

The Top Five Chemicals by Pounds Applied in each County in 2021

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.

County	Chemical	Pounds Applied	Apps	Acre Treated
Alameda	sulfuryl fluoride	68,081	<0.01	<0.01
Alameda	mineral oil	19,112	1,617	4,067
Alameda	glyphosate, isopropylamine salt	16,544	294	1,897
Alameda	sulfur	14,849	554	5,491
Alameda	disodium octaborate tetrahydrate	9,250	<0.01	<0.01
Alpine	mineral oil	207	<0.01	<0.01
Alpine	ammonium sulfate	124	1	70
Alpine	fatty acids, methyl esters	80	1	70
Alpine	glyphosate, potassium salt	69	2	23
Alpine	corn syrup*	44	1	70
Amador	sulfur	64,358	698	9,256
Amador	mineral oil	8,667	274	3,387
Amador	glyphosate, isopropylamine salt	7,779	198	2,052
Amador	methylated soybean oil*	3,774	72	1,039
Amador	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*	2,811	174	3,980
Butte	propanil	420,307	1,174	94,356
Butte	copper sulfate (pentahydrate)	291,084	300	21,923

County	Chemical	Pounds Applied	Apps	Acre Treated
Butte	copper hydroxide	216,405	1,343	56,667
Butte	mineral oil	201,343	1,523	91,920
Butte	1,3-dichloropropene	175,932	30	565
Calaveras	methylated soybean oil*	12,278	234	3,793
Calaveras	glyphosate, isopropylamine salt	9,340	129	1,681
Calaveras	sulfur	8,138	138	1,659
Calaveras	glyphosate, dimethylamine salt	5,219	128	1,528
Calaveras	glyphosate, potassium salt	3,090	44	269
Colusa	propanil	488,584	1,412	103,373
Colusa	glyphosate, potassium salt	211,234	1,623	85,374
Colusa	sulfur	143,372	209	13,347
Colusa	thiobencarb	109,524	394	32,109
Colusa	mineral oil	92,777	708	42,910
Contra Costa	sulfur	78,924	440	6,557
Contra Costa	mineral oil	38,161	620	6,006
Contra Costa	endothall, dipotassium salt	27,330	<0.01	1,707
Contra Costa	glyphosate, isopropylamine salt	22,269	102	3,826
Contra Costa	copper sulfate (pentahydrate)	22,087	2	1,961
Del Norte	1,3-dichloropropene	141,601	59	511
Del Norte	metam-sodium	61,938	36	192
Del Norte	copper hydroxide	7,854	574	4,798
Del Norte	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene), branched*	2,830	33	900
Del Norte	chlorothalonil	2,080	265	2,499
El Dorado	methylated soybean oil*	43,949	658	7,833
El Dorado	mineral oil	36,004	569	4,424
El Dorado	glyphosate, isopropylamine salt	34,471	435	3,334
El Dorado	glyphosate, dimethylamine salt	25,358	359	4,566
El Dorado	sulfur	18,466	606	5,087
Fresno	sulfur	7,711,513	18,840	874,237
Fresno	mineral oil	7,554,959	19,764	815,632
Fresno	potassium n-methyldithiocarbamate	1,949,137	286	10,044
Fresno	1,3-dichloropropene	1,503,899	366	5,518
Fresno	glyphosate, potassium salt	952,847	10,063	425,375
Glenn	propanil	329,521	1,272	72,048

County	Chemical	Pounds Applied	Apps	Acre Treated
Glenn	copper sulfate (pentahydrate)	135,962	188	9,946
Glenn	glyphosate, potassium salt	128,146	1,077	52,201
Glenn	copper hydroxide	117,014	906	32,746
Glenn	methylated soybean oil*	94,103	2,922	132,224
Humboldt	sodium bromide	50,063	<0.01	2
Humboldt	sodium hypochlorite	34,496	<0.01	2
Humboldt	methylated soybean oil*	12,536	319	6,997
Humboldt	borax	5,281	<0.01	<0.01
Humboldt	imazapyr, isopropylamine salt	4,203	361	6,883
Imperial	sulfur	1,435,101	1,276	76,042
Imperial	mineral oil	581,483	5,497	296,509
Imperial	1,3-dichloropropene	378,521	71	4,084
Imperial	pendimethalin	336,274	2,715	178,465
Imperial	glyphosate, isopropylamine salt	244,545	726	40,111
Inyo	methylated soybean oil*	6,558	3	150
Inyo	glyphosate, isopropylamine salt	2,377	10	434
Inyo	triclopyr, butoxyethyl ester	2,220	4	8
Inyo	alpha-undecyl-omega-hydroxypoly(oxyethylene)*	1,515	<0.01	<0.01
Inyo	tall oil fatty acids*	1,410	11	401
Kern	mineral oil	7,436,228	12,624	639,568
Kern	sulfur	4,168,823	11,929	719,433
Kern	potassium n-methyldithiocarbamate	1,839,426	123	8,203
Kern	metam-sodium	1,549,782	117	7,780
Kern	1,3-dichloropropene	1,167,291	132	4,811
Kings	sulfur	2,038,952	1,627	129,618
Kings	mineral oil	1,065,364	3,375	136,914
Kings	potassium n-methyldithiocarbamate	339,285	34	2,793
Kings	glyphosate, potassium salt	331,411	2,551	165,927
Kings	vegetable oil*	292,048	970	186,435
Lake	sulfur	244,101	1,034	33,049
Lake	mineral oil	191,874	547	16,779
Lake	glyphosate, isopropylamine salt	15,356	259	2,882
Lake	kaolin	11,919	33	619
Lake	lime-sulfur	11,522	33	483
Lassen	methyl bromide	49,018	6	233

County	Chemical	Pounds Applied	Apps	Acre Treated
Lassen	chloropicrin	35,422	6	233
Lassen	hexazinone	18,749	87	8,156
Lassen	methylated soybean oil*	17,258	163	9,015
Lassen	sulfur	11,772	74	3,149
Los Angeles	sulfuryl fluoride	727,887	<0.01	<0.01
Los Angeles	potassium n-methyldithiocarbamate	405,853	15	1,199
Los Angeles	boric acid	165,802	<0.01	<0.01
Los Angeles	sodium bromide	112,487	<0.01	<0.01
Los Angeles	sodium hypochlorite	106,705	52	1,607
Madera	sulfur	2,862,517	5,312	336,475
Madera	mineral oil	2,771,659	5,852	348,239
Madera	1,3-dichloropropene	536,275	46	1,633
Madera	glyphosate, potassium salt	369,109	4,622	176,927
Madera	glyphosate, isopropylamine salt	259,092	3,309	155,654
Marin	potassium phosphite	19,588	<0.01	<0.01
Marin	sulfuryl fluoride	16,007	<0.01	<0.01
Marin	copper ethanolamine complexes, mixed	10,766	<0.01	12
Marin	hydrogen peroxide	5,271	<0.01	<0.01
Marin	sulfur	2,878	59	458
Mariposa	glyphosate, isopropylamine salt	2,422	45	185
Mariposa	methylated soybean oil*	1,316	<0.01	<0.01
Mariposa	triclopyr, triethylamine salt	586	4	20
Mariposa	oxyfluorfen	489	18	147
Mariposa	copper ethanolamine complexes, mixed	421	<0.01	105
Mendocino	copper ethanolamine complexes, mixed	1,253,280	<0.01	<0.01
Mendocino	sulfur	386,701	2,280	58,215
Mendocino	octhilinone	140,483	<0.01	<0.01
Mendocino	mineral oil	122,474	476	12,529
Mendocino	4-nonylphenol, formaldehyde resin, propoxylated*	56,853	58	2,008
Merced	sulfur	1,751,329	1,940	120,183
Merced	mineral oil	1,319,278	4,769	247,489
Merced	1,3-dichloropropene	1,193,358	392	9,634
Merced	potassium n-methyldithiocarbamate	827,398	165	3,695
Merced	glyphosate, potassium salt	460,413	5,495	248,089
Modoc	metam-sodium	17,102	3	191

County	Chemical	Pounds Applied	Apps	Acre Treated
Modoc	methylated soybean oil*	14,880	637	43,730
Modoc	paraquat dichloride	8,996	194	12,701
Modoc	glyphosate, potassium salt	8,309	57	3,813
Modoc	metribuzin	8,208	257	17,144
Mono	diuron	1,793	20	1,211
Mono	pendimethalin	602	5	340
Mono	hexazinone	546	17	1,021
Mono	paraquat dichloride	531	17	1,021
Mono	2,4-d, dimethylamine salt	445	6	393
Monterey	chloropicrin	2,087,156	440	8,391
Monterey	mineral oil	982,636	14,062	229,205
Monterey	sulfur	792,539	8,981	190,821
Monterey	1,3-dichloropropene	783,508	380	8,557
Monterey	potassium phosphite	307,391	9,393	101,400
Napa	sulfur	715,586	8,611	134,015
Napa	mineral oil	150,545	2,352	39,280
Napa	glyphosate, potassium salt	22,570	1,485	10,371
Napa	2-(3-hydroxypropyl)-hepta-methyl trisiloxane, ethoxylated, acetate*	19,256	6,784	93,894
Napa	sodium carbonate peroxyhydrate	18,448	<0.01	227
Nevada	sulfur	16,902	76	1,576
Nevada	glyphosate, isopropylamine salt	5,747	33	803
Nevada	copper ethanolamine complexes, mixed	5,289	3	33
Nevada	borax	4,147	<0.01	<0.01
Nevada	glyphosate, dimethylamine salt	3,058	15	393
Orange	sulfuryl fluoride	376,206	<0.01	<0.01
Orange	disodium octaborate tetrahydrate	69,592	<0.01	<0.01
Orange	mineral oil	65,357	90	1,975
Orange	glyphosate, isopropylamine salt	41,665	669	1,437
Orange	boric acid	34,581	<0.01	<0.01
Placer	propanil	39,854	160	8,061
Placer	glyphosate, isopropylamine salt	27,515	124	1,943
Placer	mineral oil	24,600	303	10,959
Placer	permethrin	22,655	<0.01	0
Placer	sulfur	22,312	89	2,813
Plumas	fatty acids, methyl esters	20,268	2	240

County	Chemical	Pounds Applied	Apps	Acre Treated
Plumas	glyphosate, dimethylamine salt	20,001	124	5,932
Plumas	oleic acid, methyl ester*	13,202	91	4,000
Plumas	imazapyr, isopropylamine salt	5,071	112	5,837
Plumas	glyphosate, isopropylamine salt	4,594	16	2,797
Riverside	metam-sodium	551,487	119	2,712
Riverside	sulfur	299,797	2,724	77,273
Riverside	kaolin	280,283	126	4,886
Riverside	mineral oil	279,198	3,807	83,487
Riverside	disodium octaborate tetrahydrate	196,155	<0.01	<0.01
Sacramento	sulfur	2,631,392	3,638	212,804
Sacramento	mineral oil	649,961	3,723	70,595
Sacramento	glyphosate, isopropylamine salt	88,076	952	25,439
Sacramento	1,3-dichloropropene	66,716	4	202
Sacramento	glyphosate, potassium salt	50,750	786	23,138
San Benito	diatomaceous earth	138,121	1,678	9,165
San Benito	potassium n-methyldithiocarbamate	120,068	63	519
San Benito	sulfur	61,188	808	11,158
San Benito	mineral oil	54,421	1,382	16,599
San Benito	sulfur dioxide	23,622	<0.01	<0.01
San Bernardino	disodium octaborate tetrahydrate	163,305	<0.01	<0.01
San Bernardino	glyphosate, isopropylamine salt	71,905	410	4,817
San Bernardino	sulfuryl fluoride	63,796	<0.01	<0.01
San Bernardino	boric acid	24,887	<0.01	<0.01
San Bernardino	mineral oil	18,117	163	1,387
San Diego	sulfuryl fluoride	445,384	<0.01	<0.01
San Diego	mineral oil	251,689	1,832	17,534
San Diego	glyphosate, isopropylamine salt	120,933	5,102	16,156
San Diego	chloropicrin	68,993	69	609
San Diego	1,3-dichloropropene	65,147	16	565
San Francisco	chlorothalonil	3,322	<0.01	552
San Francisco	glutaraldehyde	3,175	<0.01	<0.01

County	Chemical	Pounds Applied	Apps	Acre Treated
San Francisco	2,2-dibromo-3-nitrilopropionamide	2,935	<0.01	<0.01
San Francisco	triclopyr, butoxyethyl ester	2,802	<0.01	300
San Francisco	potassium phosphite	2,290	95	64
San Joaquin	sulfur	5,957,230	11,417	476,557
San Joaquin	1,3-dichloropropene	947,530	134	3,182
San Joaquin	mineral oil	941,424	5,955	192,500
San Joaquin	potassium n-methyldithiocarbamate	478,748	74	5,180
San Joaquin	glyphosate, isopropylamine salt	336,212	6,383	172,045
San Luis Obispo	chloropicrin	736,484	132	3,618
San Luis Obispo	sulfur	648,515	3,567	142,572
San Luis Obispo	mineral oil	320,887	2,108	60,027
San Luis Obispo	1,3-dichloropropene	302,385	140	2,631
San Luis Obispo	potassium n-methyldithiocarbamate	112,724	11	448
San Mateo	sulfuryl fluoride	55,699	<0.01	<0.01
San Mateo	potassium n-methyldithiocarbamate	33,041	27	373
San Mateo	potassium phosphite	24,280	37	374
San Mateo	mineral oil	18,551	120	291
San Mateo	boric acid	10,814	<0.01	<0.01
Santa Barbara	chloropicrin	1,937,531	347	10,012
Santa Barbara	sulfur	1,084,203	4,313	186,512
Santa Barbara	potassium n-methyldithiocarbamate	653,115	55	2,548
Santa Barbara	1,3-dichloropropene	514,106	153	4,491
Santa Barbara	mineral oil	322,199	3,545	71,656
Santa Clara	sulfuryl fluoride	175,715	<0.01	<0.01
Santa Clara	potassium n-methyldithiocarbamate	169,151	46	842
Santa Clara	deltamethrin	53,586	<0.01	<0.01
Santa Clara	sodium hypochlorite	40,994	3	27
Santa Clara	boric acid	40,141	1	15
Santa Cruz	chloropicrin	625,744	157	2,300
Santa Cruz	1,3-dichloropropene	239,251	127	2,684
Santa Cruz	mineral oil	61,696	802	6,647
Santa Cruz	sulfuryl fluoride	48,001	<0.01	<0.01
Santa Cruz	lime-sulfur	39,959	135	1,417

County	Chemical	Pounds Applied	Apps	Acre Treated
Shasta	borax	82,397	<0.01	92
Shasta	methylated soybean oil*	36,062	470	14,113
Shasta	copper sulfate (pentahydrate)	32,116	36	2,447
Shasta	glyphosate, dimethylamine salt	25,481	383	13,483
Shasta	methyl bromide	23,315	9	109
Sierra	methylated soybean oil*	608	10	297
Sierra	glyphosate, isopropylamine salt	508	10	286
Sierra	hexazinone	228	6	493
Sierra	glyphosate, dimethylamine salt	137	1	44
Sierra	imazapyr, isopropylamine salt	120	5	189
Siskiyou	methyl bromide	684,766	175	2,938
Siskiyou	chloropicrin	368,784	168	2,868
Siskiyou	glyphosate, isopropylamine salt	23,003	185	5,164
Siskiyou	methylated soybean oil*	16,056	455	20,676
Siskiyou	sulfur	13,530	100	4,371
Solano	sulfur	469,824	1,139	37,254
Solano	mineral oil	158,033	348	26,223
Solano	sodium hypochlorite	145,677	1	5
Solano	2,2-dibromo-3-nitrilopropionamide	113,270	<0.01	2
Solano	sodium bromide	107,634	<0.01	5
Sonoma	sulfur	1,575,336	10,662	232,786
Sonoma	mineral oil	278,595	2,894	52,840
Sonoma	4-nonylphenol, formaldehyde resin, propoxylated*	197,259	1,141	27,394
Sonoma	castor oil ethoxylate*	179,061	1,064	24,291
Sonoma	sulfuryl fluoride	36,902	<0.01	<0.01
Stanislaus	mineral oil	1,616,956	4,513	223,331
Stanislaus	1,3-dichloropropene	1,337,843	246	5,346
Stanislaus	sulfur	550,942	1,071	53,232
Stanislaus	potassium n-methyldithiocarbamate	435,594	987	3,638
Stanislaus	glyphosate, isopropylamine salt	306,463	4,666	151,753
Sutter	propanil	403,665	931	80,491
Sutter	mineral oil	392,995	2,239	105,500
Sutter	1,3-dichloropropene	197,108	37	630

County	Chemical	Pounds Applied	Apps	Acre Treated
Sutter	sulfur	166,004	160	8,097
Sutter	copper hydroxide	163,485	1,090	35,441
Tehama	1,3-dichloropropene	172,602	113	528
Tehama	copper hydroxide	153,295	1,162	39,210
Tehama	glyphosate, potassium salt	63,470	998	35,192
Tehama	glyphosate, isopropylamine salt	57,841	1,409	32,585
Tehama	mancozeb	54,170	951	28,693
Trinity	methylated soybean oil*	12,069	88	3,138
Trinity	glyphosate, isopropylamine salt	5,115	57	2,059
Trinity	glyphosate, dimethylamine salt	4,944	71	4,272
Trinity	oxyfluorfen	4,418	31	3,055
Trinity	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*	2,146	88	3,138
Tulare	mineral oil	6,926,969	30,146	667,202
Tulare	calcium hydroxide	2,633,834	6,110	113,631
Tulare	sulfur	1,937,348	8,946	356,526
Tulare	1,3-dichloropropene	583,667	126	1,790
Tulare	copper sulfate (basic)	440,666	5,188	104,398
Tuolumne	glyphosate, isopropylamine salt	26,885	81	8,113
Tuolumne	methylated soybean oil*	7,456	110	1,509
Tuolumne	glyphosate, dimethylamine salt	5,673	91	1,845
Tuolumne	borax	3,755	11	950
Tuolumne	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*	1,930	112	3,843
Ventura	chloropicrin	1,703,562	287	9,563
Ventura	mineral oil	1,657,976	7,382	124,550
Ventura	potassium n-methyldithiocarbamate	671,372	60	2,650
Ventura	1,3-dichloropropene	316,050	76	2,317
Ventura	metam-sodium	189,178	42	913
Yolo	sulfur	1,948,715	3,494	144,536
Yolo	mineral oil	172,880	1,437	47,528
Yolo	glyphosate, potassium salt	123,749	1,461	58,534
Yolo	glyphosate, isopropylamine salt	115,783	1,468	66,958
Yolo	potassium n-methyldithiocarbamate	88,414	11	755

County	Chemical	Pounds Applied	Apps	Acre Treated
Yuba	1,3-dichloropropene	169,781	19	515
Yuba	mineral oil	166,952	1,125	39,063
Yuba	propanil	156,964	484	30,433
Yuba	copper sulfate (pentahydrate)	74,264	119	5,737
Yuba	copper hydroxide	67,860	393	15,848