The Top 100 Chemicals by Pounds in Total Statewide Pesticide Use in 2022

Text files of data are available at <https://files.cdpr.ca.gov/pub/outgoing/pur/data/>. The ranking of chemicals is determined by total pounds of chemical used. Acres treated totals are cumulative, meaning that if a one-acre field was treated three times in a year, the cumulative acres treated would equal three acres. Cumulative acres treated totals include pesticide use reports (PURs) with unit treated equal to acres (A) or square feet (S), the latter of which was converted to acres. PURs with volume (cubic feet, etc.), weight (tons, lbs, etc.), or miscellaneous units (bins, holes, etc.) are not included in the acres treated totals. Most nonagricultural PURs are not required to report acres treated, so the acres treated totals are predominantly agricultural pesticide uses. Chemical names that end with an " * " are adjuvants. Application counts (Apps) include only agricultural pesticide uses. A zero under Apps or Acre Treated therefore means that the pounds applied were nonagricultural uses. See Pesticide Use Annual Report Data Access, References, and Definitions Guide for more information.

Chemical	Rank	Pounds Applied	Apps	Acre Treated
Sulfur	1	38,982,187	118,329	4,587,375
Mineral oil	2	34,390,365	144,554	4,529,760
1,3-dichloropropene	3	9,748,837	2,667	57,076
Chloropicrin	4	8,769,970	2,356	49,077
Potassium n- methyldithiocarbamate	5	8,005,692	1,160	40,018
Glyphosate, isopropylamine salt	6	5,141,183	75,976	2,200,148
Glyphosate, potassium salt	7	4,399,453	67,019	2,236,401
Calcium hydroxide	8	4,093,610	9,292	209,488
Metam-sodium	9	3,630,276	460	18,209
Sulfuryl fluoride	10	3,472,322	40	2,569
Kaolin	11	2,862,924	3,184	77,820
Methylated soybean oil*	12	2,392,443	125,592	4,120,044
Pendimethalin	13	2,184,221	26,887	1,036,278
Copper hydroxide	14	2,100,733	32,393	992,379
Glufosinate-ammonium	15	1,781,692	63,983	1,799,657
Alpha-(para-nonylphenyl)- omega- hydroxypoly(oxyethylene)*	16	1,738,683	191,273	7,864,604
Methyl bromide	17	1,618,797	378	5,825

Chemical	Rank	Pounds Applied	Apps	Acre Treated
Propanil	18	1,333,940	4,051	305,575
Copper sulfate	19	1,213,979	2,683	167,295
(pentahydrate)				
Potassium phosphite	20	1,177,730	21,939	419,155
Copper ethanolamine	21	1,170,348	63	6,428
complexes, mixed				
Lime-sulfur	22	1,168,482	3,123	104,083
Mancozeb	23	996,511	28,621	555,198
Ammonium sulfate	24	965,947	66,913	2,241,803
Sodium hypochlorite	25	930,880	162	2,781
Copper sulfate (basic)	26	891,986	9,189	236,456
Boric acid	27	884,285	35	159
Oxyfluorfen	28	806,714	58,356	1,863,502
Chlorothalonil	29	800,485	12,537	358,175
Oleic acid, methyl ester*	30	795,687	17,339	818,239
Diatomaceous earth	31	778,768	5,268	51,962
Lecithin*	32	736,337	82,311	2,767,161
Burkholderia rinojensis strain a396	33	587,377	8,067	116,136
Methoxyfenozide	34	541,449	34,614	1,842,633
Hydrogen cyanamide	35	532,002	1,233	38,500
Vegetable oil*	36	520,302	2,953	330,777
Chlorine	37	510,828	<0.01	N/A
Alpha-undecyl-omega- hydroxypoly(oxyethylene)*	38	461,807	70,854	2,302,234
Malathion	39	450,398	8,785	173,905
Hydrogen peroxide	40	430,997	14,042	199,930
Ziram	41	385,720	4,250	71,793
Copper oxychloride	42	378,150	9,549	295,515
Paraquat dichloride	43	373,438	6,264	367,895
Fatty acids, methyl esters	44	359,008	8,176	302,861
S-metolachlor	45	350,135	4,839	216,293
Ethephon	46	333,362	8,628	381,928
Captan	47	332,669	5,528	186,861
Bensulide	48	327,048	10,496	90,408
Trifluralin	49	326,707	6,601	281,107
Imidacloprid	50	318,996	44,444	980,062
2,4-d, dimethylamine salt	51	316,952	6,988	281,612
Caprylic acid	52	308,266	3,030	45,600
Bifenthrin	53	304,990	30,841	1,357,673
Bifenazate	54	303,869	12,661	481,744
Sodium carbonate peroxyhydrate	55	293,915	193	12,257

Chemical	Rank	Pounds Applied	Apps	Acre Treated
Fatty acids, c16-c18 and c18-unsaturated, methyl esters*	56	293,559	27,726	748,205
Disodium octaborate tetrahydrate	57	286,960	11	1,029
Sodium chlorate	58	285,312	457	27,746
Buprofezin	59	277,760	5,688	272,569
Sulfur dioxide	60	272,818	9	75
Methylated fatty acids from canola oil*	61	260,494	4,026	146,876
Methomyl	62	251,949	26,971	384,233
Bacillus amyloliquefaciens strain d747	63	248,744	6,317	58,588
Oleic acid, ethyl ester*	64	233,584	27,045	490,973
Thiobencarb	65	231,986	820	70,111
Urea dihydrogen sulfate	66	229,421	12,526	515,972
Potassium bicarbonate	67	227,270	6,154	88,077
Naled	68	226,060	4,013	142,397
Methyl silicone resins*	69	222,518	24,564	675,120
Azoxystrobin	70	220,352	28,897	1,118,743
Capric acid	71	220,009	3,027	45,572
Citric acid	72	212,843	65,631	2,284,031
Alpha-alkyl (c9-c11)- omega- hydroxypoly(oxyethylene)*	73	212,429	46,021	1,512,249
Alpha-pinene beta-pinene copolymer*	74	207,248	26,509	738,866
Alkyl(42\%c12, 26\%c18, 15\%c14, 8\%c16, 5\%c10, 4\%c8)1,3- propylenediamine	75	206,495	<0.01	N/A
Cryolite	76	205,198	920	24,330
Cuprous oxide	77	196,831	3,841	75,911
Chlorthal-dimethyl	78	192,599	6,100	44,291
Glyphosate, dimethylamine salt	79	191,940	2,072	70,771
Propionic acid	80	186,099	38,155	1,119,156
Sodium chlorite	81	183,976	30	358
Dimethylpolysiloxane*	82	183,125	130,759	4,633,143
Clethodim	83	182,855	28,712	1,142,468
Emulsifiable methylated vegetable oil*	84	178,351	18,979	325,550
Phosphoric acid	85	177,458	54,202	1,597,775

Chemical	Rank	Pounds Applied	Apps	Acre Treated
Diethylene glycol*	86	174,626	22,899	1,200,673
Permethrin	87	172,726	36,521	458,938
Sodium bromide	88	171,600	< 0.01	129
Chlorantraniliprole	89	170,760	44,156	2,140,108
Modified phthalic glycerol alkyd resin*	90	169,194	15,460	549,308
Propargite	91	167,920	1,529	73,377
Peroxyacetic acid	92	165,733	13,234	197,890
Bacillus thuringiensis, subsp. aizawai, strain abts- 1857	93	161,994	19,555	191,219
Alpha-(para-nonylphenyl)- omega- hydroxypoly(oxyethylene), branched*	94	160,293	11,862	424,186
Aluminum phosphide	95	153,945	1,362	48,414
Fatty acids, mixed*	96	153,791	36,819	1,734,898
Calcium carbonate*	97	153,664	<0.01	N/A
Eptc	98	153,580	960	57,362
Alpha-alkyl (c9-c16)- omega- hydroxypoly(oxyethylene)*	99	152,688	14,780	695,284
Alpha-alkyl (secondary c12-c14)-omega- hydroxypoly(oxyethylene)*	100	152,167	33,189	1,224,505