

Use Trends of Cholinesterase-Inhibiting Pesticides: Pounds Applied

Text files of data are available at <<https://files.cdpr.ca.gov/pub/outgoing/pur/data/>>. The reported pounds of chemicals used that are organophosphorus or carbamate cholinesterase-inhibiting pesticides. Use includes both agricultural and reportable nonagricultural applications.

Chemical	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
3-iodo-2-propynyl butylcarbamate	2,675	102	<0.01	19	<0.01	28	2,980	3,002	2,636	1,303
acephate	134,993	152,610	130,472	185,274	144,640	170,759	159,353	192,134	171,300	158,055
aldicarb	64,626	24,167	1,489	1,487	126	None	None	None	None	None
azinphos-methyl	1,619	1,582	1,232	32	None	1	None	1	None	None
bendiocarb	1	3	3	2	4	1	4	3	2	2
bensulide	271,835	288,435	267,067	285,697	319,400	346,143	293,204	285,284	312,131	310,644
butylate	299	None	None	88	53	None	10	None	None	None
carbaryl	113,983	74,946	113,845	117,272	131,744	155,525	221,095	107,453	128,631	113,084
carbofuran	4	1	None	None	None	None	None	None	None	None
carbophenothion	51	4	1,204	None	None	None	None	<0.01	None	None
chlorpyrifos	1,291,616	1,301,135	1,107,027	1,469,645	1,312,209	1,107,417	903,238	948,004	602,659	12,813
coumaphos	<0.01	3	3	14	None	1	None	<0.01	5	None
crotoxyphos	None	None	None	None	None	None	<0.01	None	None	None
cycloate	27,292	31,037	33,562	30,619	36,566	39,658	45,150	49,844	41,749	43,662
ddvp	4,176	5,480	4,890	4,630	4,034	4,083	3,868	3,456	3,515	3,331
ddvp, other related	194	268	276	278	162	165	123	113	109	84
diazinon	126,804	86,648	78,523	61,224	61,126	52,665	48,991	72,612	33,497	40,065
dicrotophos	None	None	None	None	5	<0.01	None	None	None	None
dimethoate	210,431	226,676	183,239	276,329	334,563	288,769	243,736	223,336	167,919	160,874
dioxathion	2	None	None	9	None	None	None	<0.01	None	None
dioxathion, other related	1	None	None	4	None	None	None	<0.01	None	None
disulfoton	9,085	4,351	5,479	1,924	2,219	415	10	12	16	20
epn	528	13	8	20	425	1	2	<0.01	1	4
eptc	118,509	126,397	168,665	187,349	235,271	237,982	255,431	259,751	218,451	181,662
ethephon	375,561	548,799	484,406	397,060	348,653	319,356	399,901	485,572	433,639	444,819
ethion	72	1	44	None	<0.01	1	None	<0.01	None	2
ethoprop	5,796	7,475	2,077	2,502	3,076	1,820	2,023	2,134	5,848	5,950

Chemical	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
fenamiphos	8,978	2,964	5,254	2,244	865	97	143	131	<0.01	None
fenoxycarb	3	3	2	1	1	9	2	3	1	<0.01
fenthion	4	<0.01	None	None	<0.01	None	<0.01	None	None	<0.01
fonofos	<0.01	None	None	None	None	None	None	None	None	None
formetanate hydrochloride	30,313	20,952	20,446	26,912	28,333	31,172	42,037	36,709	40,183	42,670
malathion	561,398	512,004	405,396	446,890	502,997	443,128	355,223	334,893	361,816	323,905
merphos	4	None	None	None	None	None	None	None	None	None
merphos, other related	<0.01	None	None	None	None	None	None	None	None	None
methamidophos	9,664	6,037	<0.01	55	None	None	None	1	<0.01	None
methidathion	51,343	29,545	23,396	6,375	3,614	245	146	11	140	2
methiocarb	3,506	2,708	3,790	3,679	3,722	3,371	2,810	2,803	2,485	1,831
methomyl	231,690	220,085	273,338	260,662	278,740	282,501	260,627	234,580	224,670	203,184
methyl parathion	21,512	22,970	25,408	21,520	481	182	24	5	10	10
methyl parathion, other related	1,132	1,195	1,334	1,131	<0.01	5	<0.01	None	None	<0.01
mevinphos	24	118	3	<0.01	8	9	4	None	7	150
mevinphos, other related	16	79	2	None	5	6	3	None	5	100
mexacarbate	None	None	None	1	None	None	None	None	None	None
molinate	24	<0.01	3	<0.01	<0.01	<0.01	5	None	None	<0.01
naled	175,118	199,203	153,116	218,690	225,285	288,474	316,868	283,944	330,866	317,861
oxamyl	121,725	136,967	52,987	73,003	65,785	17,236	2,466	38,302	78,741	103,763
oxydemeton-methyl	71,290	26,017	17,562	10,656	8,407	6,610	3,764	1,533	1,460	9
parathion	257	196	25	<0.01	1	836	41	3	3	47
parathion, other related	10	<0.01	<0.01	None	None	1	<0.01	None	None	None
phorate	14,775	46,430	61,545	30,909	32,683	19,519	20,378	29,897	25,477	30,815
phosacetin	None	None	None	<0.01	<0.01	<0.01	None	<0.01	<0.01	<0.01
phosmet	115,008	95,781	53,587	60,903	44,344	19,278	28,971	16,869	22,596	24,687
phosphamidon	24	None	None	None	None	None	6	None	None	1
phosphamidon, other related	1	None	None	None	None	None	<0.01	None	None	<0.01
pirimicarb	1	1	None	None	None	None	None	None	None	None
profenofos	1,552	None	58	None	None	None	None	None	None	None
propramphos	213	139	170	127	3,047	5	2	<0.01	<0.01	1
propoxur	298	808	359	373	251	100	49	43	29	15
ronnel	None	2	None	1	1	112	16	12	None	<0.01
s,s,s-tributyl phosphorothioate	18,427	30,328	21,820	19,077	11,683	6,472	6,882	8,151	8,911	8,104
sodium dimethyl dithio carbamate	11,053	13,358	13,485	22,187	16,535	9,357	18,414	18,854	11,257	4,797

Chemical	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
sulfotep	None	1	None	None	None	None	None	None	None	None
temephos	99	34	17	8	10	5	3	4	2	2
tepp	1	None	None	None	None	None	None	None	None	None
tepp, other related	2	None	None	None	None	None	None	None	None	None
tetrachlorvinphos	1,086	912	665	2,660	629	173	66	55	109	63
thiobencarb	258,402	246,927	280,678	289,946	373,930	523,582	698,888	603,226	592,804	654,018
thiodicarb	152	472	145	156	None	None	None	1	None	None
triallate	879	2,671	3,752	4,530	5,886	4,830	5,217	1,568	3,796	1,422
trichlorfon	34	40	29	25	11	<0.01	<0.01	<0.01	4	7
Total	4,470,168	4,499,080	4,001,882	4,524,200	4,541,529	4,382,106	4,342,172	4,244,309	3,827,481	3,193,838