



Office of
INDIANA STATE CHEMIST AND SEED COMMISSIONER

Protecting Indiana's Agriculture and Environment - Feed, Fertilizer, Pesticide and Seed

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Legal Use of Pesticides in Hemp Production in Indiana

IMPORTANT: The following is provided as legal guidance for use of pesticides on hemp in Indiana only. Reference to any pesticide product does not indicate acceptance or approval of those products by the Office of the Indiana State Chemist (OISC) as safe or effective in controlling pests in the production of hemp.

All pesticide products that are produced, distributed, sold, displayed, or offered for sale within Indiana, must be registered in the state of Indiana (IC 15-16-4-61).

1. Are there any pesticides legal for use in hemp crops in Indiana?

EPA has accepted the legal use in hemp crops on a few EPA Registered (Sec. 3) pesticide products. The EPA is working to expand the number of pesticides available to growers. As the agency processes those applications, they will update the list of Sec. 3 pesticide products that are available for use on hemp.

A few Sec. 3, EPA registered, pesticide products are implementing the use of Supplemental Labels. This allows a grower to use a product that is in the market before the use site was added to the master label. The grower must have the appropriate pesticide and corresponding Supplemental Label on hand at the time of application.

OISC and Purdue Extension have also provided growers with additional pesticides through the use of Sec. 24(c)¹ Special Local Need registrations. Growers must have a copy of the 24(c) label on hand, at the time of application, to be compliant with regulations.

Supplemental and 24(c) labels are clearly identified on our list of available products and can be downloaded at the OISC pesticide page, under Pesticide Use on Hemp:

<https://www.oisc.purdue.edu/pesticide/index.html>

In addition to the Sec. 3 and Sec. 24(c) products, OISC has identified a few Sec. 25(b)² exempted pesticide products that can be used legally on hemp. At this time, the majority of the Sec. 25(b) state pesticide products have not been specifically evaluated for safety or efficacy in hemp production. If there is a specific product a grower is interested in, the product must first be registered in the state before it can be added to this list.

A list of Indiana state-registered pesticides that may be legally used on hemp is included within this document and can be found at:

https://www.oisc.purdue.edu/pesticide/pdf/pest_hemp_product_list.pdf

¹ Sec. 24(c) Registration: Provide the additional use of a Sec. 3 product to a crop that is not listed on the EPA accepted Sec. 3 master label. Grower must have the 24(c) on hand at the time of application.

² Sec. 25(b) Pesticide Product: There is an exception for products that have been exempted from regulation under FIFRA Sec. 25(b). EPA considers these products to be minimum risk pesticides. These products usually contain a mixture of essential oils and other active ingredients that, per EPA, are of minimal health and safety concern. There are established criteria to exempt these products from federal regulation <https://www.epa.gov/minimum-risk-pesticides>. Therefore, federal pesticide law does not apply to distribution or use of these products.

2. Does Indiana pesticide law also exempt Sec. 25(b) products from state regulation?

No, all pesticide products sold, distributed or used in Indiana must be registered by the Office of Indiana State Chemist (OISC). State law does not exempt Sec. 25(b) products from state registration or the requirement to use the product in a manner consistent with the pesticide product labeling.

3. How do I know if a pesticide product is registered and legal for purchase and use in Indiana?

You can search for currently state-registered products at

<https://www.inplants.oisc.purdue.edu/USAPlantsIN/ProductRegFSA/BrandSearch.aspx> .

Tips for product searching include:

- Program type is PESTICIDE REGISTRANTS
- Select the current REGISTRATION YEAR
- Use an asterisk if you do not know the full name of the company or product name
- To see the label that we have on file, select SHOW LABEL LINKS

The screenshot shows a web form titled "Search Criteria" with a dark red header. The form is divided into two columns. The left column contains various search fields: Program (set to "Pesticide Registrants"), USAPlants ID, Company Name, Brand Name, Brand ID, Brand Line, Dual Brand, EPA Registration Number, Registration Year (set to "2020"), Manufacturer ID, Issue Date (with Start and End date pickers), Original Effective Date (with Start and End date pickers), 25-B, EUP, SLN, Restricted Use Pesticide, Kit/CoPack, Section 18, and Device. The right column contains a "Show Label Links" checkbox, which is currently unchecked. At the bottom of the form are three buttons: "Search", "Clear", and "Back".

4. So, what does it mean that all pesticide products must be used in a manner consistent with the product labeling?

Whether the product is a Sec. 3 registered pesticide, Sec. 24(c) special local need registration, or a Sec. 25(b) state-registered pesticide the “label is the law” when it comes to legal use.

- For Sec. 3 products, use directions for the target crop “hemp” must be accepted by U.S. EPA and on the product label at the time of application.
- For Sec. 24(c) registrations, the grower must have a copy of the 24(c) on hand at the time of application.
- For Sec. 25(b) pesticides to be legally used on hemp, the product must be state registered, have ingredients that are exempt from a tolerance requirement by U.S. EPA, be labeled for use on other agricultural crops, and not labeled specifically for residential use. Sec. 25(b) products and labels that meet these criteria have been identified by OISC below.

OISC is in a continual process of reviewing labels for compliance with these criteria, so the referenced listing is subject to frequent change. If you are interested in a product that is not registered for use in the state of Indiana or is not on the list of products acceptable for use on hemp, please contact our office at (765)494-1587.

5. I have seen information online for making my own pesticides for use on hemp. Can I use these “home-brew” pesticides on my own hemp crop?

No. It is a violation of state pesticide law (I.C. 15-16-5-65-16) to knowingly purchase or use a pesticide product that has not been registered by OISC. Therefore, nonregistered home-brewed pesticides cannot be sold, distributed, or used in Indiana on hemp or any other agricultural crop, regardless of product ingredients.

6. What is the definition of a “pesticide”?

According to IC 15-16-4-30, a pesticide means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating a pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

7. What is the definition of a “pest”?

According to IC 15-16-5-24, a pest means any insect, rodent, nematode, fungus, or weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other microorganism, except viruses, bacteria or other microorganisms on or in living humans or other living animals.

Questions about pesticide products or the preceding information may be directed to OISC at:
(765) 494-1587 or pestproducts@purdue.edu.

Sec. 3, EPA registered, products acceptable for use on hemp and registered in Indiana					
OISC Product ID	Company Name	Product Name	EPA Reg Number	Active Ingredients	Product Type
2016079806	ANATIS BIOPROTECTION INC	BIOCERES WP BIOLOGICAL MYCOINSECTICIDE WETTABLE POWDER AGRICULTURAL CROP USE	89600-2	Beauveria bassiana strain ANT-03	Insecticide
2016078937	CERTIS USA LLC	CARB-O-NATOR	70051-117	Potassium Bicarbonate	Fungicide
2019085146	CERTIS USA LLC	CRYMAX BIOINSECTICIDE	70051-86	Bacillus thuringiensis subsp. kurstaki strain EG7841 solids, spores, and lepidopteran-active toxins	Insecticide
2008064693	CERTIS USA LLC	GEMSTAR LC INSECTICIAL VIRUS	70051-45	Polyhedral occlusion bodies of the nuclear polyhedrosis virus of Helicoverpa zea	Insecticide
2017080553	CERTIS USA LLC	LIFEGARD WG BIOLOGICAL PLANT ACTIVATOR	70051-119	Bacillus mycooides isolate J.	Inducer of Plant Resistance to Fungal and Bacterial Pathogens
2012072466	CERTIS USA LLC	PFR-97 20% WDG MICROBIAL INSECTICIDE	70051-19	Isaria fumosorosea Apopka strain 97	Insecticide and Miticide
2020085942	CERTIS USA LLC	SIL-MATRIX LC FUNGICIDE/MITICIDE/INSECTICIDE	70051-127	Potassium Silicate	Fungicide, Insecticide, and Miticide
2015077683	CH BIOTECH R&D CO LTD	MEGAGRO L	90866-13	Indole-3-Butyric Acid and Cytokinin (as Kinetin)	Plant Regulator
2019084284	ECOCLEAN SOLUTIONS INC	GREEN GOBBLER 20% VINEGAR WEED KILLER	85208-1-93489	Acetic Acid	Herbicide
2020085561	ENERGEN CAROLINA LLC	VINEGAR WEED & GRASS KILLER	85208-1-92429	Acetic Acid	Herbicide
2017080515	LAWN AND GARDEN PRODUCTS INC	MONTEREY GARDEN PHOS	83416-1-54705	Mono- and Di-Potassium Salts of Phosphorous Acid	Inducer of Plant Resistance to Fungal and Bacterial Pathogens
2019085216	MARRONE BIO INNOVATIONS	REGALIA BIOFUNGICIDE	84059-3	Extract of Reynoutria sachalinensis	Fungicide and Fungistat
2018083267	MARRONE BIO INNOVATIONS	REGALIA CG BIOFUNGICIDE	84059-3	Extract of Reynoutria sachalinensis	Fungicide and Fungistat
2018083084	MARRONE BIO INNOVATIONS	STARGUS BIOFUNGICIDE	84059-28	Bacillus amyloliquefaciens strain F727	Fungicide
2008065315	PARRY AMERICA INC	AZAMAX BIOLOGICAL INSECTICIDE, MITICIDE, AND NEMATICIDE	71908-1-81268	Azadirachtin	Product type: Insecticide, Miticide, and Nematicide
2019084579	PARRY AMERICA INC	ECOGARDEN BOTANICAL INSECTICIDE, MITICIDE, AND NEMATICIDE	71908-1-81268	Azadirachtin	Product type: Insecticide, Miticide, and Nematicide
2012072672	QUEST PRODUCTS LLC	RELIANT SYSTEMIC FUNGICIDE AGRICULTURAL USE	83416-1	Mono- and Di-Potassium Salts of Phosphorous Acid	Inducer of Plant Resistance to Fungal and Bacterial Pathogens
2019084768	TERRAMERA INC	RANGO FUNGICIDE, INSECTICIDE, MITICIDE	88760-10	Cold Pressed Neem Oil	Insecticide, Miticide, Fungicide, and Nematicide
2019084111	VESTARON CORPORATION	SPEAR LEP FOR CONTROL OF LEPIDOPTERANS BIOLOGICAL INSECTICIDE	88847-6	GS-omega/kappa - Hctx-Hv1a (spider venom peptides)	Insecticide
2017082135	VESTARON CORPORATION	SPEAR T LIQUID CONCENTRATE INSECTICIDE	88847-6	GS-omega/kappa - Hctx-Hv1a (spider venom peptides)	Insecticide/Miticide

Section 3, EPA Registered, products with Supplemental Labeling for use on hemp					
Remember: To legally use a product listed under Supplemental Labels or 24(c) registrations – the grower must have a copy of the additional labeling, with directions for use on hemp, on hand at the time of any applications. The labels can be located at: https://www.oisc.purdue.edu/pesticide/index.html under the Pesticide Use on Hemp section.					
OISC Product ID	Company Name	Product Name	EPA Reg Number	Active Ingredients	Product Type
2016080206	GENERAL HYDROPONICS	GENERAL HYDROPONICS PREVASYN INSECT REPELLANT/INSECTICIDE	91865-1	Soybean Oil, Garlic Oil, and Capsicum Oleoresin Extract	Insecticide and Repellent
2016080207	GENERAL HYDROPONICS	GENERAL HYDROPONICS EXILE INSECTICIDE/FUNGICIDE/MITICIDE	91865-2	Potassium Salts of Fatty Acids	Insecticide, Fungicide, and Miticide
2016080208	GENERAL HYDROPONICS	GENERAL HYDROPONICS DEFGUARD BIOFUNGICIDE/BACTERICIDE	91865-3	Bacillus amyloliquefaciens strain D747	Fungicide and Bactericide
24(c) Special Local Need Registrations for use on hemp					
OISC Product ID	Company Name	Product Name	IN SLN Number	Active Ingredients	Product Type
2020085540	CERTIS USA LLC	GEMSTAR LC (EPA REG. NO. 70051-45)	IN-200005	Polyhedral occlusion bodies (OBs) of the nuclear polyhedrosis virus of <i>Helicoverpa zea</i> (corn earworm)	Insecticide
2020085539	CERTIS USA LLC	AGREE WG (EPA REG. NO. 70051-47)	IN-200006	Bacillus thuringiensis subsp. aizawai strain GC-91	Insecticide
2020085536	MARRONE BIO INNOVATIONS	GRANDEVO WDG (EPA REG. NO. 84059-27)	IN-200007	Chromobacterium subtsugae strain PRAA4-1 cells and spent fermentation media	Insecticide
2020085535	MARRONE BIO INNOVATIONS	GRANDEVO CG (EPA REG. NO. 84059-27)	IN-200008	Chromobacterium subtsugae strain PRAA4-1 cells and spent fermentation media	Insecticide
2020085538	MARRONE BIO INNOVATIONS	VENERATE XC (EPA REG. NO. 84059-14)	IN-200009	Heat-Killed Burkholderia sp strain A396 cells and spent fermentation media	Insecticide
202008537	MARRONE BIO INNOVATIONS	VENERATE CG (EPA REG. NO. 84059-14)	IN-200010	Heat-Killed Burkholderia sp strain A396 cells and spent fermentation media	Insecticide

25(b), minimum risk, pesticide products acceptable for use on hemp

OISC Product ID	Company Name	Product Name	OISC 25B Number	Active Ingredients	Product Type
2014076760	BONIDE PRODUCTS INC	BONIDE BURNOUT FAST ACTING WEED & GRASS KILLER CONCENTRATE	4-25B-20	Citric acid, Clove Oil	Herbicide
2014075459	BONIDE PRODUCTS INC	BONIDE MAIZE WEED PREVENTER READY TO SPRAY	4-25B-19	Corn Gluten Meal	Herbicide
2016079566	DR EARTH CO	DR EARTH PURE & NATURAL FINAL STOP VEGETABLE GARDEN INSECT KILLER	999999-25B-5	Rosemary Oil, Sesame Oil, Peppermint Oil, Thyme Oil, Cinnamon Oil, Garlic Oil	Insecticide, Miticide
2016079572	DR EARTH CO	DR EARTH PURE & NATURAL FINAL STOP VEGETABLE GARDEN INSECT KILLER CONCENTRATE	999999-25B-11	Rosemary Oil, Sesame Oil, Peppermint Oil, Thyme Oil, Cinnamon Oil, Garlic Oil	Insecticide, Miticide
2016079564	DR EARTH CO	DR EARTH PURE & NATURAL FINAL STOP WEED & GRASS HERBICIDE	999999-25B-3	Citric acid, Cinnamon Oil, Clove Oil, Soybean Oil, Rosemary Oil, Sesame Oil, Thyme Oil	Herbicide
2016079568	DR EARTH CO	DR EARTH PURE & NATURAL FINAL STOP YARD & GARDEN INSECT KILLER	999999-25B-7	Rosemary Oil, Sesame Oil, Peppermint Oil, Thyme Oil, Cinnamon Oil, Garlic Oil	Insecticide, Miticide
2016079570	DR EARTH CO	DR EARTH PURE & NATURAL FINAL STOP YARD & GARDEN INSECT KILLER CONCENTRATE	999999-25B-9	Rosemary Oil, Sesame Oil, Peppermint Oil, Thyme Oil, Cinnamon Oil, Garlic Oil	Insecticide, Miticide
2017081117	GARDENS ALIVE!	WOW! WITHOUT WEEDS PRE-EMERGENT WEED CONTROL FOR LAWNS AND GARDENS 9-0-0	56872-25B-20	Corn Gluten Meal	Herbicide
2016080213	KEMIN INDUSTRIES INC	TETRACURB CONCENTRATE	8596-25B-1	Rosemary Oil	Miticide
2017082173	PACIFIC SHORE HOLDINGS INC	NATURE-CIDE ALL-PURPOSE COMMERCIAL CONCENTRATE INSECTICIDE	90395-25B-3	Clove Oil, Cottonseed Oil	Insecticide
2019085259	SAFER INC	SAFER BRAND WEED PREVENTION PLUS HERBICIDE	42697-25B-3	Corn Gluten Meal	Herbicide
2018085257	UNITED COMPOST & ORGANICS INC	BUSHDOCTOR FORCE OF NATURE INSECT REPELLENT (CONCENTRATE)	71996-25B-1	Garlic Oil	Insecticide
2018085258	UNITED COMPOST & ORGANICS INC	BUSHDOCTOR FORCE OF NATURE MITICIDE (CONCENTRATE)	71996-25B-2	Cottonseed Oil, Clove Oil, Garlic Oil	Miticide