

# The Top 100 Chemicals by Pounds in Total Statewide Pesticide Use in 2023

[Text files](#) of data are available. 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. Application counts (Apps) include only agricultural pesticide uses. A zero value under Acres Treated or Apps indicates that the pounds applied were nonagricultural uses. Chemicals in adjuvant products are excluded from this table. Values are rounded. For more information, see Pesticide Use Annual Report Data Access, References, and Definitions [Guide](#).

Chemical	Rank	Pounds Applied	Apps	Acres Treated
Sulfur	1	39,751,726	121,285	4,755,654
Mineral oil	2	28,153,285	140,333	4,670,285
Potassium n-methyldithiocarbamate	3	8,633,739	1,144	44,045
Chloropicrin	4	8,515,832	2,264	46,532
1,3-dichloropropene	5	7,023,406	2,218	44,554
Glyphosate, isopropylamine salt	6	5,287,561	78,053	2,223,069
Glyphosate, potassium salt	7	5,107,766	71,435	2,529,886
Calcium hydroxide	8	4,703,328	10,482	257,670
Kaolin	9	3,290,868	3,497	91,482
Sulfuryl fluoride	10	3,071,223	12	2,326
Metam-sodium	11	2,800,317	369	13,237
Propanil	12	2,489,585	7,124	547,178
Methylated soybean oil	13	2,485,559	130,189	4,802,498
Pendimethalin	14	2,266,480	28,802	1,110,699
Glufosinate-ammonium	15	2,010,747	72,675	2,069,518
Alpha-(para-nonylphenyl)-omega-hydroxypoly(oxy ethylene)	16	1,894,675	190,277	8,435,572
Copper sulfate (pentahydrate)	17	1,730,109	3,286	163,752
Methyl bromide	18	1,676,651	322	6,288
Copper hydroxide	19	1,525,241	28,681	849,710
Potassium phosphite	20	1,305,483	21,183	485,579
Chlorothalonil	21	1,194,970	16,009	607,588
Lime-sulfur	22	1,167,299	3,123	108,845
Ammonium sulfate	23	1,100,100	71,756	2,610,990
Copper ethanolamine complexes, mixed	24	909,941	50	5,751

<b>Chemical</b>	<b>Rank</b>	<b>Pounds Applied</b>	<b>Apps</b>	<b>Acres Treated</b>
Sodium hypochlorite	25	796,318	70	1,590
Oxyfluorfen	26	787,142	59,423	1,921,519
Copper sulfate (basic)	27	782,136	8,779	211,805
Lecithin	28	780,757	85,943	3,098,378
Mancozeb	29	773,398	25,073	436,425
Boric acid	30	744,573	30	100
Oleic acid, methyl ester	31	730,945	17,494	804,181
Hydrogen peroxide	32	659,087	19,106	360,727
Methoxyfenozide	33	594,707	36,489	1,972,902
Alpha-undecyl-omega-hydroxypoly(oxyethylene)	34	589,189	79,483	2,695,906
Diatomaceous earth	35	536,837	3,150	34,034
Vegetable oil	36	528,577	3,466	341,573
Burkholderia rinojensis strain a396	37	526,001	6,707	111,668
Chlorine	38	522,963	0	3,323
Thiobencarb	39	465,525	1,715	139,075
Ziram	40	432,295	4,423	82,864
Potassium bicarbonate	41	429,696	8,430	181,793
Fatty acids, methyl esters	42	401,400	6,798	341,534
Hydrogen cyanamide	43	388,268	999	27,230
Sodium chlorate	44	386,776	453	35,160
Bensulide	45	383,989	10,835	102,841
Paraquat dichloride	46	369,978	4,908	338,975
Captan	47	367,648	5,914	206,791
Sodium percarbonate	48	367,206	295	15,802
Tall oil fatty acids	49	365,451	61,114	2,796,669
Ethephon	50	344,664	8,880	394,844
S-metolachlor	51	335,779	5,149	221,490
Bifenthrin	52	333,491	31,779	1,587,154
Copper oxychloride	53	330,867	8,062	253,119
Azoxystrobin	54	320,528	38,016	1,601,606
Fatty acids, c16-c18 and c18-unsaturated, methyl esters	55	299,506	27,863	752,681
Caprylic acid	56	296,736	2,563	42,907
Imidacloprid	57	289,262	42,805	974,321
2,4-d, dimethylamine salt	58	286,555	6,389	241,365
Trifluralin	59	284,002	6,046	254,278

<b>Chemical</b>	<b>Rank</b>	<b>Pounds Applied</b>	<b>Apps</b>	<b>Acres Treated</b>
Malathion	60	272,549	8,207	172,167
Buprofezin	61	264,722	4,679	204,734
Alpha-alkyl (c9-c11)-omega-hydroxypoly(oxyethylene)	62	241,919	53,735	1,842,849
Methylated fatty acids from canola oil	63	237,292	3,599	121,176
Disodium octaborate tetrahydrate	64	234,126	13	3,181
Naled	65	232,889	2,365	114,309
Sulfur dioxide	66	226,956	42	10,937
Glyphosate, dimethylamine salt	67	225,844	2,619	78,461
Diethylene glycol	68	222,219	24,521	1,459,875
Peroxyacetic acid	69	219,845	18,008	357,156
Oleic acid, ethyl ester	70	219,383	26,720	504,114
Capric acid	71	217,744	2,562	42,898
Permethrin	72	211,254	34,456	472,570
Alpha-pinene-beta-pinene copolymer	73	203,493	28,231	791,719
Thiophanate-methyl	74	203,027	9,436	191,865
Bacillus velezensis strain: d747	75	199,981	5,742	52,545
Cuprous oxide	76	199,158	4,570	86,966
Dimethylpolysiloxane	77	198,281	132,365	5,175,836
Clethodim	78	198,241	30,120	1,200,602
Emulsifiable methylated vegetable oil	79	198,236	22,850	381,033
Methomyl	80	195,333	19,477	319,074
Propionic acid	81	195,083	36,244	1,148,063
Citric acid	82	192,691	68,249	2,370,487
Bifenazate	83	180,433	8,892	301,942
Urea dihydrogen sulfate	84	174,445	15,324	534,952
Sodium bromide	85	172,023	0	31
Chlorantraniliprole	86	170,364	45,940	2,216,082
Propylene oxide	87	168,176	0	0
Alcohols, c12-14-secondary, ethoxylated	88	163,126	37,188	1,538,539
Thiram	89	162,607	1,856	71,177
Triclopyr, triethylamine salt	90	159,946	4,980	364,548
N,n-bis-(2-omega-hydroxypoly(oxyethylene)ethyl)alkylamine, alkyl derived from tallow fatty acids	91	157,031	67,689	2,214,080
Cryolite	92	153,916	635	17,463
Cyprodinil	93	152,156	18,757	584,026

<b>Chemical</b>	<b>Rank</b>	<b>Pounds Applied</b>	<b>Apps</b>	<b>Acres Treated</b>
Fosetyl-al	94	148,776	5,834	35,012
Bacillus thuringiensis subsp. aizawai strain: abts-1857	95	145,749	17,528	174,770
Alpha-alkyl(c9-c16)-omega-hydroxypoly(oxyethylene)	96	142,489	15,099	692,588
Propargite	97	140,411	1,219	63,752
Eptc	98	139,645	781	48,720
Acephate	99	138,085	10,145	136,874
Alkyl(42% c12, 26% c18, 15% c14, 8% c16, 5% c10, 4% c8)1,3-propylenediamine	100	137,486	0	0