

Pesticide Use and Industrial Hemp

**The County of San Diego
Department of Agriculture,
Weights & Measures**

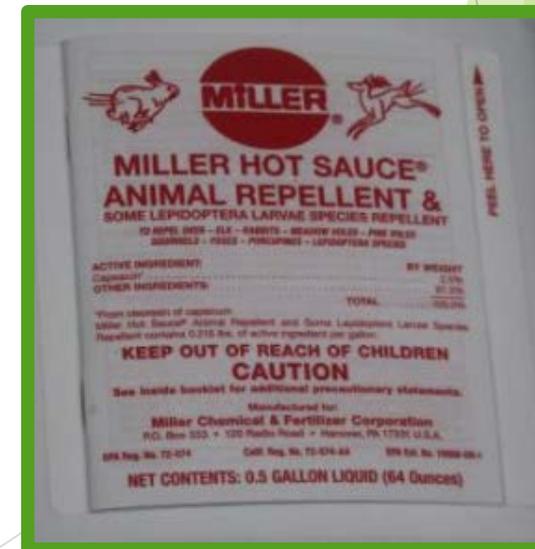


Topics

- ▶ What is a pesticide?
- ▶ Operator Identification Numbers (OID)
- ▶ Department of Pesticide Regulation(CDPR)
Pesticide Use Guidelines
- ▶ Label Review

What is a pesticide?

- ▶ Any substance that prevents, destroys, repels, or mitigates any pest
 - ▶ Insecticides
 - ▶ Rodenticides
 - ▶ Fungicides
 - ▶ Herbicides
 - ▶ Including
 - ▶ FIFRA 25b exempt pesticides
 - ▶ Organic Pesticides
 - ▶ Homemade remedies
 - ▶ Vinegar
 - ▶ Dr. Bronner's soap solutions



Operator Identification Number

- ▶ **Required for pesticide use on production agricultural commodities**
- ▶ **Allows for the purchase of commercial agricultural pesticides**
- ▶ **Pesticide Use Reports**

Department of Pesticide Regulations

Pesticide Use Guidelines

► Current guidance can be found at

<https://www.cdpr.ca.gov/docs/cannabis/index.htm>



The screenshot shows the website for the California Department of Pesticide Regulation. The header includes the logo, navigation links (HOME, PROGRAMS, DATABASES, NEWS/PUBLICATIONS, QUICK LINKS), and a search bar. The main content area is titled "Which Pesticides Can I Use on Cannabis in California?" and includes a sidebar with "LAWS & REGULATIONS" links, a "dpr" logo, and a photograph of cannabis plants in a grow room. The main text explains that the DPR develops guidelines for pesticide use in cannabis cultivation and provides links to a cannabis alert and hydroponics information. A section titled "What is okay to use?" states that no pesticide is federally registered for cannabis but provides links to examples of what can be used and legal pest management practices.

California Department of
Pesticide Regulation

About DPR | Join E-Lists | A-Z Index | Contact Us

Google Custom Search

HOME PROGRAMS DATABASES NEWS/PUBLICATIONS QUICK LINKS

LAWS & REGULATIONS

- CA Code of Regulations
- Proposed and Recently Adopted Regulations
- Food and Agricultural Code
- Recently Enacted Pesticide Laws
- Annual Legislative Summaries

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Which Pesticides Can I Use on Cannabis in California?

[Back to Cannabis and Pesticides](#)

The Department of Pesticide Regulation (DPR) develops guidelines for the use of pesticides in cannabis cultivation.

- [Subscribe to DPR Cannabis Alert](#)
- [Information for Hydroponics Stores, PDF](#)

What is okay to use?



No pesticide product is federally registered for use on cannabis. There are however, pesticide products that can be legally used on cannabis in California, provided they meet certain criteria .

- [Examples of What Can Be Used, PDF](#)
Note: This is not to be used as a list.
- [Legal Pest Management Practices for Cannabis Growers in California, PDF](#)

Exempt Pesticides

- ▶ Castor oil Cedar Oil
- ▶ Cinnamon
- ▶ Cinnamon oil
- ▶ Citric acid
- ▶ Citronella
- ▶ Citronella oil Cloves
- ▶ Clove oil
- ▶ Corn gluten meal
- ▶ Corn oil
- ▶ Cottonseed oil
- ▶ Dried blood
- ▶ Eugenol
- ▶ Garlic
- ▶ Garlic oil
- ▶ Geraniol
- ▶ Geranium oil
- ▶ Lauryl sulfate
- ▶ Lemongrass oil
- ▶ Linseed oil
- ▶ Malic acid
- ▶ Mint
- ▶ Mint oil
- ▶ Peppermint
- ▶ Peppermint oil
- ▶ 2-Phenethyl propionate
- ▶ Potassium sorbate
- ▶ Putrescent whole egg solids
- ▶ Rosemary
- ▶ Rosemary oil
- ▶ Sesame oil
- ▶ Sodium chloride
- ▶ Sodium lauryl sulfate
- ▶ Soybean oil
- ▶ Thyme
- ▶ Thyme oil
- ▶ White pepper
- ▶ Zinc metal strips

Exempt Pesticides

- ▶ Exempt from registration requirements
- ▶ Exempt from Pesticide Use Reporting
- ▶ Must maintain application use records
- ▶ Must obtain an Operator
- ▶ Must train Pesticide handlers and field workers

CDPR Registered Pesticides:

<https://www.cdpr.ca.gov/docs/label/sitecode.htm>

The screenshot shows the California Department of Pesticide Regulation website. The header includes the CA.GOV logo, the text 'California Department of Pesticide Regulation', and navigation links: 'About DPR | Join E-Lists | A-Z Index | Contact Us'. A search bar with 'Google Custom Search' is present. The main navigation menu includes 'HOME', 'PROGRAMS', 'DATABASES', 'NEWS/PUBLICATIONS', and 'QUICK LINKS'. A left sidebar lists registration-related links such as 'Register a Product', 'A Guide for Pesticide Registrants', 'Stakeholder Notices', 'Apply for Product Registration', 'Section 18 Emergency Exemptions', 'Proposed and Final Decisions', 'Research Authorizations', 'Look Up Products', and 'Forms'. The main content area is titled 'Welcome to the California Product/Label Database Application' and 'Search for Pesticide Products by Site Code'. It provides instructions on how to search by site name and then by site code. The 'Site Name' search box contains 'Hemp' and the 'Site Code' search box contains '26010'. A 'SEARCH' button is visible for both. A checkbox for 'Active Products Only' is checked. A blue callout box highlights the search results: 'Matches for: Hemp' followed by a bullet point: '(26010) HEMP/CANNABIS'. The DPR logo is in the bottom left corner.

California Department of
Pesticide Regulation

HOME PROGRAMS DATABASES NEWS/PUBLICATIONS QUICK LINKS

REGISTRATION

- Register a Product
- A Guide for Pesticide Registrants
- Stakeholder Notices
- Apply for Product Registration
- Section 18 Emergency Exemptions
- Proposed and Final Decisions
- Research Authorizations
- Look Up Products
- Forms

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Google Custom Search

Welcome to the California Product/Label Database Application

Search for Pesticide Products by Site Code

[Back to Product/Label Database Queries & Lists](#)

This query yields pesticide products that meet the criteria you specify below.

First, find the site code that matches your site by entering its name, and press "SEARCH":

Site Name

Hemp

SEARCH CLEAR

Then, enter that single site code and press "SEARCH":

Site Code

26010 Active Products Only

SEARCH CLEAR

Matches for: Hemp

- (26010) HEMP/CANNABIS

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Output Reporting

Query Parameters

Sites: HEMP/CANNABIS(26010)
Active Chemicals *only*

19 product labels match.

Any product listed below, which includes the term "Master Label" in front of the product brand name, may not be sold or used in California.

Put a check by all the products you would like more details on.
Then select the report format you want from the list below:

Brief product data citation sorted by Product Name ▾

And press the Report button:

Report Clear

ACTIVE (08/10/00) AZA-DIRECT (71908- 1-AA- 10163)

ACTIVE (02/06/17) AZAMAX BOTANICAL INSECTICIDE/ MITICIDE/ NEMATICIDE1 (91865- 4-AA)

ACTIVE (01/28/15) CAPTIVA (10163- 326-AA)

ACTIVE (08/14/18) DEBUG-ON (70310- 11-AA)

ACTIVE (01/01/17) GENERAL HYDROPONICS DEFGUARD BIOFUNGICIDE/BACTERICIDE (91865- 3-AA)

ACTIVE (01/01/17) GENERAL HYDROPONICS EXILE INSECTICIDE/FUNGICIDE/MITICIDE (91865- 2-AA)

ACTIVE (02/17/17) GENERAL HYDROPONICS PREVASYN INSECT REPELLANT/INSECTICIDE (91865- 1-AA)

ACTIVE (02/23/18) HORMEX ROOTING POWDER NO. 8 (8281- 1-ZA)

ACTIVE (04/09/15) MILLER HOT SAUCE ANIMAL REPELLENT (90930- 1-AA)

Label Review



Procidic²
Broad Spectrum Bactericide and Fungicide Compound

A Fungicide and Bactericide for use on Cannabis and Hemp plants grown in a greenhouse, indoor and/or grown outside in fields. Prevents and controls a variety of diseases including Powdery Mildew, Bud Rot and Root Rot. See label for a complete list of diseases.

- Registered Material for use in Organic Agriculture
- Bactericide and Fungicide in One
- Works Systemically
- No Re-Entry Interval Required (0-hr REI)
- Can Be Used up to Day of Harvest
- Works on Contact and Residual Action



KEEP OUT OF REACH OF CHILDREN
MANTENGASE ALEJADO DEL ALCANCE DE LOS NIÑOS.
Caution / Precaución

If you do not understand this label, find someone to explain it to you in detail. (Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle)

Greenspire Global Inc. represents that this product is a minimum risk pest control product and qualifies for exemption from EPA registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA 25b).

See Booklet for Precautionary Statements, First Aid, Directions for Use, Storage and Disposal Statements

ACTIVE INGREDIENTS:
 Citric acid 3.5%

OTHER INGREDIENTS:*.....96.5%

TOTAL 100%

* Vitamin C, Ethyl lactate, Glycerin, Sodium chloride, Water

Manufactured by 

Exclusively distributed by** 

** For Cannabis and hemp only



Net 1 gallon
(128 fl oz/ 3.785 liters)



8 59347 00334 8

Directions for Use When using Procidic follow applicable s

Crop	Target Disease	Use Rate
Greenhouse, Indoor-grown or Field-grown Cannabis	Powdery Mildew (<i>Sphaerotheca macularis</i>)	Preventative: 0.5-3.0 fl oz/g
	Gray Mold/Bud Rot (<i>Botrytis cinerea</i>)	Curative: 1-3.5 fl oz/ga
Greenhouse, Indoor-grown or Field-grown Cannabis	Root Rot (<i>Pythium sp, Fusarium sp, Phytophthora sp, Rhizoctonia sp</i>)	Preventative: 0.4-0.5 fl oz/g Curative: 0.5-1 fl oz/ga
Greenhouse, Indoor-grown or Field-grown Hemp	Powdery Mildew (<i>Sphaerotheca macularis</i>)	Preventative: 0.5-3.0 fl oz/g
	Gray Mold/Bud Rot (<i>Botrytis cinerea</i>)	Curative: 1-3.5 fl oz/ga
Greenhouse, Indoor-grown or Field-grown Hemp	Root Rot (<i>Pythium sp, Fusarium sp, Phytophthora sp, Rhizoctonia sp</i>)	Preventative: 0.4-0.5 fl oz/g Curative: 0.5-1 fl oz/ga
Greenhouse, Indoor-grown or Field-grown vegetables	<i>Pythium sp, Phytophthora sp, Fusarium sp, Rhizoctonia sp, Botrytis sp, Xanthomonas sp</i>	Preventative: 0.4-0.5 fl oz/g Curative: 0.5-0.75 fl oz

Label Review



The image shows a label for Aza-Direct Botanical Insecticide. On the left, there is an OMRI Listed logo for organic use and a graphic of two leaves. The product name 'Aza-Direct' is prominently displayed in a large, bold font, with 'BOTANICAL INSECTICIDE' underneath in a smaller font. Below the name, it states 'AZADIRACTIN-BASED BOTANICAL ANTIFEEDANT, REPELLANT AND INSECT GROWTH REGULATOR FOR USE ON GREENHOUSE AND OUTDOOR FOOD CROPS, ORNAMENTAL FLOWERS, TREES, SHRUBS AND PLANTS'. A table lists the active ingredient (Azadirachtin) at 1.2% and other ingredients at 98.8%, totaling 100.0%. At the bottom, it specifies the concentration: 'Contains 0.0987 lb. (44.8 g) azadirachtin per gallon.'

	% By Wt.
ACTIVE INGREDIENT:	
Azadirachtin	1.2%
OTHER INGREDIENTS.....	98.8%
TOTAL	100.0%

Contains 0.0987 lb. (44.8 g) azadirachtin per gallon.

MISCELLANEOUS, such as: Asparagus, Avocado, Banana, Coffee, Cocoa, Cranberry, Fig, Globe artichoke, Grape, Hops, Kiwifruit, Mango, Mushroom, Okra, Olives, Papaya, Pawpaw, Peanut, Persimmon, Pineapple, Pomegranate, Strawberry, Tea, Water chestnut, Watercress, and all other food crops

Label Review

GROUP	3A	INSECTICIDE
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Crop Protection EC 1.4_{II}



For Organic Use



FOR ORGANIC PRODUCTION

- Contains pyrethrins – a botanical insecticide derived from chrysanthemums
- Provides rapid knockdown and kill of listed plant pests
- For use on growing crops
- Can be used on day of harvest
- Kills more than 100 listed insects

ACTIVE INGREDIENT:
 Pyrethrins a *botanical insecticide* 1.40%

OTHER INGREDIENTS: 98.60%

100.00%

This product contains 0.108 lbs. Pyrethrins per gallon.

EPA Reg. No. 1021-1771
 EPA Est No. 1021-MN-2

HERBS AND SPICES: Including: Allspice, Angelica, Anise (Anise seed), Anise (Star), Annatto (seed), Balm (Lemon Balm), Basil, Borage, Burnet, Caper Buds, Caraway, Caraway (Black), Cardamom, Cassia Bark, Cassia Buds, Catnip, Celery Seed, Chamomile, Chervil (dried), Chicory, Chive, Chive (Chinese), Cinnamon, Clary, Clove Buds, Coriander (Cilantro or Chinese Parsley) (leaf), Coriander (Cilantro) (seed), Costmary, Culantro (leaf), Culantro (seed), Cumin, Curry (leaf), Dill (Dill Weed), Dill (seed), Fennel (common), Fennel (Florence) (seed), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual Marjoram, Wild Marjoram or Oregano, and Pot Marjoram), Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper (Black), Pepper (White), Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory (Summer and Winter), Sweet Bay (Bay Leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

ADDITIONAL PLANTS: Including: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Olives, Peanuts, Pineapple, Rice, Safflowers, Sesame, Sugarcane, Sunflower, Tea.

Label Review



Captiva[®]
INSECT REPELLENT / INSECTICIDE

For use on outdoor and greenhouse food and non food crops, ornamental flowers, trees, shrubs and plants

ACTIVE INGREDIENTS:	% By Wt.
Capsicum oleoresin extract*	7.6%
Garlic oil	23.4%
Soybean oil	59.3%
OTHER INGREDIENTS	9.7%
	TOTAL 100.0%

*contains 0.26% nominal concentration of Capsaicin and related capsaicinoids

KEEP OUT OF REACH OF CHILDREN
CAUTION

BRASSICA (COLE) LEAFY VEGETABLES	Chrysanthemum (edible-leaved), Garland, Collards, Corn salad, Cress (garden, upland), Dandelion, Dock (sorrel), Endive (escarole), Fennel (florence), Kale, Kohlrabi, Lettuce (head and leaf), Mizuna, Mustard Greens, Mustard Spinach, Orach, Parsley, Purslane (garden, winter), Radicchio (red chicory), Rape Greens, Rhubarb, Spinach, Spinach (New Zealand, vine), Swiss Chard, Turnip Greens
OTHER	Asparagus, Avocado, Banana, Coffee, Cocoa, Cranberry, Fig, Globe artichoke, Grape, Hops, Kiwifruit, Mango, Mushroom, Okra, Olives, Papaya, Pawpaw, Peanut, Persimmon, Pineapple, Pomegranate, Strawberry, Tea, Water chestnut, Watercress, and all other food crops
POME FRUITS	Apple, Crabapple, Loquat, Mayhaw, Quince, Oriental Pear, or Pear
	Arracacha, Arrowroot, Artichoke (Jerusalem, Chinese), Beet (garden, sugar), Burdock (edible), Canna (edible), Carrot, Cassava (bitter and sweet), Celeriac (celery root), Chayote

We are here to help!

Today was just a brief explanation of things. If you have any questions or concerns, please contact us and we will work with you to ensure you are in compliance.

San Diego County Department of Agriculture

Pesticide Regulation Program

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Two office locations to serve you.

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