

# The Top Five Chemicals by Pounds in each County in 2019

[Text files](https://files.cdpr.ca.gov/pub/outgoing/pur/data/) 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 value in Acre Treated or Apps totals indicates all applications 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	63,137	0	0
Alameda	glyphosate, isopropylamine salt	22,565	340	3,083
Alameda	sulfur	21,272	438	5,481
Alameda	disodium octaborate tetrahydrate	13,405	0	0
Alameda	boric acid	10,566	0	0
Alpine	glyphosate, isopropylamine salt	154	2	2
Alpine	glyphosate, potassium salt	73	4	13
Alpine	petroleum distillates, refined	69	0	0
Alpine	alpha-alkyl (c9-c11)-omega-hydroxypoly(oxyethylene)*	51	0	0
Alpine	oleic acid, methyl ester*	40	0	0
Amador	sulfur	79,719	834	11,458
Amador	mineral oil	9,591	461	4,262
Amador	glyphosate, isopropylamine salt	9,543	272	2,913
Amador	methylated soybean oil*	8,148	315	2,325

County	Chemical	Pounds Applied	Apps	Acre Treated
Amador	kaolin	2,671	3	75
Butte	propanil	337,268	829	65,917
Butte	copper hydroxide	337,079	2,063	87,654
Butte	1,3-dichloropropene	223,069	40	675
Butte	copper sulfate (pentahydrate)	197,153	254	15,599
Butte	mancozeb	171,815	2,171	95,255
Calaveras	sulfur	10,886	177	1,961
Calaveras	glyphosate, isopropylamine salt	7,134	108	986
Calaveras	methyated soybean oil*	6,065	110	3,061
Calaveras	glyphosate, dimethylamine salt	4,986	77	1,198
Calaveras	boric acid	4,464	1	9
Colusa	propanil	468,990	1,188	85,964
Colusa	thiobencarb	245,734	958	71,805
Colusa	glyphosate, potassium salt	183,728	1,435	83,313
Colusa	sulfur	162,780	202	14,948
Colusa	kaolin	124,466	72	4,274
Contra Costa	sulfur	165,956	667	11,870
Contra Costa	glyphosate, isopropylamine salt	35,025	147	5,829
Contra Costa	glutaraldehyde	31,931	0	0
Contra Costa	glyphosate, potassium salt	31,789	445	15,508
Contra Costa	disodium octaborate tetrahydrate	24,587	0	0
Del Norte	1,3-dichloropropene	109,572	36	367
Del Norte	metam-sodium	92,457	50	304
Del Norte	copper hydroxide	9,947	802	6,201
Del Norte	chlorothalonil	3,393	551	4,491
Del Norte	diuron	1,585	146	1,099
El Dorado	mineral oil	36,405	742	5,155
El Dorado	sulfur	30,315	883	7,672

County	Chemical	Pounds Applied	Apps	Acre Treated
El Dorado	glyphosate, isopropylamine salt	21,687	374	4,320
El Dorado	glyphosate, dimethylamine salt	19,397	224	3,209
El Dorado	oleic acid, methyl ester*	16,878	246	3,498
Fresno	sulfur	10,127,314	24,184	1,108,098
Fresno	mineral oil	6,477,496	15,288	685,840
Fresno	petroleum oil, unclassified	2,695,593	4,799	230,381
Fresno	potassium n-methyldithiocarbamate	1,739,333	248	6,277
Fresno	1,3-dichloropropene	1,376,352	328	6,123
Glenn	propanil	315,287	1,083	64,453
Glenn	copper hydroxide	155,673	1,106	43,729
Glenn	copper sulfate (pentahydrate)	124,454	152	10,891
Glenn	glyphosate, potassium salt	123,521	971	58,171
Glenn	glyphosate, isopropylamine salt	122,543	1,572	51,486
Humboldt	methylated soybean oil*	7,765	174	3,590
Humboldt	imazapyr, isopropylamine salt	4,369	321	6,075
Humboldt	oleic acid, methyl ester*	4,180	112	1,753
Humboldt	triclopyr, butoxyethyl ester	3,351	107	1,639
Humboldt	borax	1,445	0	0
Imperial	sulfur	1,666,421	1,802	89,494
Imperial	glyphosate, isopropylamine salt	547,759	794	46,205
Imperial	1,3-dichloropropene	503,437	91	5,269
Imperial	petroleum oil, paraffin based	501,735	1,613	101,574
Imperial	pendimethalin	317,646	2,506	164,503
Inyo	methylated soybean oil*	2,266	10	666
Inyo	glyphosate, isopropylamine salt	1,463	18	407
Inyo	triclopyr, butoxyethyl ester	1,057	2	4
Inyo	alpha-undecyl-omega-hydroxypoly(oxyethylene)*	435	2	3

County	Chemical	Pounds Applied	Apps	Acre Treated
Inyo	tall oil fatty acids*	400	12	821
Kern	mineral oil	5,791,705	9,048	526,562
Kern	sulfur	5,428,071	14,912	924,234
Kern	metam-sodium	1,850,339	173	9,582
Kern	potassium n-methyldithiocarbamate	1,815,728	134	8,466
Kern	petroleum oil, unclassified	1,641,872	1,471	110,136
Kings	sulfur	1,923,896	1,616	120,120
Kings	mineral oil	710,205	2,140	106,591
Kings	potassium n-methyldithiocarbamate	576,217	48	4,741
Kings	glyphosate, potassium salt	408,985	2,807	256,771
Kings	vegetable oil*	402,639	1,509	304,564
Lake	sulfur	396,544	2,499	47,823
Lake	mineral oil	193,771	551	10,466
Lake	lime-sulfur	87,256	134	2,922
Lake	petroleum distillates, refined	18,415	118	2,214
Lake	glyphosate, isopropylamine salt	15,445	399	5,370
Lassen	methyl bromide	58,590	10	261
Lassen	chloropicrin	41,420	10	261
Lassen	methylated soybean oil*	11,060	206	15,457
Lassen	glyphosate, potassium salt	8,999	71	6,420
Lassen	sulfur	7,850	100	2,334
Los Angeles	sulfuryl fluoride	749,105	0	0
Los Angeles	potassium n-methyldithiocarbamate	274,242	9	773
Los Angeles	methyl bromide	108,853	0	0
Los Angeles	glyphosate, isopropylamine salt	96,794	779	2,320
Los Angeles	dichlobenil	64,842	0	0
Madera	sulfur	3,358,648	6,550	410,240
Madera	mineral oil	1,895,476	4,066	208,049

County	Chemical	Pounds Applied	Apps	Acre Treated
Madera	glyphosate, potassium salt	422,800	4,968	202,553
Madera	petroleum oil, unclassified	396,949	657	40,931
Madera	1,3-dichloropropene	325,477	41	972
Marin	potassium phosphite	17,097	0	0
Marin	sulfuryl fluoride	12,384	0	0
Marin	copper ethanolamine complexes, mixed	6,381	0	5
Marin	mineral oil	3,246	49	444
Marin	metam-sodium	3,166	0	0
Mariposa	borax	6,665	0	0
Mariposa	metam-sodium	2,200	0	0
Mariposa	glyphosate, isopropylamine salt	2,085	44	346
Mariposa	methylated soybean oil*	974	3	295
Mariposa	copper hydroxide	480	1	4
Mendocino	copper ethanolamine complexes, mixed	1,340,276	0	0
Mendocino	sulfur	556,120	3,669	77,959
Mendocino	mineral oil	120,208	412	8,800
Mendocino	petroleum distillates, refined	43,300	237	4,474
Mendocino	octhiline	27,089	0	0
Merced	sulfur	2,134,030	2,346	146,916
Merced	1,3-dichloropropene	1,066,752	313	7,455
Merced	mineral oil	945,299	2,998	157,941
Merced	potassium n-methyldithiocarbamate	552,381	128	2,231
Merced	glyphosate, potassium salt	458,817	5,410	237,030
Modoc	metam-sodium	37,250	5	305
Modoc	methylated soybean oil*	28,052	690	46,220
Modoc	1,3-dichloropropene	17,003	2	104
Modoc	glyphosate, potassium salt	9,994	94	7,014

<b>County</b>	<b>Chemical</b>	<b>Pounds Applied</b>	<b>Apps</b>	<b>Acre Treated</b>
<b>Modoc</b>	metribuzin	6,387	171	11,478
<b>Mono</b>	pendimethalin	2,643	19	1,490
<b>Mono</b>	diuron	1,650	16	1,610
<b>Mono</b>	glyphosate, isopropylamine salt	1,520	11	816
<b>Mono</b>	oleic acid, methyl ester*	901	8	748
<b>Mono</b>	lecithin*	653	48	4,573
<b>Monterey</b>	chloropicrin	2,116,520	413	8,368
<b>Monterey</b>	sulfur	900,703	10,424	241,616
<b>Monterey</b>	petroleum distillates, refined	769,430	2,770	114,697
<b>Monterey</b>	1,3-dichloropropene	583,994	351	8,310
<b>Monterey</b>	potassium phosphite	355,949	10,082	111,887
<b>Napa</b>	sulfur	1,036,155	21,111	180,084
<b>Napa</b>	mineral oil	145,603	4,749	33,682
<b>Napa</b>	kaolin	38,893	521	5,833
<b>Napa</b>	potassium bicarbonate	34,438	1,755	11,544
<b>Napa</b>	glyphosate, potassium salt	34,181	3,266	17,602
<b>Nevada</b>	sulfur	15,911	69	1,711
<b>Nevada</b>	glyphosate, dimethylamine salt	5,361	13	552
<b>Nevada</b>	copper ethanolamine complexes, mixed	4,872	0	43
<b>Nevada</b>	glyphosate, isopropylamine salt	4,824	31	1,753
<b>Nevada</b>	copper triethanolamine complex	2,235	0	3
<b>Orange</b>	sulfuryl fluoride	356,146	0	0
<b>Orange</b>	glyphosate, isopropylamine salt	142,883	717	3,166
<b>Orange</b>	methylated soybean oil*	111,009	7	55
<b>Orange</b>	glyphosate, potassium salt	50,435	21	33
<b>Orange</b>	chloropicrin	40,033	7	187
<b>Placer</b>	copper sulfate (pentahydrate)	59,172	69	4,135

County	Chemical	Pounds Applied	Apps	Acre Treated
Placer	propanil	40,245	142	7,266
Placer	glyphosate, isopropylamine salt	38,854	153	3,370
Placer	1,3-dichloropropene	23,302	5	70
Placer	diquat dibromide	19,952	1	71
Plumas	methylated soybean oil*	9,421	87	2,433
Plumas	glyphosate, dimethylamine salt	4,910	70	1,945
Plumas	glyphosate, isopropylamine salt	4,126	23	1,437
Plumas	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*	1,558	101	3,614
Plumas	hexazinone	926	15	569
Riverside	metam-sodium	638,732	140	3,044
Riverside	sulfur	371,071	2,577	72,078
Riverside	mineral oil	253,640	2,223	46,800
Riverside	glyphosate, isopropylamine salt	220,878	4,762	99,810
Riverside	kaolin	193,312	110	3,457
Sacramento	sulfur	3,028,962	3,950	245,380
Sacramento	mineral oil	604,175	995	37,940
Sacramento	glyphosate, potassium salt	86,608	1,284	41,722
Sacramento	glyphosate, isopropylamine salt	82,559	636	25,071
Sacramento	lime-sulfur	46,006	39	2,152
San Benito	potassium n-methyldithiocarbamate	99,558	50	437
San Benito	sulfur	84,289	960	14,159
San Benito	sodium hypochlorite	35,992	0	0
San Benito	petroleum distillates, refined	32,232	147	4,991
San Benito	potassium phosphite	30,726	1,372	10,034
San Bernardino	sodium chlorate	136,465	0	3
San Bernardino	glyphosate, isopropylamine salt	80,141	369	5,470
San Bernardino	sulfuryl fluoride	66,597	0	0

County	Chemical	Pounds Applied	Apps	Acre Treated
San Bernardino	imazapyr, isopropylamine salt	42,171	0	3
San Bernardino	triclopyr, triethylamine salt	18,957	1	5
San Diego	sulfuryl fluoride	424,147	0	0
San Diego	mineral oil	221,261	1,790	17,252
San Diego	glyphosate, isopropylamine salt	118,561	5,472	19,566
San Diego	chloropicrin	87,387	96	807
San Diego	sodium chlorate	79,992	1	3
San Francisco	chlorothalonil	2,606	0	420
San Francisco	glutaraldehyde	2,519	0	0
San Francisco	boric acid	1,508	0	0
San Francisco	mineral oil	1,362	145	23
San Francisco	1-bromo-3-chloro-5,5-dimethyl hydantoin	1,359	0	0
San Joaquin	sulfur	7,639,301	14,239	583,956
San Joaquin	mineral oil	750,633	5,181	164,163
San Joaquin	1,3-dichloropropene	750,433	115	2,550
San Joaquin	glyphosate, isopropylamine salt	376,653	6,001	175,151
San Joaquin	glyphosate, potassium salt	286,242	4,640	159,621
San Luis Obispo	sulfur	617,290	4,705	160,389
San Luis Obispo	chloropicrin	591,639	112	3,164
San Luis Obispo	1,3-dichloropropene	323,094	116	2,629
San Luis Obispo	mineral oil	249,551	1,960	44,881
San Luis Obispo	glyphosate, isopropylamine salt	57,779	937	22,300
San Mateo	sulfuryl fluoride	43,057	0	0
San Mateo	potassium phosphite	16,452	39	455
San Mateo	petroleum distillates, refined	10,696	10	15
San Mateo	calcium hypochlorite	6,640	0	0
San Mateo	sodium alpha-olefin (c14-c16) sulfonate*	6,011	0	0



County	Chemical	Pounds Applied	Apps	Acre Treated
Santa Barbara	chloropicrin	1,402,589	243	7,421
Santa Barbara	sulfur	1,057,563	9,079	191,579
Santa Barbara	1,3-dichloropropene	496,406	152	4,135
Santa Barbara	potassium n-methyldithiocarbamate	418,981	32	1,686
Santa Barbara	mineral oil	262,551	2,968	42,226
Santa Clara	sulfuryl fluoride	194,349	0	0
Santa Clara	potassium n-methyldithiocarbamate	109,880	35	465
Santa Clara	chloropicrin	34,235	19	273
Santa Clara	sulfur	27,661	475	5,670
Santa Clara	boric acid	27,006	6	93
Santa Cruz	chloropicrin	652,033	181	2,352
Santa Cruz	1,3-dichloropropene	238,556	157	2,941
Santa Cruz	mineral oil	51,080	568	5,098
Santa Cruz	sulfuryl fluoride	42,341	0	0
Santa Cruz	lime-sulfur	35,768	140	1,369
Shasta	methylated soybean oil*	56,358	448	22,502
Shasta	methyl bromide	37,767	16	179
Shasta	chloropicrin	29,459	16	185
Shasta	glyphosate, isopropylamine salt	24,527	205	10,078
Shasta	glyphosate, dimethylamine salt	22,365	284	12,856
Sierra	glyphosate, isopropylamine salt	937	13	569
Sierra	oxyfluorfen	535	6	272
Sierra	methylated soybean oil*	406	8	202
Sierra	glyphosate, dimethylamine salt	266	3	97
Sierra	2,4-d, dimethylamine salt	157	5	179
Siskiyou	methyl bromide	615,420	164	2,705
Siskiyou	chloropicrin	350,570	164	2,705
Siskiyou	metam-sodium	84,569	23	645

County	Chemical	Pounds Applied	Apps	Acre Treated
Siskiyou	methylated soybean oil*	36,259	692	36,068
Siskiyou	glyphosate, isopropylamine salt	21,887	272	10,156
Solano	sulfur	534,890	1,276	43,824
Solano	mineral oil	149,323	439	29,587
Solano	glyphosate, potassium salt	107,492	1,448	63,485
Solano	glyphosate, isopropylamine salt	96,036	764	32,478
Solano	pendimethalin	41,648	332	14,742
Sonoma	sulfur	1,749,527	20,455	255,517
Sonoma	mineral oil	240,840	4,113	42,874
Sonoma	petroleum distillates, refined	92,817	954	16,735
Sonoma	glyphosate, potassium salt	46,303	3,555	27,436
Sonoma	sulfuryl fluoride	35,913	0	0
Stanislaus	mineral oil	1,588,887	4,132	216,283
Stanislaus	1,3-dichloropropene	1,346,852	223	5,097
Stanislaus	sulfur	759,706	1,580	75,579
Stanislaus	potassium n-methyldithiocarbamate	529,033	2,073	4,309
Stanislaus	glyphosate, isopropylamine salt	496,164	5,272	181,950
Sutter	mineral oil	418,912	1,812	81,628
Sutter	propanil	406,682	889	76,387
Sutter	1,3-dichloropropene	274,166	56	838
Sutter	sulfur	242,520	248	11,547
Sutter	copper hydroxide	239,737	1,750	56,050
Tehama	1,3-dichloropropene	349,675	101	1,057
Tehama	copper hydroxide	208,196	1,573	49,259
Tehama	mancozeb	79,895	1,485	43,556
Tehama	chloropicrin	73,319	13	386
Tehama	glyphosate, isopropylamine salt	60,519	1,414	30,254
Trinity	methylated soybean oil*	21,640	182	6,864

County	Chemical	Pounds Applied	Apps	Acre Treated
Trinity	glyphosate, dimethylamine salt	13,124	167	5,585
Trinity	alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*	3,827	182	6,864
Trinity	imazapyr, isopropylamine salt	2,020	105	3,796
Trinity	oxyfluorfen	1,667	43	1,365
Tulare	mineral oil	6,358,810	21,487	469,124
Tulare	calcium hydroxide	2,825,354	6,839	129,760
Tulare	sulfur	2,101,615	9,781	400,676
Tulare	petroleum oil, unclassified	1,654,062	4,186	91,112
Tulare	1,3-dichloropropene	781,284	208	2,399
Tuolumne	glyphosate, isopropylamine salt	11,493	51	7,082
Tuolumne	glyphosate, dimethylamine salt	6,965	107	1,871
Tuolumne	methylated soybean oil*	5,241	139	2,508
Tuolumne	ammonium sulfate	3,633	65	1,226
Tuolumne	glyphosate, potassium salt	1,749	2	36
Ventura	mineral oil	1,504,846	6,392	109,501
Ventura	chloropicrin	1,489,896	270	8,766
Ventura	metam-sodium	279,509	32	1,400
Ventura	1,3-dichloropropene	265,887	75	2,064
Ventura	potassium n-methyldithiocarbamate	182,483	22	829
Yolo	sulfur	2,415,528	4,123	182,453
Yolo	glyphosate, isopropylamine salt	168,862	1,774	101,046
Yolo	glyphosate, potassium salt	134,117	1,426	62,694
Yolo	kaolin	102,322	73	3,258
Yolo	mineral oil	96,309	987	39,219
Yuba	1,3-dichloropropene	197,231	17	594
Yuba	propanil	133,339	391	25,027
Yuba	mineral oil	130,387	629	21,475

<b>County</b>	<b>Chemical</b>	<b>Pounds Applied</b>	<b>Apps</b>	<b>Acre Treated</b>
<b>Yuba</b>	copper hydroxide	109,682	597	25,317
<b>Yuba</b>	sulfur	57,907	192	5,600