dibutyl phthalate 84-74-2 028001 Group D--Not Classifiable CRAVE (8/26/87)	
78	Dicamba 1918-00-9 029801 Group D--Not Classifiable OPP (7/29/96)	
79	Dichlobenil 1194-65-6 027401 Group C--Possible Human OPP (7/18/95)	
80	dichloro-2-n-octyl-3(2H)isothiazolone, 4,5- [RH-287]64359-81-5 128101 No data available N/A	
81	Dichlorobenzamide, 2,6- 2008-88-4 027402 Group D--Not classifiable as to human OPP (11/28/95)	
82	Dichlorobenzene, 1,2- 95-50-1 059401 Group D--Not Classifiable CRAVE (12/6/89)	
83	Dichloroethane, 1,2- 107-06-2 042003 Group B2--CRAVE (12/4/86)	
84	Dichloroethylene, 1,1- 75-35-4 600033 Group C--CRAVE (1/7/87)	
85	Dichloromethane 75-09-2 042004 Group B2--CRAVE (04/6/89)	
86	Dichloropropene, 1,3-Telone II 542-75-6 029001 Group B2--OPP (12/8/89)	
87	Dichlorvos (DDVP) 62-73-7 084001 Group C--OPP (8/18/1999)	
88	Diclofop-methyl (Hoelon) 51338-27-3 110902 Likely to be carcinogenic to humans OPP (5/24/00)	
89	Dicloran 99-30-9 031301 No data available OPP (07/12/01)	
90	Dicofol (Kelthane) 115-32-2 010501 Group C--OPP (6/24/92)	
91	Dicrotophos (Bidrin) 141-66-2 035201 Suggestive evidence, but not sufficient to assess human carcinogenic potential OPP (7/21/99)	
92	Dieldrin 60-57-1 045001 Group B2--CRAVE (3/5/87)	
93	Diethyl phthalate 84-66-2 128947 Group D--CRAVE (8/26/87)	
94	Difenoconazole (Dividend) 119446-68-3 128847 Group C--OPP (7/27/94)	
95	Dimethenamid (SAN 582H) 87674-68-8 129051 Group C	
96	Dimethipin (Harvade) 55290-64-7 118901 Group C	
97	Dimethoate 60-51-5 035001 Group C	
98	Dinoseb 88-85-7 037505 Group C	
99	Diuron 330-54-1 035505 Known/Likely	
100	Epichlorohydrin 106-89-8 097201 Group B2--Probable	
101	Ethalfuralin (Sonalan) 55283-68-6 113101 Group C--	
102	Ethiozin (Ebuzin/Tycor) 64529-56-2 128883 Group C (tentative)	
103	Ethofenprox (Etofenprox) 80844-07-1 128965 Group C--	
104	Ethoprop (Ethoprophos) 13194-48-4 041101 Likely to be carcinogenic to humans	
105	Ethylene diamine 107-15-3 004205 Group D--Not Classifiable as to Human Carcinogenicity	
106	Ethylene oxide 75-21-8 042301 Group B1--Probable Human	
107	Ethylene thiourea (ETU) 96-45-7 600016 Group B2--Probable Human	
108	Febram 128-04-1 034804 Likely to be carcinogenic to humans	
109	Fenbuconazole (Fenethanil) 114369-43-6 129011 Group C--	
110	Fenoxycarb 72490-01-8 125301 Likely to be carcinogenic to humans	
111	Fipronil 120068-37-3 129121 Group C [note that photodegradate MB46513 is not likely to be carcinogenic to humans]	
112	Fluometuron 2164-17-2 035503 Group C	
113	Fluthiacet-methyl (Action) 117337-19-6 108803 Likely to be carcinogenic	
114	Folpet 133-07-3 081601 Group B2	
115	Fomesafen (Flex) 72178-02-0 123802 Group C--	
116	Formaldehyde 50-00-0 043001 Group B1	
117	Furmecyclox (Xyligen B) 60568-05-0 122601 Group B2	
118	Haloxypop-methyl (Verdict) 690806-40-2 125201 Group B2	
119	Heptachlor 76-44-8 044801 Group B2	
120	Heptachlor epoxide 1024-57-3 044801 Group B2	
121	Hexachlorobenzene (HCB) 118-74-1 061001 Group B2	
122	Hexachlorocyclohexane 608-73-1 008901 Group B2	
123	Hexachloroethane 67-72-1 045201 Group C	
124	Hexaconazole (Anvil) 79983-71-4 128925 Group C	
125	Hexythiazox (Savey) 78587-05-0 128849 Group C	
126	Hydramethylinon (Amdro) 67485-29-4 118401 Group C	
127	Hydrogen cyanamide 420-04-2 014002 Group C	
128	Imazalil 35554-44-0 111901 Likely to be carcinogenic to humans	
129	Iprodione (Glycophene) 36734-19-7 109801 Likely to be carcinogenic	

	A	B
1	<b>Decision Rule 5—Carcinogens</b>	<b>Decision Rule 6 (in part) — Persistent, Bioaccumulative Toxins</b>
2	Pesticide active ingredients that are or are likely to be carcinogenic to humans, or for which evidence suggests carcinogenicity to humans, per definitions (p3) in the 1999 Draft US EPA "Chemicals Evaluated for Carcinogenic Potential" (EPA Cancer 02). Som	Source: US EPA PBT Final Rule Summary. Following are the chemicals on this list that were evaluated. Note that dioxins are PBT, but are byproducts. Degradation, esp by improper incineration, of many seemingly innocuous products can produce dioxins.
3	<b>Active Ingredients Evaluated by US EPA for Carcinogenicity Potential to Humans</b>	
130	Iprovalicarb 140923-17-7 098359 Likely to be carcinogenic to humans OPP (2/6/2002)	
131	Isophorone 78-59-1 047401 Group C--OPP (9/2/99)	
132	Isoxaben (EL-107) 82558-50-7 125851 Group C--OPP (1/4/89)	
133	Isoxaflutole 141112-29-0 123000 Likely to be carcinogenic to humans OPP (8/6/97)	
134	Kresoxim-methyl 143390-89-0 129111 Likely to be carcinogenic to humans OPP (8/19/99)	
135	Lactofen (Cobra) 77501-63-4 128888 Group B2--OPP (4/8/87)	
136	Lindane 58-89-9 009001 Suggestive evidence, but not sufficient to assess human carcinogenic potential. OPP (11/29/01)	
137	Linuron 330-55-2 035506 Group C--OPP (4/1/87)	
138	Malathion 121-75-5 057701 Suggestive evidence (see lindane). OPP (6/20/00)	
139	Mancozeb 8018-01-7 014504 Group B2--OPP (06/09/99)	
140	Maneb 12427-38-2 014505 Group B2--OPP (06/09/99)	
141	MB46513 (photodegradeof Fipronil)120067-83-6 600050 Not Likely to be carcinogenic to humans. OPP (12/6/00)	
142	MBC (Carbendazim) 10605-21-7 128872 Group C--	
143	Mercaptobenzothiazole, 2- 149-30-4 051701 Group C--	
144	Metam sodium 137-42-8 039003 Group B2--	
145	Methidathion 950-37-8 100301 Group C--	
146	Methyl isothiocyanate 6317-18-6 068103 Group B2--	
147	Methylphenol, 3- 108-39-4 022102 Group C--CRAVE OPP (10/5/89)	
148	Metiram 9006-42-2 014601 Group B2--based on ethylene thiourea data. OPP (11/15/99)	
149	Metolachlor 51218-45-2 108801 Group C--OPP (11/16/94)	
150	MGK Repellent 326 136-45-8 047201 Group C--OPP (6/7/95)	
151	MGK-264 113-48-4 057001 Group C--OPP (2/22/96)	
152	Molinate (Ordram) 2212-67-1 041402 Group C--OPP (2/22/96)	
153	MON 13900 (Furilazole) 121776-33-8 911596 Likely to be carcinogenic to humans OPP (9/21/99)	
154	MON 21200 (Genesis) 82697-71-0 128726 Group C--OPP (7/23/96)	
155	MON 4660 71526-07-3 600046 Likely to be carcinogenic to humans OPP (12/9/99)	
156	Nitrapyrin 1929-82-4 069203 Likely to be carcinogenic to humans OPP (5/5/00)	
157	Norflurazon 27314-13-2 105801 Group C--OPP (11/2/90)	
158	Orthophenylphenol & Na Salt Group B2 OPP (8/24/94)	
159	Oryzalin 19044-88-3 104201 Group C--OPP (3/12/86)	
160	Oxadiazon 19666-30-9 109001 Likely to be carcinogenic to humans OPP (5/1/2001)	
161	Oxadixyl (San 371F) 77732-09-3 126701 Group C--OPP (1/4/89)	
162	Oxyfluorfen (Goal) 42874-03-3 111601 Group C--OPP (9/29/89)	
163	Oxythioquinox (Morestan) 2439-01 2 054101 Group B2	
164	Paradichlorobenzene 106-46-7 061501 Group C--OPP (4/27/89)	
165	Parathion (Ethyl parathion) 56-38-2 057501 Group C--	
166	Pendimethalin 40487-42-1 108501 Group C--OPP (7/24/92)	
167	Pentachloronitrobenzene 82-68-8 056502 Group C--OPP (12/18/92)	
168	Pentachlorophenol 87-86-5 063001 Group B2--OPP (1/3/91)	
169	Permethrin 52645-53-1 109701 Group C--Possible Human OPP (9/18/89)	
170	Phosmet (Imidan) 732-11-6 059201 Suggestive evidence but not sufficient to assess human carcinogenic potential. OPP (10/27/99)	
171	Phosphamidon 13171-21-6 018201 Group C--OPP (5/31/89)	
172	Piperonyl butoxide 51-03-6 067501 Group C--OPP (6/7/95)	
173	Poly(hexamethylenebiguanide) (PHMB)--Not yet evaluated; 3 positive studies in mouse & rat. OPP (4/18/01)	
174	Polychlorinated biphenyls 1336-36-3 017801 Group B2--CRAVE (4/22/87)	
175	Prochloraz 67747-09-5 128851 Group C--OPP (7/1/88)	
176	Procymidone (Sumilex) 32809-16-8 129044 Group B2--OPP (4/5/91)	
177	Prodiamine (Rydex) 29091-21-2 110201 Group C--	
178	Pronamide (Kerb) 23950-58-5 101701 Group B2--OPP (5/26/93)	
179	Propachlor 1918-16-7 019101 Likely to be carcinogenic to humans OPP (10/16/97)	
180	Propanil 709-98-8 028201 Suggestive evidence, but not sufficient to assess. OPP (8/15/01)	
181	Propargite (Omite) 2312-35-8 097601 Group B2--OPP (7/23/92)	
182	Propazine 139-40-2 080808 Group C--OPP (5/8/97)	
183	Propiconazole (Banner/Tilt) 60207-90-1 122101 Group C--OPP (9/14/92)	
184	Propylene oxide 75-56-9 042501 Group B2--CRAVE (4/5/90)	
185	Pymetrozine 123312-89-0 101103 Likely to be carcinogenic to humans OPP (8/24/99)	
186	Pyrethrins 8003-34-7 069001 Likely to be carcinogenic to humans OPP (4/8/99)	
187	Pyrimethanil 53112-28-0 288201 Group C--OPP (2/12/97)	
188	Pyriproxyfen (Sumilarv) 95737-68-1 129032 Group E--Evidence of non-carcinogenicity for humans. OPP (9/15/95)	
189	Pyriithiobac-sodium 123343-16-8 078905 Group C--	
190	Simazine 122-34-9 080807 Group C--OPP (5/24/90)	
191	Sulfosulfuron [MON 31500] 141776-32-1 085601 Likely to be carcinogenic to humans OPP (10/28/98)	
192	Surfonic AGM-550 n/a 870401 No data available N/A	
193	TCMTB (Busan 72) 21564-17-0 035603 Group C--OPP (8/28/96)	
194	Tebuconazole (Folicur) 107534-96-3 128997 Group C--	

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3	<b>Active Ingredients Evaluated by US EPA for Carcinogenicity Potential to Humans</b>	
195	Terbutryn 886-50-0 080813 Group C--OPP (3/3/88)	
196	Terrazole 2593-15-9 084701 Group B2--OPP (1/9/91)	
197	Tetrachloroethane, 1,1,2,2- 79-34-5 078601 Group C--CRAVE (6/26/86)	
198	Tetrachlorvinphos (Gardona) 961-11-5 083701 Group C--OPP (3/6/95)	
199	Tetraconazole 112281-77-3 120603 Likely to be carcinogenic to humans OPP (1/11/00)	
200	Tetramethrin 7696-12-0 069003 Group C--OPP (12/11/89)	
201	Thiabendazole 148-79-8 060101 Likely to be carcinogenic to humans at high doses, not likely at low doses. OPP (3/4/02)	
202	Thiamethoxam 153719-23-4 060109 Likely to be carcinogenic to humans OPP (6/20/00)	
203	Thiazopyr (MON 13200) 117718-60-2 129100 Group C--OPP (5/25/94)	
204	Thiodicarb (Larvin) 59669-26-0 114501 Group B2--OPP (6/10/96)	
205	Thiophanate-methyl 23564-05-8 102001 Likely to be carcinogenic to humans OPP (12/08/01)	
206	Toxaphene (Campechlor) 8001-35-2 080501 Group B2--CRAVE (3/5/87)	
207	Tralkoxydim 87820-88-0 121000 Likely to be carcinogenic to humans OPP (10/22/98)	
208	Triadimefon (Bayleton) 43121-43-3 109901 Group C--OPP (12/4/96)	
209	Triadimenol (Baytan) 55219-65-3 127201 Group C--OPP (1/29/88)	
210	Triallate 2303-17-5 078802 Group C--OPP (1/12/94)	
211	Tribenuron methyl (Express) 101200-48-0 128887 Group C--OPP (7/14/89)	
212	Tribufos (Tribuphos/DEF) 78-48-8 074801 Likely to be carcinogenic to humans (high doses), not likely at low doses. OPP (5/22/97)	
213	Trichlorfon (Trichlorphon) 52-68-6 057901 Likely to be carcinogenic to humans (high doses), not likely at low doses. OPP (7/15/99)	
214	Trichloroethane, 1,1,2- 79-00-5 081203 Group C--CRAVE (7/26/86)	
215	Trichlorophenol, 2,4,6- 88-06-2 064212 Group B2--CRAVE (9/7/89)	
216	Tridiphane (Tandem) 58138-08-2 123901 Group C--OPP (4/22/86)	
217	Trifluralin (Treflan) 1582-09-8 036101 Group C--OPP (11/29/89)	
218	Triflurosulfuron-methyl 126535-15-7 129002 Group C--OPP (5/28/96)	
219	Triphenyltin hydroxide 76-87-9 083601 Group B2--OPP (5/24/90)	
220	UDMH 57-14-7 600018 Group B2--OPP (7/26/91)	
221	Uniconazole (Prunit) 83657-22-1 128976 Group C--OPP (10/11/90)	
222	Vinclozolin 50471-44-8 113201 Group C--OPP (6/20/00)	
223	Ziram 137-30-4 034805 Likely to be carcinogenic to humans OPP (4/6/00)	