SPARC Data Pull – Category 2 – Registration Branch

Listed product registration counts and regulatory summaries are accurate as of November 4, 2026, and are subject to change.

Cyhalothrins

Lambda- and gamma-cyhalothrin (also referred to as "cyhalothrins") are non-systemic, Type II pyrethroid insecticides. Type II synthetic pyrethroids contain an alpha-cyano group which renders them more neurotoxic than their non-cyano type I counterparts. Like other pyrethroids, the cyhalothrins cause neurotoxicity by interacting with sodium channels. Products containing cyhalothrins are registered for use on a variety of sites including agricultural crops, cattle ear tag and pour-on treatment, food handling establishments, ornamental gardens, lawns/turf, golf courses, and general insect control (spot and crack/crevice treatments) in and around buildings, structures, and immediate surroundings (including residential uses). Currently there are 133 actively registered lambda-cyhalothrin, and 21 actively registered gamma-cyhalothrin pesticide products with DPR.

U.S. EPA Regulatory Overview

In 2021, U.S. EPA published the Lambda-Cyhalothrin and Gamma-Cyhalothrin Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2010-0480-0380>. This document summarizes the Agency's human health risk assessments and provides updated occupational and residential risk estimates. EPA evaluated the current registered uses of lambda- and gamma-cyhalothrin and identified human health risks of concern for occupational handler exposures, residential post-application exposures, and bystander exposures from off-target deposition of sprays on turf and lawns. These concerns resulted in mandatory labeling changes including:

1. For residential risks; removing uses, prohibiting certain application methods, and adding mandatory and advisory spray drift management measures.
2. For occupational handler risks: prohibiting certain application methods (mostly the use of handheld equipment) and adding PPE (gloves, double layer clothing, and a PF10 respirator).
3. For occupational post-application risks: lowering application rates on specific crops and updating re-entry intervals for both lambda- and gamma-cyhalothrin.

4. For risks to bystander from spray drift: requiring an update to mandatory and advisory spray drift language.

California DPR Regulatory Outlook

Lambda- and Gamma-cyhalothrin were included in DPR's reevaluation of certain pesticide products containing pyrethroids, initiated in 2006 and closed in 2014. This reevaluation was based on the widespread presence of synthetic pyrethroid residues in the sediment of both agricultural and urban dominated California waterways at levels toxic to *Hyalella azteca*. This reevaluation resulted in regulations designed to control urban runoff risks.

- Gamma-cyhalothrin DPR web page <cdpr.ca.gov/active-ingredient/gamma-cyhalothrin/>
- Lambda-cyhalothrin DPR web page <cdpr.ca.gov/active-ingredient/lambda-cyhalothrin/>

Dichlorvos (DDVP)

Dichlorvos (DDVP)(DPR chemical code 187) is an organophosphate insecticide registered for use for control of insects in stored products, livestock housing, and structural or enclosed spaces. It is applied as a spray, fog, or vapor producing resin strips. Dichlorvos is designated by U.S. EPA as a restricted use pesticide. The active ingredient naled degrades into DDVP. Currently there are 34 active registered products with DPR.

U.S. EPA Regulatory Outlook

In 2020, U.S. EPA published its Draft Human Health Risk Assessment for Registration Review <regulations.gov/document/EPA-HQ-OPP-2009-0209-0019>. This risk assessment updates U.S. EPA's dietary assessment, found risks of concern for occupational handlers and post-application workers, evaluated residential exposures, and determined that some aggregate exposures scenarios exceeded the Agency's level of concern. EPA's 2020 DDVP Occupational and Residential Exposure Assessment in Support of Registration Review <regulations.gov/document/EPA-HQ-OPP-2009-0209-0024> summarizes risk estimates and provides label recommendations for uses of concern. As of 2026, EPA has not issued a proposed interim decision or interim registration review decision for dichlorvos.

California DPR Regulatory Outlook

In 1996, the California Department of Pesticide Regulation (DPR) completed a Risk Characterization Document <cdpr.ca.gov/wp-content/uploads/2024/10/ddvp.pdf> for dichlorvos and updated through multiple addenda, with a third addendum in 2008. DPR implemented risk mitigation measures intended to reduce human exposure. Dichlorvos is classified as a Toxic Air Contaminant in California. Link to DPR web page for dichlorvos. <cdpr.ca.gov/active-ingredient/dichlorvos-ddvp/>

Naled

Naled (DPR chemical code 418) is an organophosphate insecticide registered for use on agricultural crops, ornamentals, in and around commercial settings, livestock feedlots and pastures, in greenhouses, and in public pest control programs. It is applied by ground or aerial equipment. Naled is designated by U.S. EPA as a restricted use pesticide. Currently there are 4 active registered products with DPR.

U.S. EPA Regulatory Outlook

In 2020, U.S. EPA published its Draft Human Health Risk Assessment for Registration Review for naled <regulations.gov/document/EPA-HQ-OPP-2009-0053-0053>. Because naled degrades to dichlorvos, EPA also considered potential exposure to dichlorvos resulting from naled use. EPA identified both human health risks associated with registered uses of naled, including exposures during wide-area mosquito control applications and agricultural spray drift concerns. As of 2026, EPA has not issued a proposed interim decision or interim decision for naled.

California DPR Regulatory Outlook

In 2001, DPR published an addendum to the Naled Risk Characterization Document <cdpr.ca.gov/active-ingredient/naled/>.

Fluopyram

Fluopyram (DPR chemical code 6004) is a fungicide and nematicide whose biochemical mode of action involves the inhibition of the enzyme succinate dehydrogenase. Fluopyram was first registered in 2012 and is registered for use on a variety of agricultural crops, and non-agricultural uses on Christmas tree plantations, ornamentals, and turf. It is applied as a foliar or soil spray by ground and aerial equipment and as a seed treatment. Currently there are 11 actively registered fluopyram products with DPR.

U.S. EPA Regulatory Overview

In 2022, U.S. EPA published its Fluopyram Final Work Plan <regulations.gov/document/EPA-HQ-OPP-2021-0350-0009>. The Final Work Plan highlights data and risk assessment needs and provides an anticipated timeline for completing the registration review of fluopyram. In November 2025, U.S. EPA issued a data call-in. As of 2026, EPA has not issued a proposed interim decision or interim decision for fluopyram.

California DPR Regulatory Outlook

DPR has not conducted any recent continuous evaluation activity on fluopyram.

Malathion

Malathion (DPR chemical code 367) is an organophosphate insecticide registered for use on agricultural crops, ornamentals, outdoor (commercial and residential) perimeter treatments, residential gardens, and public health mosquito control. It is applied as a ground and aerial spray or by chemigation. Currently there are 17 active registered products with DPR.

U.S. EPA Regulatory Outlook

In 2024, U.S. EPA published its Proposed Interim Registration Review Decision for malathion <regulations.gov/document/EPA-HQ-OPP-2009-0317-0175>. The updated human health assessment of malathion concluded there are no human health risks of concern, but potential risks to several of the assessed ecological taxa were identified. EPA proposed mitigation measures including updated PPE requirements, strengthened spray drift management controls, a 96 hour rice water holding period, and additional protections for mixers and loaders. As of 2026, EPA has not issued an interim decision for Malathion.

California DPR Regulatory Outlook

DPR has not conducted any recent continuous evaluation activity on malathion.

Methyl Bromide

Methyl bromide (DPR chemical code 385) is a broad-spectrum fumigant chemical that can be used as an acaricide, antimicrobial, fungicide, herbicide, insecticide, nematicide, and vertebrate control agent. Products containing methyl bromide are registered for pre-plant soil fumigation for food and ornamental crops, structural and industrial fumigations, and post-harvest food and non-food commodity uses. Currently there are 25 actively registered methyl bromide products with DPR.

U.S. EPA Regulatory Overview

In 2020, U.S. EPA published its Interim Registration Review Decision for methyl bromide <regulations.gov/document/EPA-HQ-OPP-2013-0269-0049>. This document identified continuing concerns regarding acute inhalation exposure to fumigation workers and potential bystander exposures. EPA required label updates included updated glove statements, updated critical use exemption language, updated Fumigant Management Plan requirements, and clarification of use in shade houses. Methyl bromide is a Restricted Use Pesticide.

California DPR Regulatory Outlook

In 2001, DPR commenced reevaluation of pesticide products containing methyl bromide and intended for use as soil applied fumigants. Ambient air quality monitoring results were submitted, which confirmed the existence of unacceptable seasonal exposures in certain situations. In 2004, DPR adopted methyl bromide field fumigation regulations to mitigate possible exposures to workers and the public. DPR's reevaluation was closed in 2008 following the determination that seasonal methyl bromide exposure is below the required regulation limit. DPR's 2010 Methyl Bromide Regulations Risk Management Decision instructed staff to mitigate occupational bystander exposures. In response, work-hour regulations were amended to further protect handlers, and buffer zones were widened to further protect bystanders. In 2017, DPR released a memo notifying the completion of mitigation for field soil fumigations, citing a steady decline in use due to only critical uses and quarantine pre-shipment applications being approved. Link to DPR web page for methyl bromide <cdpr.ca.gov/active-ingredient/methyl-bromide/>.

Organophosphate Class

Organophosphate pesticides are a class of insecticides that act by inhibiting the enzyme acetylcholinesterase. They are used in agriculture to control a wide variety of pests on various crops, in livestock and structural pest applications, and for control of external parasites on dogs and cats. Because the mechanism of action is not specific to insects, these chemicals are also toxic to humans, pets, and other animals is exposure is sufficient. Because of these toxicity concerns, many organophosphate uses have been reduced or eliminated and are subject to extensive regulatory controls. 12 organophosphate active ingredients in addition to the 3 included above are covered in this regulatory summary table for consideration as a pesticide class.

Table 1. Regulatory summaries for organophosphate chemicals

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
Acephate	1685	25	Insecticide. Agricultural (ground and air application), outdoor non-agricultural, indoor commercial/institutional, greenhouse ornamental.	2024- Acephate Proposed Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2008-0915-0146> This proposed interim registration review decision finds that current uses of acephate pose dietary risks, risks to occupational handlers, and risk to non-target organisms. EPA proposes to cancel all uses of acephate other than tree injection.	DPR identified acute mitigation exposure concerns with certain uses of the chemical, labels containing these uses have been updated with appropriate precautionary language. Link to DPR web page for acephate.<cdpr.ca.gov/ active-ingredient/acephate />
Bensulide	70	9	Herbicide. Preplant agricultural ground spray application, golf courses, home lawns.	2016- Bensulide Human Health Risk Assessment <regulations.gov/document/EPA-HQ-OPP-2008-0022-0019>	No recent DPR continuous evaluation action.
Chlorpyrifos	253	4	Insecticide. Granular formulations for	2020- Chlorpyrifos Proposed Interim Registration Review Decision <regulations.gov/docum	In 2020, DPR cancelled all uses of chlorpyrifos except for a few

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
			structural and landscaping use.	ent/EPA-HQ-OPP-2008-0850-0971>	products applied in granular form. DPR's risk assessment found that chlorpyrifos is associated with serious health effects in children and sensitive populations. Designated as a toxic air contaminant in 2019. Link to DPR web page for chlorpyrifos. <cdpr.ca.gov/active-ingredient/chlorpyrifos/>
Coumaphos	165	1	Insecticide for use in honeybee colonies. Strip formulation.	2021- Coumaphos Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2008-0023-0095>	No recent DPR continuous evaluation action.

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
Diazinon	198	4	Insecticide. Agricultural and ornamental ground spray application, cattle ear tags.	2016- Draft Human Health Risk Assessment for Registration Review <regulations.gov/document/EPA-HQ-OPP-2008-0351-0093>	Reevaluation initiated in 2003 due to surface water contamination. Reevaluation concluded in 2017, due to diazinon use dropping to a level of minimal risk to aquatic organisms as a result of federal restrictions, regional water-quality programs, and grower practice changes. Link to DPR web page for diazinon. <cdpr.ca.gov/active-ingredient/diazinon/>

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
Dimethoate	216	7	Insecticide/acaricide. Agricultural (ground, air, soil drench) applications.	2024- Dimethoate Proposed Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2009-0059-0074>	No recent DPR continuous evaluation action.
Ethoprop	404	3	Insecticide/nematicide. Agricultural use (ground). Restricted Use Product.	2015- Ethoprop Draft Human Health Risk Assessment for Registration Review <regulations.gov/document/EPA-HQ-OPP-2008-0560-0028>	Risk characterization document published in 1995. 2016 DPR memo cited low/declining use and lack of illness reports to find no need for additional mitigation. Link to DPR web page for ethoprop. <cdpr.ca.gov/active-ingredient/ethoprop/>

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
Fosthiazate	2325	1	Nematicide. Agriculture use on tomatoes. Only applied through drip irrigation.	2014- Fosthiazate Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2009-0267-0019>	No recent DPR continuous evaluation action.
Phorate	478	2	Insecticide. Agriculture use. Requires a closed loading system to prevent contact. Restricted Use Pesticide.	2009- Phorate Final Work Plan <regulations.gov/document/EPA-HQ-OPP-2009-0055-0010>	No recent DPR continuous evaluation action.
Phosmet	335	3	Insecticide. Agriculture use (ground/air) applications. Conifer and nursery ornamentals. Also used as a spray or backrubber treatment for cattle.	2016- Phosmet Draft Human Health Risk Assessment to Support Registration Review <regulations.gov/document/EPA-HQ-OPP-2009-0316-0022>	No recent DPR continuous evaluation action.

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
Tetrachlorvinphos	305	25	Insecticide. Liverstock, poultry, and premise spray. Flea and tick spray/collar for dogs and cats.	2024- Tetrachlorvinphos (TCVP) Interim Registration Review Decision <regulations.gov/document/EPA-HQ-OPP-2008-0316-0129>	No recent DPR continuous evaluation action.
Tribufos	190	1	Cotton defoliant agricultural use (aerial/ground application).	2015- Tribufos Human Health Draft Risk Assessment for Registration Review <regulations.gov/document/EPA-HQ-OPP-2008-0883-0011>	Mitigation completed in 2026. <cdpr.ca.gov/wp-content/uploads/2024/10/completion_of_tribufos_mitigation.pdf> DPR negotiated with registrant to amend label to reduce maximum acres treated per day, and prohibited irrigation and hand weeding activities after application. Link to DPR web page for tribufos. <cdpr.ca.gov/active-ingredient/sss-tributyl-

Organophosphate Active Ingredient	DPR chemical code	Number of Active Registered Products	General Use	Link to latest EPA Decision or Human Health Risk Assessment	Recent DPR Regulatory Actions
					phosphorotrithioate -tribufos-def-folex/>