

# The Top 100 Chemicals by Acres Treated 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 cumulative acres treated. 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 |
|---|------|----------------|---------|--------------|
| Alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene)*  | 1    | 1,738,683      | 191,273 | 7,864,604    |
| Dimethylpolysiloxane*   | 2    | 183,125        | 130,759 | 4,633,143    |
| Sulfur  | 3    | 38,982,187     | 118,329 | 4,587,375    |
| Mineral oil   | 4    | 34,390,365     | 144,554 | 4,529,760    |
| Methylated soybean oil*   | 5    | 2,392,443      | 125,592 | 4,120,044    |
| Lecithin*   | 6    | 736,337        | 82,311  | 2,767,161    |
| Lambda-cyhalothrin  | 7    | 108,017        | 67,896  | 2,394,279    |
| Alpha-undecyl-omega-hydroxypoly(oxyethylene)*   | 8    | 461,807        | 70,854  | 2,302,234    |
| Citric acid   | 9    | 212,843        | 65,631  | 2,284,031    |
| Ammonium sulfate  | 10   | 965,947        | 66,913  | 2,241,803    |
| Glyphosate, potassium salt  | 11   | 4,399,453      | 67,019  | 2,236,401    |
| Glyphosate, isopropylamine salt   | 12   | 5,141,183      | 75,976  | 2,200,148    |
| Abamectin   | 13   | 42,140         | 62,971  | 2,176,168    |
| Chlorantraniliprole   | 14   | 170,760        | 44,156  | 2,140,108    |
| N,n-bis-(2-omega-hydroxypoly(oxyethylene)ethyl)alkylamine, alkyl derived from tallow fatty acids* | 15   | 142,567        | 62,870  | 2,041,541    |
| Oxyfluorfen   | 16   | 806,714        | 58,356  | 1,863,502    |
| Methoxyfenozide   | 17   | 541,449        | 34,614  | 1,842,633    |

| Chemical  | Rank | Pounds Applied | Apps   | Acre Treated |
|---|------|----------------|--------|--------------|
| Glufosinate-ammonium  | 18   | 1,781,692      | 63,983 | 1,799,657    |
| Fatty acids, mixed*   | 19   | 153,791        | 36,819 | 1,734,898    |
| Tall oil fatty acids*   | 20   | 150,008        | 44,821 | 1,623,607    |
| Phosphoric acid   | 21   | 177,458        | 54,202 | 1,597,775    |
| Alpha-alkyl (c9-c11)-omega-hydroxypoly(oxyethylene)*                      | 22   | 212,429        | 46,021 | 1,512,249    |
| Bifenthrin  | 23   | 304,990        | 30,841 | 1,357,673    |
| Alpha-alkyl (secondary c12-c14)-omega-hydroxypoly(oxyethylene)*           | 24   | 152,167        | 33,189 | 1,224,505    |
| Diethylene glycol*  | 25   | 174,626        | 22,899 | 1,200,673    |
| Clethodim   | 26   | 182,855        | 28,712 | 1,142,468    |
| Propionic acid  | 27   | 186,099        | 38,155 | 1,119,156    |
| Azoxystrobin  | 28   | 220,352        | 28,897 | 1,118,743    |
| Polyacrylamide polymer*   | 29   | 10,150         | 22,690 | 1,099,218    |
| Saflufenacil  | 30   | 41,071         | 26,731 | 1,044,936    |
| Pendimethalin   | 31   | 2,184,221      | 26,887 | 1,036,278    |
| Alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene), phosphate ester* | 32   | 149,102        | 26,499 | 1,033,007    |
| Spinetoram  | 33   | 66,451         | 57,388 | 1,021,717    |
| Copper hydroxide  | 34   | 2,100,733      | 32,393 | 992,379      |
| Propylene glycol  | 35   | 84,745         | 40,169 | 989,513      |
| Imidacloprid  | 36   | 318,996        | 44,444 | 980,062      |
| Polyalkene oxide modified heptamethyl trisiloxane*                        | 37   | 35,535         | 31,431 | 976,222      |
| 4-nonylphenol, formaldehyde resin, propoxylated*                          | 38   | 103,692        | 31,964 | 910,751      |
| Spirotetramat   | 39   | 98,064         | 50,884 | 910,391      |
| Pyraclostrobin  | 40   | 107,901        | 28,603 | 863,344      |
| Rimsulfuron   | 41   | 40,406         | 27,029 | 841,255      |
| Isopropyl alcohol   | 42   | 38,206         | 28,667 | 824,582      |
| Oleic acid, methyl ester*   | 43   | 795,687        | 17,339 | 818,239      |
| Polyethylene glycol*  | 44   | 133,011        | 19,806 | 806,057      |
| Pyraflufen-ethyl  | 45   | 2,833          | 18,625 | 770,234      |
| Polyoxyethylene polyoxypropylene*   | 46   | 139,887        | 26,797 | 769,795      |
| Polybutenes   | 47   | 63,507         | 28,495 | 762,124      |
| Polyether modified polysiloxane*  | 48   | 90,616         | 32,739 | 754,863      |
| Fatty acids, c16-c18 and c18-unsaturated, methyl esters*                  | 49   | 293,559        | 27,726 | 748,205      |
| Alpha-pinene beta-pinene copolymer*                                       | 50   | 207,248        | 26,509 | 738,866      |
| Fluopyram   | 51   | 69,791         | 21,532 | 723,000      |
| Alpha-alkyl (c9-c16)-omega-hydroxypoly(oxyethylene)*                      | 52   | 152,688        | 14,780 | 695,284      |

| Chemical  | Rank | Pounds Applied | Apps   | Acre Treated |
|---|------|----------------|--------|--------------|
| Methyl silicone resins*   | 53   | 222,518        | 24,564 | 675,120      |
| Indaziflam  | 54   | 39,235         | 24,650 | 664,744      |
| Tebuconazole  | 55   | 111,325        | 15,360 | 625,590      |
| Difenoconazole  | 56   | 67,923         | 13,561 | 601,921      |
| Alkyl (c8,c10) polyglucoside*   | 57   | 102,426        | 22,823 | 601,243      |
| Oleic acid*   | 58   | 55,888         | 18,996 | 576,694      |
| Alpha-tridecyl-omega-hydroxypoly(oxyethanol) phosphate*                 | 59   | 39,944         | 14,674 | 575,640      |
| Heptamethyltrisiloxane ethoxylated*                                     | 60   | 60,826         | 12,496 | 571,140      |
| Carfentrazone-ethyl   | 61   | 12,237         | 18,640 | 568,185      |
| Heptamethyltrisiloxane-1,3-propanediol ether, ethoxylated propoxylated* | 62   | 81,049         | 22,405 | 566,871      |
| Acetamiprid   | 63   | 61,849         | 22,730 | 561,174      |
| Mancozeb  | 64   | 996,511        | 28,621 | 555,198      |
| Modified phthalic glycerol alkyd resin*                                 | 65   | 169,194        | 15,460 | 549,308      |
| Ammonium nitrate*   | 66   | 64,287         | 19,516 | 538,073      |
| Glycerol*   | 67   | 114,311        | 15,177 | 532,467      |
| Urea dihydrogen sulfate   | 68   | 229,421        | 12,526 | 515,972      |
| Fluxapyroxad  | 69   | 51,548         | 11,102 | 511,647      |
| Etoazole  | 70   | 63,900         | 11,321 | 505,975      |
| Trifloxystrobin   | 71   | 53,126         | 17,376 | 493,955      |
| Thiamethoxam  | 72   | 57,961         | 23,099 | 492,488      |
| Oleic acid, ethyl ester*  | 73   | 233,584        | 27,045 | 490,973      |
| Polyethylene glycol stearate*   | 74   | 55,731         | 27,006 | 487,858      |
| Esfenvalerate   | 75   | 36,762         | 15,344 | 484,094      |
| Bifenazate  | 76   | 303,869        | 12,661 | 481,744      |
| Tall oil*   | 77   | 41,400         | 11,987 | 479,786      |
| Dimethyl alkyl tertiary amines*   | 78   | 3,949          | 20,214 | 477,820      |
| Benzoic acid*   | 79   | 3,619          | 20,214 | 477,820      |
| 2-(3-hydroxypropyl)-hepta-methyl trisiloxane, ethoxylated, acetate*     | 80   | 107,436        | 22,461 | 473,431      |
| Gibberellins  | 81   | 17,359         | 16,245 | 466,836      |
| Flupyradifurone   | 82   | 67,254         | 18,902 | 460,758      |
| Permethrin  | 83   | 172,726        | 36,521 | 458,938      |
| Alpha-(para-dodecylphenyl)-omega-hydroxypoly(oxyethylene)*              | 84   | 20,348         | 19,104 | 450,641      |
| Ammonium propionate*  | 85   | 83,226         | 15,213 | 447,676      |
| Propiconazole   | 86   | 92,296         | 16,238 | 437,973      |
| Cyflumetofen  | 87   | 77,465         | 9,364  | 426,462      |
| Alpha-(para-nonylphenyl)-omega-hydroxypoly(oxyethylene), branched*      | 88   | 160,293        | 11,862 | 424,186      |
| Potassium phosphite   | 89   | 1,177,730      | 21,939 | 419,155      |

| <b>Chemical</b>   | <b>Rank</b> | <b>Pounds Applied</b> | <b>Apps</b> | <b>Acre Treated</b> |
|---|-------------|-----------------------|-------------|---------------------|
| <b>Poly(oxyethylene) poly(oxypropylene) glycol monoallyl ether*</b>     | 90          | 42,496                | 13,240      | 417,430             |
| <b>Flumioxazin</b>  | 91          | 107,299               | 13,994      | 404,208             |
| <b>Hexythiazox</b>  | 92          | 69,769                | 9,089       | 400,429             |
| <b>Penthiopyrad</b>   | 93          | 99,286                | 12,425      | 394,971             |
| <b>Cyprodinil</b>   | 94          | 114,062               | 14,249      | 390,043             |
| <b>Methomyl</b>   | 95          | 251,949               | 26,971      | 384,233             |
| <b>Ethephon</b>   | 96          | 333,362               | 8,628       | 381,928             |
| <b>Cyantraniliprole</b>   | 97          | 57,708                | 26,656      | 381,701             |
| <b>Alpha-2,6,8-trimethyl-4-nonyloxy-omega-hydroxypoly(oxyethylene)*</b> | 98          | 70,320                | 13,549      | 381,013             |
| <b>Pyriproxyfen</b>   | 99          | 22,830                | 9,330       | 379,563             |
| <b>Sodium polyacrylate*</b>   | 100         | 2,335                 | 9,774       | 376,981             |