

Department of Pesticide Regulation  
Nonfumigant volatile organic compound (VOC) regulations  
Product list (updated November 2, 2018)

The Department of Pesticide Regulation's (DPR's) nonfumigant VOC regulations (California Code of Regulations (CCR) sections 6452.2, 6558, 6577, 6880, 6881, 6883, 6884 and 6886) include sales and use restrictions for certain agricultural use products containing any of the following pesticides as the primary active ingredient provided certain criteria are met.

<b>Primary Active Ingredient</b>	<b>Emission Potential (EP) Threshold (%)</b>
Abamectin	35
Chlorpyrifos	25
Gibberellins	25
Oxyfluorfen	15

If a product contains more than one active ingredient, the primary active ingredient is the one present at the highest percentage in a product. These criteria do not apply to products that contain an active ingredient listed above, but not as the primary active ingredient, including products with one or more active ingredients present at the same percentage.

The emission potential (EP) is an estimate of the product VOC content and is normally determined by the registrant using thermogravimetric analysis, with the test results reviewed and approved by DPR.

Products labeled only for non-agricultural uses are excluded from the proposed regulations. Non-agricultural uses include: a) home use; b) use in structural pest control; c) industrial or institutional use; d) control of an animal pest under the written prescription of a veterinarian; or e) vector control. All other uses are considered agricultural.

DPR classifies products containing any of the four pesticides into three groups:

**High-VOC product:** a) contains any of the four pesticides as a primary active ingredient; and b) labeled for agricultural use; and c) the EP is greater than the threshold.

**Low-VOC product:** a) contains any of the four pesticides as a primary active ingredient; and b) labeled for agricultural use; and c) the EP is equal to or less than the threshold.

**Excluded product:** a) contains any of the four pesticides, but not as a primary active ingredient; or b) labeled only for non-agricultural use.

The nonfumigant VOC restrictions only apply to high-VOC products. Low-VOC products or excluded products have no restrictions.

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Actively registered products containing **abamectin**. Products are listed in order by EP. Products highlighted in orange indicate a change from the last list. If a product was only recently registered or has an inactive registration it may not appear on the list below. Agricultural products with inactive registrations are considered high-VOC unless they are listed below as low-VOC, formulated as a solid (e.g., powder, granule), or meet the criteria for excluded products.

**Low-VOC Abamectin Products, EP ≤ 35.0% (20)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Abacide 2	7946-27-AA	J.J. Mauget Co.	Solution/Liquid	0.00
Abacide 2 HP	7946-30-AA	J.J. Mauget Co.	Solution/Liquid	0.00
Wipe Out	90326-1-AA	B & K Distributors	Solution/Liquid	3.00
Epi-Mek SCL	100-1439-AA	Syngenta Crop Protection, Inc.	Other (Liquid Suspension)	3.08
Award II Fire Ant Bait	100-1452-AA	Syngenta Crop Protection, Inc.	Granular/Flake	3.70
Clinch Ant Bait	100-894-ZB	Syngenta Crop Protection, Inc.	Granular/Flake	3.70
Advance 375A Granular Ant Bait	499-370-ZD	BASF Corporation	Granular/Flake	3.70
Ascend Fire Ant Granular Bait	499-370-ZE	BASF Corporation	Granular/Flake	3.70
Willowood Abamectin 0.7SC	87290-36-AA	Willowood, LLC	Aqueous Suspension	4.62
Avert DF Dry Flowable Cockroach Bait	499-294-ZB	BASF Corporation	Dust/Powder	5.55
Agri-Mek SC Miticide/Insecticide	100-1351-ZA	Syngenta Crop Protection, LLC	Aqueous Suspension	5.63
Willowood Abamectin 0.15LV	87290-68-AA	Willowood, LLC	Liquid Concentrate	7.61
Abamex Miticide/Insecticide	228-734-AA	Nufarm Americas Inc.	Liquid Concentrate	24.10
Minx 2 Miticide/Insecticide	228-736-AA	Nufarm Americas Inc.	Liquid Concentrate	24.10
Abacus V	83100-32-AA-83979	Rotam North America, Inc.	Emulsifiable Concentrate	27.26
Timectin 0.15 EC Ag Insecticide/Miticide	84229-2-AA	Tide International USA, Inc.	Emulsifiable Concentrate	29.75
Timectin 0.15 EC T&O Insecticide/Miticide	84229-1-AA	Tide International USA, Inc.	Emulsifiable Concentrate	29.75
Reaper Clearform	34704-1078-ZA	Loveland Products Inc.	Liquid Concentrate	31.08
Abba Ultra Miticide/Insecticide	66222-226-AA	Makhteshim-Agan of North America	Emulsifiable Concentrate	34.18
Abba Ultra Miticide/Insecticide	5481-621-AA	AMVAC Chemical Corporation	Emulsifiable Concentrate	34.18

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**High-VOC Abamectin Products, EP > 35.0% (13)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Willowood Abamectin 0.15EC	87290-58-AA	Willowood, LLC	Emulsifiable Concentrate	46.70
Abamectin 0.15EC Select	89442-20-AA	Prime Source, LLC.	Emulsifiable Concentrate	46.70
Aracinate	74779-1-AA	Rainbow Treecare Scientific	Other (Liquid)	55.10
Ardent 0.15 EC Miticide/Insecticide	100-896-ZC	Syngenta Crop Protection, Inc.	Emulsifiable Concentrate	55.10
Avid 0.15EC Miticide/Insecticide	100-896-ZD	Syngenta Crop Protection, Inc.	Emulsifiable Concentrate	55.10
Abacus Agricultural Miticide/Insecticide	83100-4-AA-83979	Rotam North America, Inc.	Emulsifiable Concentrate	60.54
Lucid Ornamental Miticide/Insecticide	83100-5-AA-83979	Rotam North America, Inc.	Emulsifiable Concentrate	60.54
Zoro Miticide/Insecticide	67760-71-AA	Cheminova, Inc.	Emulsifiable Concentrate	61.20
Abba 0.15 EC	66222-139-AA	Makhteshim-Agan of North America	Emulsifiable Concentrate	62.62
Quali-Pro Abamectin 0.15 EC	53883-371-AA	Control Solutions, Inc.	Emulsifiable Concentrate	62.62
Reaper 0.15 EC	34704-923-AA	Loveland Products, Inc.	Emulsifiable Concentrate	73.33
Reaper Advance	34704-923-ZA	Loveland Products, Inc.	Emulsifiable Concentrate	73.33
Aim A Abamectin	88050-3-AA	SmartVet USA, Inc.	Solution/Liquid	98.00

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Actively registered products containing **chlorpyrifos**. Products are listed in order by EP. Products highlighted in orange indicate a change from the last list. If a product was only recently registered or has an inactive registration it may not appear on the list below. Agricultural products with inactive registration are considered high-VOC unless they are listed below as low-VOC, formulated as a solid (e.g., powder, granule), or meet the criteria for excluded products.

**Low-VOC Chlorpyrifos Products, EP ≤ 25.0% (18)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Duraguard ME Microencapsulated Insecticide	499-367-ZB	BASF Corporation	Aqueous Concentrate	0.00
Durashield CS Controlled Release Insecticide	499-419-ZC	BASF Corporation	Microencapsulated	0.00
Lorsban 50W In Water Soluble Packets	62719-221-ZA	Dow AgroSciences LLC	Wettable Powder	3.03
CPF 15G	83222-34-AA	Direct Ag Source LLC	Granular/Flake	3.70
Rainbow Fire Ant & Insect Killer	13283-14-ZA	Rainbow Technology Corporation	Granular/Flake	3.70
Andersons Golf Products Insecticide III	9198-167-AA	Andersons, Inc.	Granular/Flake	3.70
Lorsban 75WG	62719-301-AA	Dow AgroSciences LLC	Granular/Flake	3.70
Lorsban 75WG	62719-301-AA-10163	Gowan Company	Granular/Flake	3.70
Lorsban 15G Smartbox	5481-525-AA	Amvac Chemical Corporation	Granular/Flake	3.70
Drexel Chlorpyrifos 15G	19713-505-AA	Drexel Chemical Company	Granular/Flake	3.70
Lorsban 15G Granular Insecticide	62719-34-ZA	Dow AgroSciences LLC	Granular/Flake	5.33
Dursban 50W In Water Soluble Packets	62719-72-ZA	Dow AgroSciences LLC	Wettable Powder	10.80
Warhawk Clearform	34704-1077-AA	Loveland Products, Inc.	Emulsifiable Concentrate	17.89
Drexel Lambdafos Insecticide	19713-671-AA	Drexel Chemical Company	Emulsifiable Concentrate	18.30
Drexel Chlorpyrifos 4E-Ag	19713-520-AA	Drexel Chemical Company	Emulsifiable Concentrate	18.20
Lorsban Advanced	62719-591-AA	Dow AgroSciences LLC	Aqueous Concentrate	18.45
Lock-On Insecticide	62719-79-ZA	Dow AgroSciences LLC	Emulsifiable Concentrate	20.90
Vulcan	66222-233-AA	Makhteshim-Agan of North America	Emulsifiable Concentrate	24.24

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**High-VOC Chlorpyrifos Products, EP > 25.0% (18)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Cobalt Advanced	62719-615-AA	Dow AgroSciences LLC	Emulsifiable Concentrate	37.42
Govern 4E Insecticide	62719-220-AA-55467	Tenkoz Inc.	Emulsifiable Concentrate	50.00
Whirlwind	62719-220-AA-5905	Helena Chemical Company	Emulsifiable Concentrate	50.00
Eraser	62719-220-AA-71058	Independent Agribusiness Professionals	Emulsifiable Concentrate	50.00
Yuma 4E	62719-220-ZA-1381	Winfield Solutions LLC	Emulsifiable Concentrate	50.00
Hatchet	62719-220-ZC	Dow AgroSciences LLC	Emulsifiable Concentrate	50.00
Lorsban-4E	62719-220-ZA	Dow AgroSciences LLC	Emulsifiable Concentrate	51.32
CPF 4E	83222-20-AA	Direct Ag Source, LLC	Emulsifiable Concentrate	50.83
Nufos 4E	67760-28-AA	Cheminova, Inc.	Emulsifiable Concentrate	52.30
Chlorpyrifos 4E Ag	66222-19-AA	Makhteshim-Agan of North America	Emulsifiable Concentrate	52.90
Quali-Pro Chlorpyrifos 4E	66222-19-ZA	Makhteshim-Agan of North America	Emulsifiable Concentrate	52.90
Warhawk	34704-857-AA	Loveland Products, Inc.	Aqueous Concentrate	54.41
Stallion Insecticide	279-9545-AA	FMC Corp. Agricultural	Emulsifiable Concentrate	55.45
Stallion Brand Insecticide	279-9545-ZA	FMC Corporation	Emulsifiable Concentrate	55.45
Cobalt	62719-575-AA	Dow AgroSciences LLC	Emulsifiable Concentrate	68.61
Bolton Insecticide	67760-112-AA	Cheminova, Inc.	Emulsifiable Concentrate	70.39
Bolton Insecticide	279-3581-AA	FMC Corp. Agricultural	Emulsifiable Concentrate	70.39
Duraplex TR Total Release Insecticide	499-405-ZA	BASF Corporation	Pressurized Liquid	100.0

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Actively registered products containing **gibberellins**. Products are listed in order by EP. Products highlighted in orange indicate a change from the last list. If a product was only recently registered or has an inactive registration it may not appear on the list below. Agricultural products with inactive registrations are considered high-VOC unless they are listed below as low-VOC, formulated as a solid (e.g., powder, granule), or meet the criteria for excluded products.

**Low-VOC Gibberellins Products, EP ≤ 25.0% (10)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Gibgro 20% Powder	55146-53-ZA	Nufarm Americas Inc.	Dust/Powder	0.00
Pro-Gibb Plus 2x Plant Growth Regulator	73049-16-AA	Valent Biosciences LLC	Soluble Powder	1.15
N-Large 40 SP	57538-22-AA	Stoller Enterprises, Inc.	Soluble Powder	1.15
Falgro 20SP	62097-3-AA-82917	Fine Americas, Inc.	Soluble Powder	1.15
Provide 10 SG	73049-409-AA	Valent Biosciences LLC	Granular/Flake	3.70
Progibb 40% Plant Growth Regulator Water Soluble Granule	73049-1-ZA	Valent Biosciences LLC	Granular/Flake	3.70
Progibb 40PH Post Harvest Plant Growth Regulator Water Soluble Granule	73049-492-AA	Valent Biosciences LLC	Granular/Flake	3.70
X-Pand	57538-63-AA	Stoller Enterprises, Inc.	Liquid Concentrate	4.72
Progibb LV Plus Plant Growth Regulator Solution	73049-498-AA	Valent Biosciences LLC	Other (Liquid)	11.54
Falgro 2X LV	62097-32-AA-82917	Fine Americas, Inc.	Aqueous Concentrate	22.95

**High-VOC Gibberellins Products, EP > 25.0% (14)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
N-Large Premier	57538-20-AA	Stoller Enterprises, Inc.	Aqueous Concentrate	79.02
Gibbmax	69766-1-AA	Advanced Foliar Nutrients Systems	Other (Liquid)	92.43
Falgro 4L	62097-2-AA-82917	Fine Americas, Inc.	Solution/Liquid	93.82
Florgib 4L	62097-10-AA-82917	Fine Americas, Inc.	Aqueous Concentrate	93.82
Pro-Gibb 4% Plant Growth Regulator Solution	73049-15-AA	Valent Biosciences LLC	Aqueous Concentrate	94.13
Progibb T & O Plant Growth Regulator (PGR) Solution	73049-15-ZA	Valent Biosciences LLC	Aqueous Concentrate	94.13
Gibgro 4LS	55146-62-ZA	Nufarm Americas Inc.	Flowable Concentrate	94.87
Chrysal BVB	72992-10-AA	Chrysal International BV	Aqueous Concentrate	95.30
Fascination Plant Growth Regulator (PGR)	73049-41-ZA	Valent Biosciences LLC	Aqueous Concentrate	95.58
Promalin Plant Growth Regulator Solution	73049-41-AA	Valent Biosciences LC	Aqueous Concentrate	95.58
Fresco	62097-6-ZA-82917	Fine Americas, Inc.	Aqueous Concentrate	95.85
Perlan	62097-6-AA-82917	Fine Americas, Inc.	Aqueous Concentrate	95.85
Novagib 10L	62097-7-AA-82917	Fine Americas, Inc.	Aqueous Concentrate	98.91
Falgro OD	62097-49-AA-82917	Fine Americas, Inc.	Emulsifiable Concentrate	NI

NI = No Information.

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Actively registered products containing **oxyfluorfen**. Products are listed in order by EP. Products highlighted in orange indicate a change from the last list. If a product was only recently registered or has an inactive registration it may not appear on the list below. Agricultural products with inactive registrations are considered high-VOC unless they are listed below as low-VOC, formulated as a solid (e.g., powder, granule), or meet the criteria for excluded products.

**Low-VOC Oxyfluorfen Products, EP ≤ 15% (9)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Galigan H2O	66222-140-AA	Makhteshim-Agan of North America	Aqueous Concentrate	1.64
Nufarm Double O SPC Herbicide	228-632-AA	Nufarm Americas Inc.	Granular/Flake	3.70
Biathlon Ornamental Herbicide	59807-12-AA	OHP, Inc.	Granular/Flake	3.70
Willowood Oxyflo 4 SC	87290-10-AA	Willowood, LLC	Aqueous Concentrate	6.76
Goaltender	62719-447-ZA	Dow Agrosciences LLC	Flowable Concentrate	8.28
Rout Ornamental Herbicide	58185-27-ZA	Everiss NA, Inc.	Granular/Flake	8.60
Pindar GT	62719-611-AA	Dow Agrosciences LLC	Aqueous Suspension	10.60
Cleantraxx	62719-702-AA	Dow Agrosciences, LLC	Aqueous Suspension	10.60
Oxystar 4L	42750-199-AA	Albaugh, Inc.	Emulsifiable Concentrate	10.63

**High-VOC Oxyfluorfen Products, EP > 15.0% (8)**

Product Name	Registration Number	Registrant	Formulation	EP (%)
Willowood Oxyflo 2 EC	87290-8-AA	Willowood, LLC	Emulsifiable Concentrate	60.00
Oxyfluorfen 2E Herbicide	87290-8-AA-84237	Solera ATO, LLC	Emulsifiable Concentrate	60.00
Goal 2XL	62719-424-AA	Dow Agrosciences LLC	Emulsifiable Concentrate	62.30
Collide Herbicide	70506-295-AA	United Phosphorous, Inc.	Emulsifiable Concentrate	66.08
Oxyfluorfen 2E Herbicide	70506-295-AA-84237	Solera ATO, LLC	Emulsifiable Concentrate	66.08
Galigan 2E Herbicide	66222-28-ZA	Makhteshim-Agan of North America	Emulsifiable Concentrate	66.15
Galigan 2E	66222-28-ZB	Makhteshim-Agan of North America	Emulsifiable Concentrate	66.15
Oxystar 2E	42750-136-AA	Albaugh, LLC	Emulsifiable Concentrate	73.09