## The Top 100 Chemicals by Pounds in Total Statewide Pesticide Use in 2021

Text files of data are available at <a href="https://files.cdpr.ca.gov/pub/outgoing/pur/data/">https://files.cdpr.ca.gov/pub/outgoing/pur/data/</a>. 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.

|                            |      | Pounds     |         |              |
|----------------------------|------|------------|---------|--------------|
| Chemical                   | Rank | Applied    | Apps    | Acre Treated |
| sulfur                     | 1    | 40,158,469 | 120,534 | 4,732,431    |
| mineral oil                | 2    | 37,089,143 | 151,244 | 4,822,049    |
| 1,3-dichloropropene        | 3    | 11,086,414 | 2,807   | 61,509       |
| potassium n-               |      |            |         |              |
| methyldithiocarbamate      | 4    | 8,513,080  | 2,042   | 44,736       |
| chloropicrin               | 5    | 8,506,588  | 2,205   | 45,991       |
| glyphosate, potassium salt | 6    | 5,609,918  | 80,825  | 2,783,021    |
| glyphosate,                |      |            |         |              |
| isopropylamine salt        | 7    | 4,704,007  | 72,656  | 1,916,133    |
| calcium hydroxide          | 8    | 4,331,909  | 9,202   | 206,339      |
| metam-sodium               | 9    | 3,593,891  | 499     | 17,697       |
| sulfuryl fluoride          | 10   | 3,065,098  | 47      | 42           |
| kaolin                     | 11   | 2,616,436  | 2,805   | 71,882       |
| pendimethalin              | 12   | 2,437,026  | 30,922  | 1,114,304    |
| methylated soybean oil*    | 13   | 2,355,756  | 128,475 | 4,171,030    |
| copper hydroxide           | 14   | 2,044,752  | 31,739  | 997,734      |
| propanil                   | 15   | 1,968,013  | 5,809   | 413,305      |
| glufosinate-ammonium       | 16   | 1,952,176  | 68,909  | 1,920,076    |
| alpha-(para-nonylphenyl)-  |      |            |         |              |
| omega-                     |      |            |         |              |
| hydroxypoly(oxyethylene)*  | 17   | 1,818,978  | 209,253 | 8,296,943    |
| lime-sulfur                | 18   | 1,679,134  | 2,976   | 103,118      |
| methyl bromide             | 19   | 1,603,060  | 381     | 5,785        |

|                                      |      | Pounds    |        |              |
|--------------------------------------|------|-----------|--------|--------------|
| Chemical                             | Rank | Applied   | Apps   | Acre Treated |
| copper sulfate                       |      |           |        |              |
| (pentahydrate)                       | 20   | 1,381,787 | 3,052  | 181,854      |
| sodium hypochlorite                  | 21   | 1,335,028 | 111    | 2,502        |
| copper ethanolamine                  |      |           |        |              |
| complexes, mixed                     | 22   | 1,329,086 | 56     | 6,542        |
| potassium phosphite                  | 23   | 1,259,728 | 21,829 | 418,409      |
| mancozeb                             | 24   | 1,043,342 | 28,192 | 555,543      |
| ammonium sulfate                     | 25   | 1,015,194 | 70,360 | 2,423,024    |
| chlorothalonil                       | 26   | 913,164   | 14,323 | 406,933      |
| copper sulfate (basic)               | 27   | 883,919   | 8,821  | 224,825      |
| oxyfluorfen                          | 28   | 869,732   | 62,998 | 2,028,785    |
| boric acid                           | 29   | 725,765   | 62     | 867          |
| lecithin*                            | 30   | 710,402   | 81,839 | 2,617,080    |
| diatomaceous earth                   | 31   | 695,186   | 4,909  | 42,287       |
| oleic acid, methyl ester*            | 32   | 689,657   | 15,720 | 674,247      |
| disodium octaborate                  |      |           |        |              |
| tetrahydrate                         | 33   | 615,180   | 44     | 4,717        |
| methoxyfenozide                      | 34   | 571,255   | 36,859 | 1,951,177    |
| hydrogen peroxide                    | 35   | 564,514   | 14,275 | 189,893      |
| burkholderia sp strain a396          |      |           |        |              |
| cells and fermentation               |      |           |        |              |
| media                                | 36   | 527,545   | 7,899  | 88,667       |
| alpha-undecyl-omega-                 |      |           |        |              |
| hydroxypoly(oxyethylene)*            | 37   | 488,514   | 73,643 | 2,434,053    |
| ziram                                | 38   | 487,948   | 4,855  | 88,762       |
| hydrogen cyanamide                   | 39   | 478,503   | 1,107  | 33,510       |
| vegetable oil*                       | 40   | 449,080   | 3,657  | 322,826      |
| paraquat dichloride                  | 41   | 426,104   | 7,719  | 399,445      |
| bifenthrin                           | 42   | 425,966   | 33,547 | 1,450,253    |
| sodium bromide                       | 43   | 417,695   | <0.01  | 194          |
| fatty acids, methyl esters           | 44   | 413,156   | 8,463  | 358,639      |
| thiobencarb                          | 45   | 394,055   | 1,377  | 116,407      |
| 4-nonylphenol,                       |      |           |        |              |
| formaldehyde resin,<br>propoxylated* | 46   | 276 647   | 36,697 | 1 120 100    |
| fatty acids, c16-c18 and             | 40   | 376,647   | 30,097 | 1,130,188    |
| c18-unsaturated, methyl              |      |           |        |              |
| esters*                              | 47   | 359,969   | 31,742 | 933,661      |
| bensulide                            | 48   | 340,608   | 9,736  | 93,386       |
| captan                               | 49   | 332,842   | 5,844  | 190,677      |
| imidacloprid                         | 50   | 330,638   | 48,480 | 1,070,291    |
| 2,4-d, dimethylamine salt            | 51   | 330,382   | 7,114  | 268,137      |
| ethephon                             | 52   | 317,821   | 8,984  | 381,836      |
| etilepiloli                          | 32   | 317,041   | 0,704  | 301,030      |

|  |      | Pounds  |         |                  |
|--|------|---------|---------|------------------|
| Chemical                               | Rank | Applied | Apps    | Acre Treated     |
| bifenazate                             | 53   | 315,776 | 12,255  | 495,356          |
| copper oxychloride                     | 54   | 310,974 | 9,132   | 271,077          |
| trifluralin                            | 55   | 304,787 | 6,685   | 261,165          |
| sulfur dioxide                         | 56   | 295,852 | 175     | 129              |
| s-metolachlor                          | 57   | 291,451 | 4,547   | 192,514          |
| peroxyacetic acid                      | 58   | 289,683 | 13,388  | 189,103          |
| cryolite                               | 59   | 288,310 | 1,343   | 34,714           |
| oleic acid, ethyl ester*               | 60   | 284,148 | 27,653  | 577,747          |
| caprylic acid                          | 61   | 271,317 | 2,916   | 41,044           |
| sodium carbonate                       | -    | 7-      | ,       | ,-               |
| peroxyhydrate                          | 62   | 266,624 | 207     | 12,227           |
| castor oil ethoxylate*                 | 63   | 255,260 | 7,655   | 243,917          |
| azoxystrobin                           | 64   | 252,486 | 31,578  | 1,266,941        |
| petroleum oil, unclassified            | 65   | 252,249 | 439     | 18,310           |
| sodium chlorite                        | 66   | 251,911 | 143     | 8,328            |
| malathion                              | 67   | 247,106 | 8,612   | 157,033          |
| methylated fatty acids                 |      |         |         |                  |
| from canola oil*                       | 68   | 245,001 | 3,964   | 156,757          |
| borax                                  | 69   | 241,002 | 469     | 17,410           |
| methomyl                               | 70   | 235,742 | 22,687  | 368,623          |
| diethylene glycol*                     | 71   | 231,261 | 26,508  | 1,375,352        |
| copper oxide (ous)                     | 72   | 220,425 | 4,290   | 82,059           |
| bacillus amyloliquefaciens             |      |         |         |                  |
| strain d747                            | 73   | 220,056 | 5,983   | 54,626           |
| dimethylpolysiloxane*                  | 74   | 205,880 | 134,989 | 4,899,422        |
| permethrin                             | 75   | 203,283 | 36,107  | 504,184          |
| sodium chlorate                        | 76   | 199,114 | 355     | 22,381           |
| chlorantraniliprole                    | 77   | 198,752 | 47,880  | 2,323,295        |
| naled                                  | 78   | 194,516 | 4,044   | 136,832          |
| buprofezin                             | 79   | 194,087 | 5,047   | 207,259          |
| chlorthal-dimethyl                     | 80   | 193,533 | 6,193   | 47,207           |
| capric acid                            | 81   | 192,755 | 2,914   | 41,017           |
| potassium bicarbonate                  | 82   | 192,488 | 5,403   | 72,168           |
| phosphoric acid                        | 83   | 192,143 | 58,455  | 1,900,125        |
| citric acid                            | 84   | 191,635 | 62,948  | 2,185,354        |
| glyphosate, dimethylamine              | Q.F  | 100 (22 | 1 (20   | F2 011           |
| salt                                   | 85   | 190,622 | 1,630   | 53,811           |
| alpha-pinene beta-pinene<br>copolymer* | 86   | 189,361 | 25,546  | 669,646          |
| triclopyr, triethylamine salt          | 87   | 185,789 | 4,189   | 294,920          |
| urea dihydrogen sulfate                | 88   | 185,288 | 11,645  | 469,740          |
| propionic acid                         | 89   | 184,964 | 37,986  | 1,091,157        |
| chlorine                               | 90   | 180,763 | <0.01   | 1,091,137<br>N/A |
| cilionne                               | 90   | 100,703 | <0.01   | IN/A             |

|                           |      | Pounds  |        |              |
|---------------------------|------|---------|--------|--------------|
| Chemical                  | Rank | Applied | Apps   | Acre Treated |
| corn steep liquor*        | 91   | 175,174 | 1,200  | 45,126       |
| clethodim                 | 92   | 174,040 | 25,980 | 1,062,714    |
| lambda-cyhalothrin        | 93   | 173,094 | 70,450 | 2,473,490    |
| potash soap               | 94   | 169,318 | 8,699  | 34,820       |
| tall oil fatty acids*     | 95   | 168,605 | 47,630 | 1,773,987    |
| emulsifiable methylated   |      |         |        |              |
| vegetable oil*            | 96   | 168,160 | 18,885 | 333,952      |
| alpha-(para-nonylphenyl)- |      |         |        |              |
| omega-                    |      |         |        |              |
| hydroxypoly(oxyethylene), |      |         |        |              |
| phosphate ester*          | 97   | 163,697 | 29,481 | 1,030,472    |
| propylene oxide           | 98   | 163,231 | < 0.01 | N/A          |
| fatty acids, mixed*       | 99   | 163,055 | 41,048 | 1,807,121    |
| alkyl(42\%c12, 26\%c18,   |      |         |        |              |
| 15\%c14, 8\%c16, 5\%c10,  |      |         |        |              |
| 4\%c8)1,3-                |      |         |        |              |
| propylenediamine          | 100  | 161,578 | < 0.01 | 3            |