Organophosphate Pesticides Reported Used in California, 2023

CAS Registry numbers, statewide pounds, current California product registrations, leading counties, and principal uses

Active ingredient	CAS Registry No.	2023 pounds used	Current active CA products	Primary 2023 counties / concentration	Major 2023 California uses / pattern
Bensulide	741-58-2	383,989	8	Monterey (~173,000 lb); Imperial (~120,000); San Benito (~14,000)	Leaf lettuce (~157,300 lb); broccoli (~67,600); head lettuce (~61,200); dry onions (~18,200); cantaloupe/arugula and other vegetables. Largest 2023 OP by pounds.
Malathion	121-75-5	272,549	17	Kings (~51,000 lb); Santa Barbara (~36,000); Monterey (~34,000)	Cotton (~53,379 lb); strawberries (~43,979); alfalfa (~38,050); leaf lettuce (~20,612); celery (~12,020); processing tomatoes (~11,761); cherries (~11,006); public health (~6,257).
Naled	300-76-5	232,889	4	Yolo (~21,100 lb); Monterey (~15,400); San Joaquin (~15,200)	Public-health mosquito control (~106,621 lb); cotton (~60,446); safflower (~24,502); strawberries (~16,569); Brussels sprouts (~6,922); broccoli (~6,594). Public health accounts for nearly half of use.
Acephate	30560-19-1	138,085	25	Fresno (~35,000 lb); Monterey (~19,000); Kings (~16,000)	Cotton (~56,900 lb across reporting units); head lettuce (~17,400); tangerines (~10,400); pistachios (~10,300); celery (~9,500). Cotton is the dominant use.
Dimethoate	60-51-5	111,215	7	Fresno (~36,500 lb); Kings (~23,400); Tulare (~12,400)	Processing tomatoes (~28,636 lb); alfalfa (~22,643); cotton (~22,560); oranges (~12,561); safflower (~5,613).
Diazinon	333-41-5	39,932	4	Colusa (~15,000 lb); Yolo (~7,400); Sutter (~3,400)	Processing tomatoes (~20,470 lb); fresh tomatoes (~7,305); dry onions (~3,957); apples (~2,171); pears (~1,769); bok choy (~1,300).
Ethoprop (Ethoprophos)	13194-48-4	13,006	3	Merced (~6,400 lb) dominates sweet-potato use; additional use in potato-growing counties; Del Norte (~700)	Sweet potatoes (~7,530 lb); potatoes (~3,904); smaller use on outdoor flowers, cabbage and dried beans.
Phosmet	732-11-6	6,615	3	Tehama (~3,000 lb); San Joaquin (~1,600); Tulare (~300)	Almonds (~3,149 lb); apples (~1,326); smaller uses on oranges, alfalfa, peaches and nursery plants.
Dichlorvos (DDVP)	62-73-7	4,068	34	Dispersed nonagricultural use; Tulare and San Joaquin are among identifiable higher-use counties	Structural pest control; animal premises; commodity/storage fumigation; warehouses. County ranking is less meaningful because use is largely non-crop.
Phorate	298-02-2	3,452	2	Kings (~2,200 lb); Del Norte (~700); Riverside (~400)	Cotton (~2,739 lb); outdoor flowers/nursery (~712). Use is highly concentrated in cotton.
Chlorpyrifos	2921-88-2	1,933	4	Dispersed low-volume use; no meaningful agricultural county concentration after phase-out	Primarily rights-of-way and other nonagricultural uses; very limited crop use. Most California agricultural uses ended in 2020.
Tetrachlorvinphos	22248-79-9	0.26	25	Trace use; no meaningful county concentration	Landscape maintenance and structural pest control; essentially non-crop use.
Coumaphos	56-72-4	0.05	1	Trace use; no meaningful county concentration	Very limited non-crop/structural use.

Notes: 2023 pounds reflect statewide reported use and can include nonagricultural categories. County entries identify the strongest 2023 county concentrations visible in DPR county summaries; approximate county pounds are rounded. For trace or predominantly structural/nonagricultural uses, a ranked county list may not be meaningful. “Current active CA products” is DPR’s current number of actively registered products containing that active ingredient (DPR active-ingredient list generated September 7, 2026).

DPR sources: 2023 PUR chemical totals; 2023 chemical-by-commodity data; 2023 county chemical subtotals; current actively registered active ingredients.
https://files.cdpr.ca.gov/pub/outgoing/pur/data/2023_pur_report_textfiles/Pesticide_use_report_lists/2023_pesticide_use_report_data_chemical_totals.txt
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