

## LAWS OF MALAYSIA

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## **Act 149**

## **PESTICIDES ACT 1974**

As at 1 June 2015

## **PESTICIDES ACT 1974**

Date of Royal Assent	30 July 1974
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## PREVIOUS REPRINTS

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### LAWS OF MALAYSIA

### **Act 149**

### **PESTICIDES ACT 1974**

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#### LAWS OF MALAYSIA

### **Act 149**

### PESTICIDES ACT 1974

An Act to control pesticides.

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[Throughout Malaysia—15 April 1975, ss.1–6, 16, 21–27,
                        34, 50-52, 55-59, P.U. (B) 118/1975;
           Throughout Malaysia—1 December 1976, ss.7–12,
                                         P.U. (B) 637/1976;
               Throughout Malaysia—1 February 1981, s.53,
                                          P.U. (B) 48/1981;
 Peninsular Malaysia—1 April 1981, ss.13, 14, 31–33, 35, 36,
                            38-49, 54, 61, P.U. (B) 49/1981;
               Peninsular Malaysia—1 January 1982, s.20(3),
                                          P.U. (B) 50/1981;
Peninsular Malaysia—1 January 1982, s.60, P.U. (B) 51/1981;
        Sabah and Sarawak—1 January 1982, s.13, 14, 31–33,
                     35, 36, 38–49, 54, 61, P.U. (B) 52/1981;
             Sabah and Sarawak—1 September 1982, s.20(3),
                                         P.U. (B) 574/1981:
                 Peninsular Malaysia—1 April 1982, s.20(4),
                                         P.U. (B) 127/1982;
             Sabah and Sarawak—1 September 1982, s.20(4),
                                         P.U. (B) 297/1982;
          Throughout Malaysia—1 September 1988, ss.17–19.
                                         P.U. (B) 353/1988;
          Sabah, Sarawak and Federal Territory of Labuan—
                                            1 October 1991,
                           s.20(1), 20(2), P.U. (B) 466/1991]
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**BE IT ENACTED** by the Seri Paduka Baginda Yang di-Pertuan Agong with the advice and consent of the Dewan Negara and Dewan Rakyat in Parliament assembled, and by the authority of the same, as follows:

#### Part I

#### **PRELIMINARY**

## Short title, application and commencement

- **1.** (1) This Act may be cited as the Pesticides Act 1974 and shall apply throughout Malaysia.
- (2) This Act shall come into operation on a date to be appointed by the Minister by notification in the *Gazette*; and the Minister may appoint different dates for the coming into operation of this Act, or of different provisions thereof, in different parts of Malaysia.

## **Interpretation**

2. (1) In this Act, unless the context otherwise requires—

"active ingredient" means an ingredient, as listed in the First Schedule, which has pesticidal properties and gives pesticidal properties to a substance, material, preparation or mixture, of which the ingredient is one of the constituents of the substance, material, preparation or mixture;

"Analyst" means an Analyst appointed under section 34;

"analytical standard" means a substance containing an active ingredient and is used as a reference standard in the analysis of a pesticide;

"animals" means—

- (a) animals that are useful to man as a source of food or other essential products or as beasts of burden;
- (b) animals that are commonly kept as domestic animals or as pets;

- (c) animals that are protected under any written law for the time being in force relating to the protection of wild life;
- (d) animals that are beneficial to agricultural production; or
- (e) animals that are valued for reasons of amenity;

"authorized officer" means—

- (a) a Pesticides Licensing Officer; or
- (b) a public officer designated as an authorized officer by the Minister by notification in the *Gazette*;

"Board" means the Pesticides Board established under section 3:

"contaminated food" means food in which there is present a pesticide, or a quantity, proportion, strength, or concentration of a pesticide, in contravention of regulations made under section 21; and a reference to the use or presence of a pesticide in food includes a reference to its use or presence on food;

"food" includes every substance that is used for food or drink by man or that enters into or is used in the composition or preparation of the substance, and also includes flavouring matters and condiments, but does not include a substance or mixture of substances used by man as a medicine;

"label" means any written, printed, or graphic matter—

- (a) fixed, secured or embossed, whether immediate or otherwise, on the package of a pesticide; or
- (b) accompanying a pesticide;

"manufacture" in relation to a pesticide means to prepare, compound, formulate, mix, make, pack, re-pack, label, or otherwise treat the pesticide with a view to its sale, but does not include the carrying on of a *bona fide* research or experiment relating to a

pesticide or the doing of an act or thing forming part of or incidental to such research or experiment;

"pack" means to enclose in a package;

"package" means anything in or by which a pesticide or any food, as the case may be, is cased, covered, closed or contained;

"pest" includes bacteria, virus, fungi, weeds, insects, rodents, birds, or any other plant or animal that adversely affects or attacks animals, plants, fruits or property;

"pesticide" means, subject to subsection (2)—

- (a) any substance that contains an active ingredient; or
- (b) any preparation, mixture or material that contains any one or more of the active ingredients as one of its constituents,

but does not include contaminated food or any article listed in the Second Schedule;

"Pesticides Licensing Officer" means a Pesticides Licensing Officer appointed under section 16;

"prescribed" means prescribed by the rules or regulations;

"rules" and "regulations" mean rules and regulations made under this Act;

"Secretary" means the Secretary of the Board;

"sell" includes offer for sale, exhibit for sale, or possess for sale any pesticide, or offer for reward any service relating to the usage of pesticides.

(2) For the purposes of this Act, a pesticide shall be treated as a different pesticide from another pesticide if—

- (a) the chemical name of that pesticide is different from that of the other pesticide;
- (b) the trade name or trade mark of that pesticide is different from that of the other pesticide;
- (c) the ingredients of that pesticide are different from those of the other pesticide, in type, number, proportion, concentration, or in other respects;
- (d) that pesticide is differently formulated from the other pesticide;
- (e) that pesticide is manufactured by a manufacturer other than the manufacturer of the other pesticide; or
- (f) that pesticide is different in quality, nature, characteristics, or efficacy from the other pesticide.
- (3) For the purposes of this Act, a pesticide shall be deemed to be misbranded if—
  - (a) its label contains a statement, design, or graphic representation relating to the pesticide that is false or misleading in any material particular, or if its package is otherwise deceptive in respect of the contents of the package;
  - (b) it is an imitation, or is sold under the name, of another pesticide;
  - (c) its label does not contain such warning or caution as is necessary and, if complied with, sufficient to prevent risk to human beings or animals;
  - (d) any word, statement, information, or other matter required by the rules or regulations to appear on its label is not displayed thereon at all or in the prescribed manner;
  - (e) it is not packed or labelled in the prescribed manner;

- (f) it has a toxicity that is different from that claimed for it;
- (g) it is mixed or packed with a substance so as to subsequently alter its original nature or quality; or
- (h) it contains a substance other than the substance or substances that it is claimed to contain.

#### PART II

#### THE PESTICIDES BOARD

#### Establishment of the Board

- **3.** For the purposes of this Act, there is hereby established a board named Pesticides Board and consisting of the following members:
  - (a) the Director General of Agriculture, who shall be the Chairman;
  - (b) a senior officer of the Department of Agriculture, Peninsular Malaysia, who shall be appointed by the Minister, and be the Secretary;
  - (c) the Deputy Director General of Health (Public Health);
  - (d) the Director General of Chemistry;
  - (e) the Director General of the Malaysian Agricultural Research and Development Institute;
  - (f) the Director General of the Malaysian Rubber Board;
  - (g) the Director General of the Department of Standards, Malaysia;
  - (h) the Director General of Veterinary Services;

- (i) the Director of Pharmaceutical Services of the Ministry of Health;
- (j) the Director General of Forestry, Peninsular Malaysia;
- (k) the Director of Agriculture, Sabah;
- (1) the Director of Agriculture, Sarawak;
- (m) the Director General of Environmental Quality; and
- (n) the Director General of the Malaysian Palm Oil Board.

#### Alternate members

- **4.** (1) The Minister may, in relation to each member of the Board, appoint, on the nomination of the member, not more than one person to be an alternate member to attend in place of the member meetings of the Board that the member is for any reason unable to attend.
- (2) When attending meetings of the Board, an alternate member shall for all purposes be deemed to be a member of the Board.

## **Provision of facilities by Ministry**

**5.** The Ministry responsible for the Board shall provide it with such staff, funds, and other facilities as are necessary to enable it to carry out its functions.

## **Proceedings of the Board**

- **6.** (1) The Chairman shall preside at all meetings of the Board that he attends.
- (2) In the absence of the Chairman at a meeting of the Board, the members present shall elect one of themselves to preside at the meeting.

- (3) The Chairman or other member presiding at a meeting of the Board shall have a deliberative vote and, if upon any question the votes are equally divided, a casting vote.
- (4) The Board shall meet at such places and times as the Chairman may appoint; and at a meeting of the Board seven members including the Chairman or other member presiding shall form a quorum.
- (5) The Board may invite any person to attend any of its meetings but the person shall have no right to vote at the meeting.
- (6) Subject to this section, the Board may regulate its own procedure.

#### PART III

## CONTROL OF IMPORTATION AND MANUFACTURE OF PESTICIDES BY REGISTRATION AND PERMIT

## **Application for registration of pesticides**

- **7.** (1) A person desiring to import or manufacture a pesticide shall apply to the Board in the prescribed manner for registration of the pesticide.
- (2) Subject to subsection (4), an applicant must with his application submit to the Board—
  - (a) a statement of the common name of the pesticide, if available, its trade name, its chemical name, and its structural formula, and of the name and concentration of every active ingredient of the pesticide;
  - (b) the name and concentration of every other ingredient of the pesticide;
  - (c) detailed toxicological information on every ingredient of the pesticide and on the pesticide as a whole;

- (d) all matters proposed to be included in the label of the pesticide, including instructions for, and the precautionary measures to be taken in connection with, its use the claims made for it and the proposed class of pesticide;
- (e) a statement as to, or a sample of, the proposed package of the pesticide;
- (f) reports on the efficacy and safety of the pesticide;
- (g) a statement of the methods of analyzing the pesticide and of the authorities or sources of information on which the statement is based:
- (h) a statement of the methods of determining the residue of the pesticide on plants or crops on which it is intended to be used;
- (i) the addresses of the place of business of the applicant and of the place where the applicant intends to store pesticides;
- (j) if he is a manufacturer, the name and address of the factory, building, or premises at which the applicant intends to manufacture the pesticide and an outline of the process of manufacturing the pesticide; and
- (k) a prescribed amount of a sample of the pesticide which the applicant intends to register.

## (3) The Board may require the applicant—

- (a) to submit to it any information relating to the pesticide other than the matters specified in subsection (2); and
- (b) to amend or modify the matters specified in paragraphs (2)(d) and (e) so as to comply with the rules or regulations relating thereto or, if there are no such rules or regulations for the time being, with the policy of the Board relating thereto.

- (4) The Board may, in any particular case, waive any of the requirements of subsection (2) or accept and act on an application that lacks any of those requirements, if it considers that it may properly act under section 8 notwithstanding the absence of that requirement.
- (5) Every application made to the Board under subsection (1) shall be accompanied by the prescribed application fee.

## Registration and refusal to register

- **8.** (1) Upon receipt of an application duly made under and in accordance with section 7 and the rules, and after compliance by the applicant with any requirement of the Board made under subsection 7(3), the Board may, after such inquiry or investigation as it considers proper and necessary to carry out and on payment of the prescribed registration fee, register the pesticide to which the application relates subject to such conditions as the Board thinks fit to impose, state the class of pesticide, assign a registration number thereto, and issue to the applicant a certificate of registration thereof, if the Board is satisfied that—
  - (a) all matters contained in and submitted with the application are true in all material particulars;
  - (b) the matters proposed to be included in the label of the pesticide, and the proposed package of the pesticide, comply with the rules or regulations relating to labeling and packaging or, if there are no such rules or regulations for the time being, with the policy of the Board relating thereto; and
  - (c) the pesticide, if used or handled according to the instructions contained in its proposed label, would be efficacious and would—
    - (i) be safe to human beings and animals; or

- (ii) constitute a risk to human beings and animals of such a minimal extent or degree as to be outweighed by the necessity or advantages of using the pesticide.
- (2) If the Board is not satisfied of any of the matters specified in subsection (1), it shall not register the pesticide.
- (3) If a standard specification in respect of the pesticide has been declared under section 28 of the \*Standards and Industrial Research Institute of Malaysia (Incorporation) Act 1975 [Act 157]—
  - (a) in formulating its policy relating to the label and package of the pesticide for the purpose of paragraph (1)(b), the Board shall, in addition to other matters, take into consideration the relevant requirements of the standard specification and the need or otherwise of adopting any or all of those requirements; and
  - (b) in assessing and determining the efficacy and safety of the pesticide for the purpose of paragraph (1)(c), the Board shall, in addition to other determining factors, take into consideration the relevant requirements of the standard specification, and may refuse to register the pesticide if it does not satisfy any of those requirements.
- (3A) For the purposes of subsection (1), the Board shall issue guidelines regarding the classification of pesticides.
- (4) Notwithstanding subsections (1), (2) and (3), if an application is made for the registration of a pesticide that is for the time being registered on the previous application of another person, the Board shall, on payment of the prescribed fee, register the pesticide on the same conditions as those imposed on the existing registration, assign a registration number thereto, and issue to the subsequent applicant a certificate of registration thereof.

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<sup>\*</sup>NOTE—Standards and Industrial Research Institute of Malaysia (Incorporation) Act 1975 [Act 157] has since been repealed by Standards of Malaysia Act 1996 [Act 549]—see subsection 23(1) of Act 549.

## Period of registration

- **9.** (1) The period of registration of a pesticide shall be five years but the pesticide may, on application by the person on whose application the pesticide was registered and on payment of the prescribed registration fee, be re-registered at the end of every five-year period.
- (2) An application for re-registration of a pesticide shall be made and dealt with in the same manner as an application for registration under section 7.

## Power to cancel registration

- **10.** (1) Subject to subsection (2) and without prejudice to any prosecution that may be brought under this Act or the rules or regulations, the Board may order the cancellation of the registration of a pesticide—
  - (a) upon receipt of a notification in writing from the person on whose application the pesticide was registered, and on being satisfied, that the pesticide has been withdrawn from sale or use;
  - (b) if the Board considers it undesirable that the pesticide should continue to remain registered owing to its toxicity, inefficacy or adverse effects on human beings, animals, plants, fruits or property;
  - (c) if the pesticide does not conform to the claims made for it in its label;
  - (d) if its label does not comply with the requirements of this Act or the rules or regulations;
  - (e) if any of the conditions subject to which the pesticide is registered has not been observed;

- (f) if the Board finds that any of the matters submitted to it under subsection 7(2) is untrue in any material particular; or
- (g) if the Board is satisfied that the pesticide has fallen into disuse.
- (2) Before ordering the cancellation of the registration of a pesticide on any of the grounds in subsection (1), other than those in paragraph 1(a) thereof, the Board shall by notice in writing give the person on whose application the pesticide was registered an opportunity to show cause against the making of the order, and pending the making of such order all sales, import or manufacture of the pesticide by that person shall be suspended from the date of the receipt of the notice by him.

## Registrant shall inform Board about adverse effects of pesticide

- **10A.** (1) Without prejudice to the power conferred upon the Board under section 10, the person on whose application the pesticide was registered shall inform the Board upon discovering any adverse effects of the pesticide on human beings, animals, plants, fruits or property, within sixty days from such discovery.
- (2) Any person who contravenes subsection (1) commits an offence.

## Appeal against decision of Board

11. (1) If an applicant for registration or re-registration of a pesticide is dissatisfied with the refusal of the Board to register or re-register the pesticide or if the person on whose application a pesticide was registered is dissatisfied with the order of the Board to cancel the registration of the pesticide, the applicant or person, as the case may be, may appeal to the Minister whose decision shall be final and shall not be called into question in any court.

(2) In the case of an appeal against the refusal of the Board to register or re-register a pesticide, the appellant may submit to the Minister any information relating to the pesticide additional to that previously submitted to the Board on condition that it is also at the same time submitted to the Board.

## **Gazetting of pesticides**

**12.** As soon as possible after a pesticide has been registered, reregistered or removed from the register by cancellation, the Board shall cause the fact to be published in the *Gazette* together with particulars relating to the pesticide sufficient to identify it.

## Prohibitions as to importation and manufacture, and penalty

- **13.** (1) Except as provided in sections 14 and 14A, no person shall import or manufacture—
  - (a) a misbranded pesticide;
  - (b) a pesticide that is not for the time being registered on his application under this Act; or
  - (c) a pesticide otherwise than in accordance with the conditions subject to which it was registered on his application.
- (2) Subject to subsection (3), a person who contravenes subsection (1) commits an offence and is liable, on a first conviction, to imprisonment for five years or to a fine of fifty thousand ringgit and, on a second or subsequent conviction, to imprisonment for ten years or to a fine of one hundred thousand ringgit or to both.
- (3) Notwithstanding subsections (1) and (2), it shall be a defence to a charge under paragraph (1)(a) of importing or manufacturing a pesticide that is misbranded as defined in paragraph 2(3)(g) or (h), that, in the process of manufacturing or transporting the pesticide,

some extraneous substance has unavoidably become intermixed with it.

## Importation of pesticides for educational or research purposes or as registration sample or analytical standard

- **14.** (1) A person desiring to import a pesticide for educational or research purposes or as a registration sample or an analytical standard shall apply to the Board in the prescribed manner and accompanied with the prescribed application fee, for a permit to import the pesticide.
- (2) Upon receipt of an application under subsection (1), the Board may, if it is satisfied that the pesticide desired to be imported is intended solely for educational or research purposes or as a registration sample or an analytical standard, issue to the applicant a permit in the prescribed form subject to such conditions as the Board thinks fit to impose, including conditions as to the disposal of any unused surplus of the pesticide.
- (3) If an applicant for a permit under this section is dissatisfied with the refusal of the Board to issue to him the permit, he may appeal to the Minister whose decision shall be final and shall not be called into question in any court.
- (4) A permit issued under this section shall authorize the importation of one consignment only of one or more pesticides within a specified period.
- (5) The person to whom a permit is issued under this section may, subject to the conditions thereof, import the pesticide or pesticides named therein notwithstanding that the pesticide or pesticides are not for the time being registered under this Act on his application and notwithstanding the prohibitions in section 13 against the importation of misbranded or unregistered pesticides.
- (6) A person who imports a pesticide under a permit issued to him under this section but contrary to or in breach of any of the conditions of the permit commits an offence.

- (7) A person who imports a pesticide under a permit issued to him under this section and who uses or disposes of the pesticide otherwise than for educational or research purposes or as a registration sample or an analytical standard, commits an offence and is liable to imprisonment for three years or to a fine of fifty thousand ringgit.
- (8) The Board may delegate its functions under this section to any member thereof.

# Research or experiment on unregistered pesticides synthesized in Malaysia

- **14A.** (1) A person desiring to carry out any research or experiment outside the laboratory on an unregistered pesticide synthesized in Malaysia shall apply to the Board in the prescribed manner, and accompanied with the prescribed application fee, for a permit to carry out the research or experiment.
- (2) Upon receipt of an application under subsection (1), the Board may, if it is satisfied that the pesticide desired to be researched or experimented on is intended solely for the purpose of research or experiment, issue to the applicant a permit in the prescribed form subject to such conditions as the Board thinks fit to impose, including conditions as to the disposal of any unused surplus of the pesticide.
- (3) If an applicant for a permit under this section is dissatisfied with the refusal of the Board to issue to him the permit, he may appeal to the Minister whose decision shall be final and shall not be called into question in any court.
- (4) The person to whom a permit is issued under this section may, subject to the conditions of the permit, research or experiment on the pesticide named in the permit, notwithstanding that the pesticide is not for the time being registered under this Act and notwithstanding the prohibitions in section 53A against the possession or use of unregistered pesticides.

- (5) A person who researches or experiments on a pesticide under a permit issued to him under this section, but contrary to or in breach of any of the conditions of the permit, commits an offence.
- (6) A person who researches or experiments on an unregistered pesticide without a permit issued to him under this section commits an offence and is liable to imprisonment for six years or to a fine of fifty thousand ringgit.
- (7) The Board may delegate its functions under this section to any of its members.

#### PART IV

## CONTROL OF MANUFACTURE, SALE AND STORAGE OF PESTICIDES BY LICENSING

## **Licence to manufacture pesticides**

- **15.** (1) A person desiring to manufacture a pesticide shall apply to the Board in the prescribed manner and accompanied with the prescribed application fee, for a licence to manufacture the pesticide.
- (2) Upon receipt of an application duly made under subsection (1) and in accordance with the rules, the Board may, issue to the applicant a licence in the prescribed form subject to such conditions as the Board thinks fit to impose, if the Board is satisfied that—
  - (a) the pesticide to which the application relates is for the time being registered under this Act on the application of the applicant;
  - (b) the applicant is technically competent to manufacture the pesticide; and
  - (c) the applicant is aware of the toxicity of the pesticide and of the risks involved in the use and handling thereof, and is equipped with effective means of minimizing or avoiding them.

(3) A licence under this section shall be valid for three years from the date of its issue but may be renewed at the end of every three-year period on payment of the prescribed application fee.

## **Appointment of Pesticides Licensing Officers**

**16.** For the purpose of this Act, the Minister may by notification in the *Gazette* appoint such number of officers of any Department of Agriculture as he considers necessary, to be Pesticides Licensing Officers for specified areas.

## Licence to sell or store pesticides

- 17. (1) A person desiring to sell or store for sale a pesticide shall, in the prescribed manner and accompanied with the prescribed application fee, apply for a licence for that purpose to the Pesticides Licensing Officer for the area in which he resides or, in the case of a body corporate or firm, in which the body corporate or firm has its place or principal place of business.
- (2) Upon receipt of an application duly made under subsection (1) and in accordance with the rules, the Pesticides Licensing Officer may, issue to the applicant a licence in the prescribed form subject to such conditions as the Pesticides Licensing Officer thinks fit to impose, if he is satisfied that—
  - (a) the pesticide to which the application relates is for the time being registered under this Act; and
  - (b) the applicant is aware of the toxicity of the pesticide and of the risks involved in the use and handling thereof.

#### (3) A licence under this section—

(a) shall not authorize the sale or storage for sale of a pesticide at more than one premises;

- (b) shall specify the premises at which the sale or storage for sale of the pesticide is authorized;
- (c) may authorize both the sale and storage for sale of one or more pesticides that may be of the same class or different classes of pesticides at the specified premises; and
- (d) shall be valid for three years from the date of its issue but may be renewed on payment of the prescribed application fee.

## Revocation and suspension of licence

- **18.** (1) If the Board, in the case of a licence to manufacture, or the proper Pesticides Licensing Officer, in the case of a licence to sell or store for sale, is satisfied that—
  - (a) the application on which the licence has been granted under section 15 or 17, as the case may be, contains a misrepresentation as to a material fact; or
  - (b) the holder of the licence has failed to comply with any of the conditions subject to which it was issued or has contravened any of the provisions of this Act or the rules or regulations,

the Board or Pesticides Licensing Officer, as the case may be, may, without prejudice to any prosecution that may be brought under this Act or the rules or regulations, but subject to subsection (2), revoke the licence, suspend it for such period as the Board or Pesticides Licensing Officer, as the case may be, thinks fit, or refuse to renew it.

(2) Before acting under subsection (1), the Board or Pesticides Licensing Officer, as the case may be, shall give the holder of the licence concerned an opportunity to show cause against so acting.

## Appeal against decision of Board or Pesticides Licensing Officer

19. If an applicant for a licence or a holder of a licence, as the case may be, is dissatisfied with the refusal of the Board or Pesticides Licensing Officer to grant or renew a licence under section 15 or 17, or the decision of the Board or Pesticides Licensing Officer to revoke, suspend, or refuse to renew his licence under section 18, he may appeal to the Minister whose decision shall be final and shall not be called into question in any court.

## Offences relating to manufacture, sale, and storage for sale

- **20.** (1) No person shall manufacture, sell, or store for sale a pesticide unless he is licensed to do so under this Act or otherwise than in accordance with the conditions of a licence to do so issued to him under this Act.
- (2) No person shall sell or store for sale a pesticide other than at the premises specified in a licence issued to him under section 17.
- (3) No person, whether or not he is licensed under this Act, shall sell or store for sale a pesticide that is misbranded or is not for the time being registered under this Act.
- (4) A person who contravenes any of the provisions of this section commits an offence and is liable, on a first conviction, to imprisonment for three years or to a fine of ten thousand ringgit and, on a second or subsequent conviction, to imprisonment for six years or to a fine of twenty thousand ringgit or to both.

## Part V

#### CONTROL OF PRESENCE OF PESTICIDES IN FOOD

## Regulations to control presence of pesticides in food

**21.** (1) The Minister may, after consulting the Board and the Minister responsible for health services, make regulations to prohibit—

- (a) the addition to or the use or presence in food or any specified kind thereof; or
- (b) the treatment of food or any specified kind thereof,

of or with any specified pesticide or more than the specified quantity, proportion, strength, or concentration thereof.

(2) Regulations made under subsection (1) may provide that, unless the contrary is proved, a specified contravention of any prohibition therein shall be presumed to have been committed by a specified person or persons in respect of any specified food if there is present therein a specified pesticide or a specified quantity, proportion, strength, or concentration thereof.

## Entry, inspection and seizure

## **22.** An authorized officer may—

- (a) at all reasonable times enter into and inspect any place where he has reason to believe that there is any food intended for sale:
- (b) inspect any food, wherever found, that he has reason to believe to be intended for sale;
- (c) seize, detain, or remove any such food that is or appears or is believed to be contaminated food, and may mark, seal, or otherwise secure the food in order to effect seizure, detention, or removal thereof.

## Power to demand, select and take samples

**23.** (1) On payment or tender to a person selling any food, or to his agent or servant, of the current market value thereof, if demanded, an authorized officer may at any place demand, select, and take or obtain samples of the food for the purpose of analysis to determine whether the food is contaminated food.

- (2) If any food is kept for retail sale in an unopened package, the authorized officer shall not demand or take less than the whole of the contents of the package.
- (3) A person who refuses or neglects to comply with a demand made by an authorized officer in pursuance of this section commits an offence.

## Right to analysis of food

- **24.** (1) A person who has bought any food shall, on payment of the prescribed fee, be entitled to have a sample of the food analysed by an Analyst in order to determine whether the food is contaminated food, and to receive from him a certificate of analysis.
- (2) A person, other than the seller of the food, may, on payment of the prescribed fee and the cost of the sample, require an authorized officer to purchase a sample of any food and submit it for analysis by an Analyst in order to determine whether the food is contaminated food.

## Offence of selling contaminated food

**25.** A person who sells any contaminated food commits an offence.

## Ignorance of contamination not a defence

**26.** In a prosecution for an offence under section 25 it shall be no defence that the accused did not know that the food in question was contaminated food unless he also proves that he had taken all reasonable steps to ascertain that the food was not contaminated food.

### **Defence of reliance on written warranty or statement**

**27.** (1) Subject to subsections (2) and (3), it shall be a defence in a prosecution for an offence under section 25 that—

- (a) the accused purchased the food sold by him in reliance on a written warranty or other written statement as to the nature of the food, given or made by or on behalf of the person from whom he purchased it; and
- (b) the accused had no reason to believe that the food sold did not conform to such warranty or statement; and
- (c) if the food had conformed to such warranty or statement, it would not have been contaminated food.
- (2) No such warranty or statement given or made by a person resident outside Malaysia shall be a defence under subsection (1) unless the accused proves that he had taken reasonable steps to ascertain, and did in fact believe in, the truth of the matters set forth in the warranty or statement.
- (3) No such warranty or statement shall be a defence under subsection (1) unless the accused has, within ten days after service of the summons on him—
  - (a) delivered to the prosecutor a copy of the warranty or statement and a written notice stating that he intends to rely thereon and specifying the name and address of the person who gave or made it; and
  - (b) sent by registered post to the person a like notice of his intention.
- (4) If the accused is a servant or agent of the person who purchased the food in reliance on such warranty or statement, he shall be entitled to the benefit of subsection (1) in the same manner and to the same extent as his employer or principal would have been if he had been the accused, if the accused further proves that he had no reason to believe that the food did not conform to the warranty or statement.
- (5) A person who, in respect of any food sold by him as principal or agent, gives or makes to the purchaser a false written warranty or other written statement as to the nature of the food commits an offence and is liable, on a first conviction, to a fine of ten thousand

ringgit and, on a second or subsequent conviction, to a fine of twenty thousand ringgit, unless he proves that when he gave or made the warranty or statement he had reason to believe that the matters contained therein were true.

#### PART VI

#### DEATH AND INJURY OCCASIONED BY PESTICIDES

## Reporting of accident, death and personal injury

- **28.** (1) Whenever an accident that occasions loss of human life or personal injury occurs as a result of the fumigation, spraying, or any other mode of treatment of plants, premises, or articles, including ships and vehicles, with a pesticide, the person by whom, or by whose servant or agent, the fumigation, spraying, or treatment was carried out shall forthwith send or cause to be sent to the Minister notice of the accident and of the loss of human life or personal injury.
- (2) Whenever an accident that occasions loss of human life or personal injury is suffered by an employee as a result of the handling, use, or presence of or contact with or exposure to a pesticide in the course of his employment, his employer shall forthwith send or cause to be sent to the Minister notice of the accident and of the loss of human life or personal injury.
- (3) Whenever a registered medical practitioner finds or has reason to believe that a person has died or suffered personal injury as a result of the handling, use, or presence of or contact with or exposure to a pesticide, the registered medical practitioner shall forthwith send or cause to be sent to the Minister notice of the death or personal injury.
- (4) This section shall not apply to accidents occasioning loss of human life or personal injury of which notice is required by the Hydrogen Cyanide (Fumigation) Act 1953 [*Act 260*] to be given to the proper Minister thereunder.

(5) A person who fails to comply with any of the provisions of this section commits an offence and is liable to a fine of one thousand ringgit.

# Inquiry into and investigation of accident, death and personal injury

- **29.** (1) The Minister may direct an inquiry to be made by such person or persons as he may appoint into the cause of an accident, death, or personal injury of which notice is required by section 28 to be given to him and, if it appears to him, either before or after the commencement of the inquiry, that a more formal investigation of the accident, death, or personal injury and of the causes and circumstances thereof is expedient, he may direct a formal investigation to be held.
- (2) The following provisions shall apply to inquiries and investigations made or held under this section:
  - (a) the Minister may appoint any person or persons possessing legal or special knowledge to assist in holding a formal investigation, or direct a Magistrate or any other person or persons to hold such an investigation with the assistance of any named assessor or assessors;
  - (b) the persons holding a formal investigation, who hereafter in this section are referred to as the tribunal, shall hold it in open court in such manner and under such conditions as they think most effectual for ascertaining the causes and circumstances of the accident, death, or personal injury, and for enabling them to make the report required by paragraph (f);
  - (c) the tribunal shall, for the purpose of the investigation, have all the powers of a Magistrate when exercising jurisdiction in criminal cases and, in addition, the power—
    - (i) to enter and inspect any place or building the entry or inspection whereof appears to them requisite;

- (ii) by summons under their hands, to require the attendance of all such persons as they think fit to call before them and examine, and to require to be furnished to them answers or returns to such inquiries as they think fit to make;
- (iii) to require the production of all books, papers, and documents that they consider important;
- (iv) to administer oaths and to require any person examined to make and sign a declaration of the truth of the statements made by him in his examination:
- (d) persons attending as witnesses before the tribunal shall be allowed such expenses as would be allowed to witnesses attending before the High Court in criminal cases, and in case of dispute as to the amount to be allowed, the dispute shall be referred by the tribunal to any Registrar of the High Court who shall ascertain and certify the proper amount of the expenses;
- (e) if a person, without reasonable cause, proof of which shall lie on him, fails, after having had the expenses, if any, to which he is entitled tendered to him, to comply with a summons or requisition of the tribunal issued or made under paragraph (c), or prevents or impedes the tribunal in the execution of their duty, he commits an offence and is liable to a fine of five hundred ringgit, or, in the case of a failure to comply with a requisition for the furnishing of answers or returns or the production of any book, paper, or document, to a further fine of one hundred ringgit for every day on which the failure occurs or continues;
- (f) the person or persons appointed to make an inquiry, and the tribunal holding an investigation, under this section shall make a report to the Minister stating the causes of the accident, death, or personal injury and all the circumstances attending it, and containing such observations thereon or on the evidence or any matter

arising out of the inquiry or investigation as he or they think right to include in the report, and the Minister shall cause every such report to be published in such manner as he thinks expedient.

(3) All persons appointed under this section to make an inquiry or to hold or assist in holding a formal investigation, including assessors, shall be deemed to be public servants within the meaning of the Penal Code [Act 574].

## Inquiry or inquest in cases of death occasioned by pesticides

- **30.** (1) An appropriate Magistrate shall hold, under the relevant law, an inquiry or inquest in every case of death that may have been occasioned by a pesticide or in which a pesticide may have been involved, unless the case is one in which, under the relevant law, it is not necessary to hold, or the Magistrate is enjoined not to hold, an inquiry or inquest, as the case may be, by reason that criminal proceedings have been, or are about to be, instituted or commenced against any person for having caused the death.
- (2) The Magistrate shall, at least seven days before holding the inquiry or inquest, send to the Minister notice in writing of the time and place of holding the inquiry or inquest.
- (3) If, in the course of any inquiry or inquest, it appears to the Magistrate holding the inquiry or inquest that the death that is the subject matter thereof may have been occasioned by a pesticide or was one in which a pesticide may have been involved, he shall, unless—
  - (a) the notice required by subsection (2) had been sent; or
  - (b) a representative of the Minister is present at the inquiry or inquest,

adjourn the inquiry or inquest, but before doing so he may take evidence to identify the body.

- (4) The Magistrate shall, at least seven days before holding the adjourned inquiry or inquest, send to the Minister notice in writing of the time and place of holding the adjourned inquiry or inquest.
- (5) A representative of the Minister appearing at an inquiry or inquest referred to in this section may, subject to the order of the Magistrate on points of law, examine any witness.
- (6) A copy of the notes of evidence and findings made in every such inquiry or inquest shall be furnished to the Minister without fee.
- (7) This section shall apply notwithstanding anything inconsistent therewith in the relevant law but shall otherwise be read and construed as one with the relevant law.
- (8) This section shall not apply to cases of loss of human life occasioned by accident of which notice is required by the Hydrogen Cyanide (Fumigation) Act 1953 to be given to the proper Minister thereunder.

### (9) In this section—

"appropriate Magistrate" means the Magistrate to whom, under the relevant law, is forwarded by the officer in charge of a police district or a police station, the report of an investigation into the cause of a death:

"relevant law" means the Criminal Procedure Code [Act 593] or the \*Inquest Ordinance of Sabah [Ord. 6 of 1959] or Sarawak [Cap. 48], as the case may be.

<sup>\*</sup>NOTE—See P.U. (A) 97/1976—Modification of Laws (Criminal Procedure) (Sabah and Sarawak) Order 1976.

#### PART VII

#### **ENFORCEMENT**

## Entry, search and seizure

- **31.** An authorized officer may at all reasonable times enter into any place where a pesticide is or may reasonably be supposed to be kept or stored and, by himself or by some other person accompanying him and acting under his instructions and in his presence, may search the place and may—
  - (a) examine and, on payment of the current market value thereof, if demanded, take samples of any substance found in the place and reasonably believed to be or to contain a pesticide;
  - (b) require the production of, inspect, make copies of, or take extracts from, any book or record relating or reasonably believed to relate to any dealing in or with pesticides and kept or found in the place and may, if he has reason to believe that it may furnish evidence of the commission of an offence against this Act or the rules or regulations, seize it;
  - (c) seize, detain, or remove any substance found therein that is reasonably believed to be or to contain a pesticide in respect of which an offence against this Act or the rules or regulations is being or has been committed, and mark, seal, or otherwise secure the substance in order to effect seizure, detention, or removal thereof.

## Power to stop and search conveyances

**32.** (1) If an authorized officer has reasonable suspicion that a conveyance is carrying a pesticide in contravention of this Act or the rules or regulations or in respect of which an offence against this Act or the rules or regulations is being or has been committed, he may stop and examine the conveyance and seize any pesticide found

therein in respect of which the contravention or offence is suspected to be or to have been committed and any book or document that is reasonably believed to furnish evidence of the contravention or of the commission of the offence.

- (2) The person in control or in charge of the conveyance shall, if required to do so by the authorized officer—
  - (a) stop the conveyance and allow the authorized officer to examine it; and
  - (b) open all parts of the conveyance for examination and take all measures to enable or facilitate the carrying out of such examination as the authorized officer considers necessary,

and if he fails to do so he commits an offence.

## **Identification of officers when taking action**

- **33.** (1) An authorized officer must, if not in uniform, on demand declare his office and produce to the person against whom he is acting, the prescribed certificate of indentity.
- (2) A person may refuse to comply with a request, requisition, demand, or order made by an authorized officer acting or purporting to act under this Act if he is not in uniform and refuses, on demand by the person, to declare his office and produce his certificate of identity.

## Part VIII

#### **ANALYSIS**

## **Appointment of Analysts**

**34.** For the purposes of this Act, the Minister may by notification in the *Gazette* appoint such number of competent persons as he considers necessary, to be Analysts.

## Manner of taking samples

- **35.** (1) An authorized officer shall, before or forthwith after taking or obtaining a sample of any substance under this Act for analysis, inform the seller or his agent or servant or the person apparently having possession, custody, or control of the lot from which the sample is to be or was taken or obtained that he intends to have the sample analysed by an Analyst.
- (2) The authorized officer shall thereupon divide the sample into three approximately equal parts and shall mark and seal or fasten, in such manner as its nature will permit, each such part and shall offer one of such parts to the seller or his agent or servant or the person apparently having possession, custody, or control of the lot from which the sample was taken or obtained.
- (3) The authorized officer shall subsequently deliver, either personally by registered post or courier service, another of such parts to an Analyst, and shall retain the third of such parts for future comparison or use.
- (4) If the substance is in packages of small volume, the requirements of this section shall be deemed to be complied with if the authorized officer takes or obtains three unopened packages of the substance and deals with them as if they were the three parts into which the sample is required to be divided.

#### Time to commence analysis

**35**A. Where any substance has been purchased, taken or obtained from a person under this Act for the purpose of analysis, the analysis of that substance shall be commenced within sixty days from the time of purchasing, taking or obtaining the substance.

#### Court may order analysis

**36.** If a sample has been dealt with in accordance with section 35, the court before which a person is prosecuted for an offence against this

Act or the rules or regulations shall, on the request of either the prosecutor or the accused, and may, if it thinks fit, without such request, order that the part of the sample retained by the authorized officer be submitted to another Analyst for analysis.

## Right to analysis of pesticide

- **37.** (1) A person who has bought a pesticide shall, on payment of the prescribed fee, be entitled to have a sample of the pesticide analysed by an Analyst and to receive from him a certificate of analysis.
- (2) A person, other than the seller of the pesticide, may, on payment of the prescribed fee and the cost of the sample, require an authorized officer to purchase a sample of any pesticide and submit it for analysis by an Analyst.

## **Certificate of Analyst**

- **38.** (1) The certificate of analysis of an Analyst shall be in the prescribed form.
- (2) If a method of analysis has been prescribed by regulations made under this Act for the analysis of any food or pesticide, an Analyst, whether for the prosecution or for the defence, shall follow, and shall in his certificate declare that he has followed, the prescribed method in his analysis.
- (3) A copy of the certificate of analysis of a sample of any food or pesticide taken or obtained by an authorized officer may, on payment of the prescribed fee, be obtained from the appropriate Analyst by the seller of the food or pesticide or his agent or servant, or by the person having possession, custody, or control of the lot from which the sample was taken or obtained.

## Certificate of Analyst to be *prima facie* evidence

- **39.** (1) A certificate of analysis purporting to be under the hand of an Analyst and complying with subsection 38(2) shall, on production thereof by the prosecutor, be sufficient evidence of the facts stated therein unless the accused requires that the Analyst be called as a witness, in which case he shall give notice thereof to the prosecutor not less than ten clear days before the day fixed for the hearing of the case.
- (2) In like manner such a certificate of analysis shall, on production thereof by the accused, be sufficient evidence of the facts stated therein unless the prosecutor requires that the Analyst be called as a witness, in which case he shall give notice thereof to the accused not less than ten clear days before the day fixed for the hearing of the case.
- (3) If the accused intends to put in evidence a certificate of analysis of an Analyst, he shall send to the prosecutor a certified copy of the certificate at least fourteen clear days before the day fixed for the hearing of the case, and if it has not been so sent the court may adjourn the hearing on such terms as it thinks proper.

## **Recovery of fees and other expenses**

- **40.** (1) Where a person is convicted of an offence against this Act or the rules or regulations, the court may order that all fees and other expenses incurred in respect of the analysis of any food or pesticide in respect of which the conviction is obtained, including an analysis made pursuant to section 36, be paid by the person.
- (2) All such fees and expenses shall be recoverable in the same manner as a fine is recoverable.

#### PART IX

#### **PROCEEDINGS**

## Notice of seizure, detention or removal

**41.** If the seizure, detention, or removal of any substance under this Act is made in the absence of a person having or apparently having lawful possession, custody, or control of the substance, the authorized officer making or effecting the seizure, detention, or removal shall forthwith give notice thereof in writing to the owner or to the agent of the owner, or to the consignor or consignee, of the substance, if his name and address are attached thereto or, after reasonable inquiries or otherwise, are known to the authorized officer, and the address is in Malaysia.

## Complaints as to seizure, detention or removal

- **42.** (1) A person claiming any substance seized, detained, or removed under this Act may, at any time, but not later than forty-eight hours, after its seizure, detention, or removal or, if notice under section 41 has been given to any person, after receipt of the notice by the person, complain thereof to a Magistrate who shall hear and determine the complaint and who may confirm or disallow the seizure, detention, or removal wholly or in part or order the substance to be restored to the person who appears to the Magistrate to be entitled to possession thereof.
- (2) The Magistrate shall not disallow the seizure, detention, or removal, whether wholly or in part, unless he is satisfied—
  - (a) that it was unlawful; or
  - (b) if it was lawful, that no contravention of this Act or the rules or regulations had occurred.
  - (3) The substance seized, detained, or removed shall—

- (a) if no complaint is made under and in accordance with this section; or
- (b) if the seizure, detention, or removal is confirmed, to the extent of the confirmation,

become the property of the Government and shall be disposed of, by destruction or otherwise, as directed by the Minister, unless it is intended to prosecute any person in respect of the substance, in which case it shall be held to abide the result of the prosecution and the order of the court under section 49.

## (4) Notwithstanding subsection (3)—

- (a) the authorized officer who has seized, detained, or removed any substance may destroy it or cause it to be destroyed if and when he finds that it has begun to deteriorate but shall, forthwith after the destruction, prepare a written statement signed by him and setting out a description and the quantity of the substance destroyed, and the date, time, method, and reason of the destruction;
- (b) the Minister may at any time order the restoration of the substance to any person if he thinks it just and proper to do so.

#### Summons

- **43.** (1) The summons in a prosecution for an offence against this Act or the rules or regulations shall not be returnable in less than twenty-one days from the date of service thereof.
- (2) There shall be served with the summons a copy of the certificate of analysis of an Analyst, if any, intended to be introduced in evidence by the prosecution.

## **44.** (*Deleted by Act A1226*).

## Presumption as to importer or manufacturer

**45.** For the purpose of a prosecution for an offence against this Act or the rules or regulations in respect of a pesticide found in an unopened package, the person who appears from the label of the pesticide to have imported or manufactured it shall, unless he proves the contrary, be deemed to have imported or manufactured it.

## Label as evidence of substance being a pesticide

**45**A. For the purpose of a prosecution for an offence against this Act or the rules or regulations in respect of a substance found in a package, the label on the package describing the substance to be a pesticide shall be *prima facie* evidence that the substance is a pesticide, unless the contrary is proved.

## Presumption for sale or storage for sale

**45**B. For the purpose of a prosecution for an offence against this Act or the rules or regulations in respect of a pesticide not registered under this Act that is found in any premises which have been licensed for the sale or storage for sale of pesticides, such pesticide shall, unless the contrary is proved, be deemed to be intended for sale or is being stored for sale.

## Liability of agent, servant, principal and employer

- **46.** (1) If a person does an act that constitutes an offence against this Act or the rules or regulations, he shall be liable for the act whether he does it on his own account or as an agent or servant of another person.
- (2) If the act is done by an agent or servant, his principal or employer shall be liable for the act as if he had done it himself, unless he proves that it was done neither with his consent nor with his connivance and that it was not attributable to any neglect on his part.

## Liability of directors and other officers of bodies corporate

- **47.** (1) If an offence against this Act or the rules or regulations that has been committed by a body corporate is proved to have been committed with the consent or connivance, or to have been attributable to any neglect on the part, of a director, manager, secretary, or other similar officer of the body coporate, or a person purporting to act in any such capacity, the director, manager, secretary, officer, or person, as the case may be, shall be deemed to have also committed that offence, and both he and the body corporate are liable to be proceeded against and punished therefor.
- (2) For the purpose of subsection (1), the director of a body corporate that is established by or under any law and whose affairs are managed by its members, includes a member of the body corporate.

## Offence as to sample deemed offence as to the whole lot

**48.** If, in a prosecution for an offence against this Act or the rules or regulations, the offence is proved with regard to a sample of any substance, the offence shall be deemed to have been proved with regard to the whole lot from which the sample was taken or obtained or to all of the substance bought, taken, or obtained at the same time as the sample.

## Forfeiture of offending substances

- **49.** (1) The court before which a person is prosecuted for an offence against this Act or the rules or regulations relating to any substance shall—
  - (a) upon conviction of the person for the offence; or
  - (b) if it is satisfied that the offence has been committed, notwithstanding that no person has been convicted thereof,

order that the substance and any similar substance found in the premises of the accused or in his possession at the time of the commission of the offence, together with all packages and vessels thereof, be forfeited and be disposed of at the direction of the Minister and in the case of disposal upon the conviction of a person for an offence against this Act or the rules or regulations, the cost of such disposal shall be borne by the person convicted of the offence.

(2) In any other case, the court shall order the restoration of the substance to the person who appears to the court to be entitled to possession thereof.

#### Jurisdiction

**50.** Notwithstanding anything to the contrary contained in any other written law, a Court of a First Class Magistrate shall have jurisdiction to try any offence against this Act or the rules or regulations and to impose the full penalty provided therefor.

## Privilege from disclosure

**51.** No prosecutor or witness in a prosecution for an offence against this Act or the rules or regulations shall be compelled to disclose the fact that he received any information or the nature of the information or the name of the person who gave the information or to produce any confidential report or document made or received by him in his official capacity or to make any statement in relation thereto.

#### **Notification of conviction**

**52.** A notification of the name and occupation of a person who has been convicted of an offence against this Act or the rules or regulations and of the address or addresses of his place or places of business, the nature of the offence, the penalty imposed and any order made shall, if the court so orders, be published in any newspaper circulating in Malaysia or in any part thereof.

#### PART X

#### **GENERAL**

## Giving or making false information or statement

**53.** A person who, in making an application under this Act other than an application for a licence to sell or store for sale a pesticide, gives an information or makes a statement that is false in any material particular, unless he proves that he did not know and had no reason to suspect that the information or statement was false and had taken all reasonable steps to ascertain the truth thereof, commits an offence and is liable to imprisonment for one year or to a fine of twenty-five thousand ringgit or to both.

## Possession or use of unregistered pesticides and unapproved use of pesticides

- **53**A. (1) Except as provided in sections 14 and 14A, no person shall—
  - (a) possess or use a pesticide that is not for the time being registered under this Act; or
  - (b) use a pesticide otherwise than in accordance with the uses stipulated on the label, as approved by the Board.
- (2) Any person who contravenes subsection (1) commits an offence and is liable on a first conviction, to imprisonment for one year or to a fine of ten thousand ringgit and, on a second or subsequent conviction, to imprisonment for three years or to a fine of twenty thousand ringgit or to both.

#### Interference with official marks

**54.** A person who without authority opens, alters, breaks, removes, or erases any mark, fastening, or seal placed by an authorized officer in pursuance of the provisions of this Act upon any substance or upon

any package, place, door, or opening containing or affording access to the substance commits an offence.

## **Secrecy**

**55.** Except for the purposes of this Act or of an investigation into or prosecution for an offence against this Act or the rules or regulations, no person shall disclose any information that he has obtained in the course of his duties under this Act and if he does so he commits an offence.

## **General penalty**

**56.** A person who commits an offence against this Act or the rules or regulations, for which no other penalty is specifically provided thereby, is liable, on a first conviction, to imprisonment for six months or to a fine of five thousand ringgit and, on a second or subsequent conviction, to imprisonment for one year or to a fine of ten thousand ringgit or to both.

## Rules and regulations

- **57.** (1) The Minister may, after consulting the Board, make rules or regulations to carry out the purposes of this Act and to give effect to the provisions thereof and in particular, but without prejudice to the generality of the foregoing power, such rules or regulations may—
  - (a) prescribe the procedure to be followed and the forms to be used in making applications under this Act and the fees payable therefor;
  - (b) provide generally for matters connected with registration, licensing, and the issue of permits;
  - (c) prescribe the procedure for appeals and showing cause under this Act;

- (d) prescribe the manner of testing and analyzing samples of any food or pesticide;
- (e) prescribe the measures to be taken and the practice to be followed or avoided by manufacturers and employers for the protection, safety, and well-being of their workers engaged in the manufacture or handling of pesticides, including—
  - (i) the provision of protective clothing, equipment, and facilities for the workers;
  - (ii) the provision of facilities for medical examination of the workers;
  - (iii) the provision of facilities for ensuring first aid treatment of the workers;
  - (iv) the giving to the workers of instruction and training in the manufacture or in any process in the manufacture of, and in handling, pesticides; and
  - (v) the measures to be taken in cases of poisoning through the use or handling of pesticides by the workers;
- (f) prescribe the requirements to be fulfilled in transporting pesticides in bulk;
- (g) prescribe the manner of storing or keeping pesticides;
- (h) prescribe the manner of labelling and packing pesticides, the matters to be displayed on labels of pesticides, and the persons liable for breaches in respect of labelling and packing;
- (i) provide for the dyeing or colouring of certain pesticides;

- (j) regulate the manner of using certain pesticides and the precautions to be taken in respect thereof;
- (k) with a view to protecting persons from danger in connection with the fumigation, spraying, or any other mode of treatment of premises and articles, including ships and vehicles, and fumigation, spraying, or treatment for agricultural purposes, with a pesticide—
  - (i) generally regulate the fumigation, spraying, or treatment;
  - (ii) regulate the manner in which the pesticide is to be generated or applied and require the admixture therewith of any substance;
  - (iii) prohibit the carrying out of fumigation, spraying, or treatment except by or under the supervision of persons having such training or experience and by such number of persons as may be specified;
  - (iv) prohibit the carrying out of fumigation, spraying, or treatment except by persons licensed to carry it out:
  - (v) regulate the issue, suspension, or cancellation of licences for the carrying out of fumigation, spraying, or treatment and the terms and conditions subject to which they may be issued and the fees to be charged therefor;
  - (vi) regulate the disposal of the residues of any substance used in the fumigation, spraying, or treatment;
  - (vii) impose temporary restrictions upon the use of any premises, article, ship, or vehicle, and require such tests as may be specified to be carried out after fumigation, spraying, or treatment;

- (1) regulate the advertising of pesticides;
- (m) provide for the control of pesticides imported under permit under section 14;
- (n) regulate the conduct of the duties of Pesticides Licensing Officers, Analysts, and authorized officers under this Act;
- (o) prescribe the fees payable under this Act;
- (oa) regulate the export of pesticides; and
- (p) prescribe anything that may be prescribed under this Act.
- (2) If a standard specification in respect of a pesticide has been declared under section 28 of the Standards and Industrial Research Institute of Malaysia (Incorporation) Act 1975, the Board, in making rules or regulations under subsection (1) prescribing the label or package of the pesticide, shall, in addition to other matters, take into consideration the relevant requirements of the standard specification and the need or otherwise of adopting any or all of those requirements.
- (3) Rules and regulations made under subsection (1) may provide for presumptions, which shall be rebuttable, to facilitate the proof of acts or omissions that constitute an offence thereunder.
- (4) If any proceedings or prosecution under this Act or the rules or regulations or in the administration thereof a question or dispute arises as to the correctness or acceptability of the result of a test or analysis of any substance or a sample thereof, the result obtained from a test or analysis conducted in the manner prescribed under paragraph (1)(d) shall be taken and accepted to be the correct result.

#### **Amendment of Schedules**

**58.** The Minister may from time to time, after consulting, or on the advice of, the Board, by order amend the First and Second Schedules.

## **Exemption**

**59.** The Minister may, by order published in the *Gazette* and subject to such conditions as he may specify therein, exempt any person from any provision of this Act or the rules or regulations.

#### PART XI

## AMENDMENT, REPEAL, AND SAVING OF RELATED LAWS

#### Removal of certain substances from F.M. 29/1952

- **60.** (1) Subject to and except as provided by subsection (2), the \*Poisons Ordinance 1952 [*F.M.* 29 of 1952] shall cease to apply to the substances listed in Part I of the Third Schedule to this Act and accordingly the Ordinance is amended by—
  - (a) deleting from the Poisons List set out in the First Schedule thereto all entries relating to those substances; and
  - (b) deleting from the Appendix to the said Poisons List the entries listed in Part II of the Third Schedule to this Act.
- (2) Notwithstanding subsection (1) and the other provisions of this Act—
  - (a) a person who, by virtue of a licence issued, under the Ordinance or the regulations made thereunder, before the coming into operation of this section, would, but for this Act, be entitled to do any act or thing in relation to a substance listed in Part I of the Third Schedule to this Act may, during the period for which the licence is valid, continue to do that act or thing subject to the terms or conditions of the licence and shall, in doing or in relation to the doing of that act or thing, continue to be governed by the Ordinance and the regulations made thereunder;

<sup>\*</sup>NOTE—Poisons Ordinance 1952 [F.M. 29 of 1952] has since been superseded and revised–see relevant section of the Poisons Act 1952 [Act 366].

- (b) if the appropriate licensing authority under the Ordinance or the regulations made thereunder considers, after consulting the Board, that it is necessary to do so in order that the business or activities of a person referred to in paragraph (a) may not be unduly jeopardized by any delay in fully implementing this Act, the licensing authority may, upon the expiry of the current licence of the person, from time to time issue to him another such licence under, in accordance with, and subject to the Ordinance and the regulations made thereunder as if they continue to apply to the substance concerned in the licence, and paragraph (a) shall apply mutatis mutandis to the person;
- (c) a person who would, but for this Act, be entitled to do an act or thing by virtue of subsection 4(3) or section 15 of the Ordinance shall continue to be so entitled in relation to a substance listed in Part I of the Third Schedule to this Act and shall, in doing or in relation to the doing of that act or thing, continue to be governed by the Ordinance and the regulations made thereunder;
- (d) a person who would, but for this Act, be entitled, by virtue of paragraph 9(1)(a), (b) or (c) of the Ordinance, to dispense, compound, or mix any of the substances listed in Part I of the Third Schedule to this Act with any other substance for the purpose of its being used for medical treatment shall continue to be so entitled and, in doing or in relation to the doing of the said acts, shall continue to be governed by the Ordinance and the regulations made thereunder;
- (e) regulations made under the Ordinance relating to the possession, containers, packaging, labelling, or storing of poisons generally or of particular poisons and applicable, immediately before the coming into operation of this section, to the substances listed in Part I of the Third Schedule to this Act or to any one or more of them shall, notwithstanding and to the exclusion of the rules and regulations made under this Act, continue to be so applicable and to be enforceable under the Ordinance until

those first-mentioned regulations are amended expressly in order to remove those substances from the operation thereof, upon the happening of which event the rules and regulations made under this Act relating to those matters shall apply or be made to apply, as the case may be, to those substances.

## Control in Peninsular Malaysia of substances that are both poisons and pesticides

- **61.** (1) This section shall apply in relation to a substance that is both a poison as defined in the Poisons Ordinance 1952 and a pesticide as defined in this Act.
- (2) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under the Ordinance or the regulations made thereunder or would not, but for this Act, constitute an offence by virtue of a licence, authorization, exemption, or exception under, or any provision of, the Ordinance or the regulations made thereunder, shall not be liable to be prosecuted under this Act or the rules or regulations for doing that act or thing.
- (3) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under this Act or the rules or regulations or would not, but for the Ordinance, constitute an offence by virtue of a registration, licence, permit, authorization, exemption, or exception under, or any provision of, this Act or the rules or regulations, shall not be liable to be prosecuted under the Ordinance or the regulations made thereunder for doing that act or thing.

### Removal of certain substances from Sabah Cap. 100

**62.** (1) Subject to and except as provided by subsection (2), the \*Poisons and Deleterious Drugs Ordinance of the State of Sabah

<sup>\*</sup>NOTE—See P.U. (A) 157/1978–Modofication of Laws (Dangerous Drugs and Poisons) (Extension and Modification) Order 1978.

[Cap. 100] shall cease to apply to the substances listed in Part III of the Third Schedule to this Act and accordingly the Ordinance is amended by deleting from the First Schedule thereto all entries relating to those substances.

- (2) The Ordinance is further amended by deleting the words "Substances for use in agriculture and horticulture" appearing against the entry "Metanitro-phenol; orthonitrophenol; and paranitrophenol" added to the First Schedule thereto by State of Sabah *Gazette* No. S. 33 of 1969.
- (3) Notwithstanding subsection (1) and the other provisions of this Act—
  - (a) a person who, by virtue of a licence issued under the Ordinance before the coming into operation of this section, would, but for this Act, be entitled to do any act or thing in relation to a substance listed in Part III of the Third Schedule to this Act may, during the period for which the licence is valid, continue to do that act or thing subject to the terms, conditions, or limitation of the licence and shall, in doing or in relation to the doing of that act or thing, continue to be governed by the Ordinance:
  - (b) if the appropriate licensing authority under the Ordinance considers, after consulting the Board, that it is necessary to do so in order that the business or activities of a person referred to in paragraph (a) may not be unduly jeopardized by any delay in fully implementing this Act, the licensing authority may, upon the expiry of the current licence of the person, from time to time issue to him another such licence under, in accordance with, and subject to the Ordinance as if it continues to apply to the substance concerned in the licence, and paragraph (a) shall apply mutatis mutandis to the person;
  - (c) a person who would, but for this Act, be authorized, by virtue of section 5 of the Ordinance, to import, possess, and use poisons shall continue to be so authorized and, in

- doing or in relation to the doing of the said acts, shall continue to be governed by the Ordinance and the regulations made thereunder;
- (d) section 8 of the Ordinance shall, notwithstanding and to the exclusion of the rules and regulations made under this Act, continue to apply where appropriate to the substances listed in Part III of the Third Schedule to this Act in relation to the manner of containing, distinguishing, labelling, or storing them when they are in the possession of a person or under his control, or in keeping, selling, dispensing, or delivering them, and to be enforceable under the Ordinance, until the Minister orders otherwise by notification in the Federal *Gazette*, upon the happening of which event the rules and regulations made under this Act relating to those matters shall apply or be made to apply, as the case may be, to those substances.

## Control in the State of Sabah of substances that are both poisons and pesticides

- **63.** (1) This section shall apply in relation to a substance that is both a poison as defined in the Poisons and Deleterious Drugs Ordinance of the State of Sabah and a pesticide as defined in this Act.
- (2) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under the Ordinance or would not, but for this Act, constitute an offence by virtue of a licence, authorization, exemption, or exception under, or any provision of, the Ordinance, shall not be liable to be prosecuted under this Act or the rules or regulations for doing that act or thing.
- (3) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under this Act or the rules or regulations or would not, but for the Ordinance, constitute an offence by virtue of a registration, licence, permit, authorization, exemption, or exception under, or any provision of, this Act or the rules or regulations, shall not be liable to be prosecuted under the Ordinance for doing that act or thing.

## Removal of certain substances from Sarawak Cap. 121

- **64.** (1) Subject to and except as provided by subsection (2), the \*Poisons Ordinance of the State of Sarawak [*Cap. 121*] shall cease to apply to the substances listed in Part IV of the Third Schedule to this Act and accordingly the Ordinance is amended by deleting from the Poisons List set out in the Schedule thereto all entries shown in the said Part IV.
- (2) Notwithstanding subsection (1) and the other provisions of this Act—
  - (a) a person who, by virtue of a licence issued, under the Ordinance or the rules made thereunder, before the coming into operation of this section, would, but for this Act, be entitled to do any act or thing in relation to a substance listed in Part IV of the Third Schedule to this Act may, during the period for which the licence is valid, continue to do that act or thing subject to the terms, conditions, or limitations of the licence and shall, in doing or in relation to the doing of that act or thing, continue to be governed by the Ordinance and the rules made thereunder;
  - (b) if the appropriate licensing authority under the Ordinance or the rules made thereunder considers, after consulting the Board, that it is necessary to do so in order that the business or activities of a person referred to in paragraph (a) may not be unduly jeopardized by any delay in fully implementing this Act, the licensing authority may, upon the expiry of the current licence of the person, from time to time issue to him another such licence under, in accordance with, and subject to the Ordinance and the rules made thereunder as if they continue to apply to the substance concerned in the licence, and paragraph (a) shall apply mutatis mutandis to the person;
  - (c) a person who would, but for this Act, be entitled to do an act or thing by virtue of section 7 of the Ordinance shall

<sup>\*</sup>NOTE—See P.U. (A) 157/1978.

- continue to be so entitled in relation to a substance listed in Part IV of the Third Schedule to this Act and shall, in doing or in relation to the doing of that act or thing, continue to be governed by the Ordinance and the rules made thereunder;
- (d) the provisions of section 9 of the Ordinance shall, notwithstanding and to the exclusion of the rules and regulations made under this Act, continue to apply where appropriate to the substances listed in Part IV of the Third Schedule to this Act in relation to the manner of containing, securing, distinguishing, labelling or storing them when they are in the possession of a person or under his control, or in keeping, selling, dispensing, or delivering them, and to be enforceable under the Ordinance, until the Minister orders otherwise by notification in the Federal Gazette, upon the happening of which event the rules and regulations made under this Act relating to those matters shall apply or be made to apply, as the case may be, to those substances.

# Control in the State of Sarawak of substances that are both poisons and pesticides

- **65.** (1) This section shall apply in relation to a substance that is both a poison as defined in the Poisons Ordinance of the State of Sarawak and a pesticide as defined in this Act.
- (2) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under the Ordinance or would not, but for this Act, constitute an offence by virtue of a licence, authorization, exemption, or exception under, or any provision of, the Ordinance, shall not be liable to be prosecuted under this Act or the rules or regulations for doing that act or thing.
- (3) A person who does an act or thing in relation to that substance, which act or thing is authorized by or under this Act or the rules or regulations or would not, but for the Ordinance, constitute an offence by virtue of a registration, licence, permit, authorization, exemption,

or exception under, or any provision of, this Act or the rules or regulations, shall not be liable to be prosecuted under the Ordinance for doing that act or thing.

## Repeal of F.M. 15/1949 and Sabah Cap. 99

- **66.** (1) The Poisons (Sodium Arsenite) Ordinance 1949 [F.M. 15 of 1949] and the Poisons (Agricultural and Industrial) Ordinance of the State of Sabah [Cap. 99] are repealed.
- (2) A person who does an act or thing in relation to sodium arsenite, which act or thing is authorized by the regulations made under the Ordinances or would not, but for this Act, constitute an offence whether by virtue of a licence, or permit under, or any provision of, the regulations, shall not be liable to be prosecuted under this Act or the rules or regulations for doing that act or thing.
- (3) A person who does an act or thing in relation to sodium arsenite which act or thing is authorized by or under this Act or the rules or regulations or would not, but for the regulations made under the Ordinances, constitute an offence by virtue of a registration, licence, permit, authorization, exemption, or exception under, or any provision of, this Act or the rules or regulations, shall not be liable to be prosecuted under the regulations made under the Ordinances for doing that act or thing.
- (4) If it is intended to revoke the regulations in their entirety or to amend them so as to affect the provisions thereof relating to the right to deal in sodium arsenite, such revocation or amendment shall not be made to have effect until at least one year after the publication of the revocation or amendment.

#### Amendment of F.M. 29/1952

**67.** The Poisons Ordinance 1952 is amended by deleting subsection 21(3).

\_\_\_\_\_

#### First Schedule

(Section 2)

#### LIST OF PESTICIDES

#### **EXPLANATION**

- 1. In the following list the common name and the chemical name or, if no common name is provided, the chemical name only, determine the identity of a pesticide.
- 2. The sign (=) indicates continuity of spelling and is used where a word or name is broken up owing to limitation of space.

Common names

Chemical names

abamectin

a mixture of:

- (i) (10E,14E,16E,22Z) (1R, 4S, 5'S, 6S, 6'R, 8R, 12S, = 13S,20R,21R,24S)-6'-[(S)-secbutyl]-21,24-= dihydroxy-5',11,13,22-tetramethyl-2-oxo-3,7,=19-trioxatetracyclo [15.6.1.1<sup>4.8</sup>.0<sup>20.24</sup>] penta= cosa-10,14,16,22-tetraene-6-spiro-2'-(5',6'-= dihydro-2'Hpyran)-12-yl 2,6-dideoxy-4-O-= (2,6-dideoxy- 3-O-methyl- $\alpha$ -L-arabino-hexo=pyranosyl)-3-O-methyl- $\alpha$ -L-arabino-hexo=pyranoside; and
- (ii) (10E, 14E, 16E, 22Z) (1R, 4S, 5'S, 6S, 6'R, 8R, 12S, = 13S,20R,21R,24S) -21,24-dihydroxy-6'-iso= propyl-5',11,13,22-tetramethyl-2-oxo-3,7,19= -trioxatetracyclo-[15.6.1.1<sup>4.8</sup>.0<sup>20.24</sup>]pentacosa= -10,14,16,22-tetraene-6-spiro-2'-(5',6'-dihydro= -2'H-pyran)-12-yl 2,6-dideoxy-4-O- (2,6= -dideoxy-3-O-methyl-α-L-arabino-hexo= pyranosyl)-3-O-methyl-α-L-arabino-hexo= pyranoside

Abrobacterium radiobacter

Common names	Chemical names
acephate	O,S-dimethyl acetylphosphoramidothioate
acequinocyl	3-dodecyl-1,4-dihydro-1,4-dioxo-2-naphthyl acetate
acetamiprid	$\label{eq:continuous} \begin{tabular}{ll} (E)-N1 & -[(6\mbox{-chloro-3-pyridyl})methyl]-N2\mbox{-cyano-}N1= -methylacetamidine \\ \end{tabular}$
acetochlor	2-chloro-N-ethoxymethyl-6'-ethylaceto-o-toluidide
acibenzolar-S- methyl	S-methyl benzo[1,2,3]thiadiazole-7-carbothioate
acifluorfen (including salts)	5-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyloxy)-2-nitro= benzoic acid
aclonifen	2-chloro-6-nitro-3-phenoxyaniline
acrinathrin	$(S)\text{-}\alpha\text{-}cyano\text{-}3\text{-}phenoxybenzyl} \qquad (Z)\text{-}(1R,3S)\text{-}2,2\text{-}=\\ dimethyl\text{-}3\text{-}[2\text{-}(2,2,2\text{-}tifluoro\text{-}1\text{-}\\ ethoxycarbonyl})vinyl]cyclopropanecarboxylate}$
acrolein	prop-2-enal
acypetacs (including salts)	a reaction mixture of $C_8$ to $C_{10}$ linear and branched chain saturated aliphatic carboxylic acids, the branched chain acids being a mixture of approximately equal parts by mass of:
	(a) acids in which the main chain is dialkyl-= substituted on the second carbon atom; and
	(b) acids in which the second carbon atom is either unsubstituted or monoalkyl-substituted
Adoxophyes orana granulosis virus	-
Agrobacterium radiobacter	-
alachlor	2-chloro-2',6'-diethyl-N-methoxymethylacetanilide
alanycarb	ethyl (Z)-N-benzyl-N-[[methyl(1-methylthioethyli=deneamino-oxycarbonyl)amino]thio]- $\beta$ -alaninate

Common names	Chemical names
Aldicarb	2-methyl-2-(methylthio)propionaldehyde O- = methylcarbamoyloxime
aldoxycarb	2-mesyl-2-methylpropionaldehyde O-methyl= carbamoyloxime
aldrin (HHDN)	(1R,4S,4aS,5S,8R,8aR)-1,2,3,4,10,10-hexachloro-= 1,4,4a,5,8,8a-hexahydro-1,4:5,8-dimethanonaph= thalene
allethrin [(1R)-isomers]	$(RS)\mbox{-}3\mbox{-}allyl\mbox{-}2\mbox{-}methyl\mbox{-}4\mbox{-}oxocyclopent\mbox{-}2\mbox{-}enyl=\mbox{\ }(+)\mbox{-}cistrans\mbox{-}chrysanthemate$
allidochlor	N,N-dially-2-chloroacetamide
alloxydim (including salts)	methyl(E)-(RS)-3-[1-(allyloxyimino)butyl]-4-= hydroxy-6,6-dimethyl-2-oxocyclohex-3-enecar= boxylate
allyxycarb	4-diallylamino-3,5-xyly methylcarbamate
alpha-cypermethrin	a racemate comprising of:
	(a) (R)-α-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2=dichlorovinyl)-2,2-dimethylcyclopropane=carboxylate; and
	(b) (S)-α-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2= dichlorovinyl)-2,2-dimethylcyclopropane= carboxylate
	or
	a racemate comprising of:
	(a) (R)-α-cyano-3-phenoxybenzyl (1S)-cis-3-(2,2-= dichlorovinyl)-2,2-dimethylcyclopropane= carboxylate; and
	(b) (S)-α-cyano-3-phenoxybenzyl (1R)-cis-3-(2,2=dichlorovinyl)-2,2-dimethylcyclopropane=carboxylate
aluminium phosphide	aluminium phosphide

Common names Chemical names

Amblyseius spp -

ametridione 1-amino-6-ethylthio-3-neopentyl-1,3,5-triazine-

=2,4(1H,3H)-dione

ametryn N<sup>2</sup>-ethyl-N<sup>4</sup>-isopropyl-6-methylthio-1,3,5-triazine=-2,4-

diamine

amibuzin 6-tert-butyl-3-dimethylamino-4-methyl-1,2,4-=triazin-

5(4H)-one

amicarbazone 4-amino-*N-tert*-butyl-4,5-dihydro-3-isopropyl-5-=oxo-

1*H*-1,2,4-triazole-1-carboxamide

amidithion S-2-methoxyethylcarbamoylmethyl O,O-dimethyl=

phosphorodithioate

amidosulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-mesyl=

(methyl)sulfamoylurea

aminocarb 4-dimethylamino-m-totyl methylcarbamate

aminopyralid

(including salts and

esters)

4-amino-3-6-dichloropyridine-2-carboxylic acid

amiprofos-methyl (RS)(O-methyl O-2-nitro-p-tolyl isopropyl=

phosphoramidothioate)

amiton S-2-diethylaminoethyl O,O-diethyl phosphorothioate

amitraz N-methylbis(2,4-xylyliminomethyl)amine

amitrole 1H-1,2,4-triazol-3-ylamine

ammonium sulfamate ammonium sulfamidate

50111111111

Ampelomyces quisqualis

Common names Chemical names ampropylfos (RS)-1-aminopropylphosphonic acid

anabasine (S)-3-(piperidin-2-yl)pyridine

Anagrapha california NPV

Anagrapha falcifera

NPV

ancymidol  $\alpha$ -cyclopropyl-4-methoxy- $\alpha$ -(pyrimidin-5-yl)=benzyl

alcohol

anilazine 4,6-dichloro-N-(2-chlorophenyl)-1,3,5-triazin-2-=amine

Anilofos S-4-chloro-N-isopropylcarbaniloylmethyl O,O-= dimethyl

phosphorodithioate

Anticarsia gemmatalis NPV

Anisuron 1-(3,4-dichlorophenyl)-1-(4-methoxybenzoyl)=3,3-

dimethylurea

antraquinone Anthraquinone

Antu 1-(1-naphthyl)-2-thiourea

Aphelinus abdominalis

Aphidius colemani -

Aphidoletes aphidimyza

Asulam methyl sulfanilylcarbamate

athidathion O,O-diethyl S-2,3-dihydro-5-methoxy-2-oxo-

1,3,4-= thiadiazol-3-ylmethyl phosphorodithioate

Chemical names Common names

atraton  $N^2$ -ethyl- $N^4$ -isopropyl-6-methoxy-1,3,5-

triazine-= 2,4-diamine

6-chloro-N<sup>2</sup>-ethyl-N<sup>4</sup>-isopropyl-1,3,5-triazine-2,4-= atrazine

Autographa californica NPV

1-[[2-(2,4-dichlorophenyl)-1,3-dioxolan-2-yl]= methyl]azaconazole

1H-1,2,4-triazole

azadirachtin dimethyl [2aR-

> $[2a\alpha,3\beta,4\beta(1aR*,2S*,3aS*,6aS*,7S*,=7aS*),4a\beta,5\alpha.7aS*$  $.8\beta(E).10\beta.10a\alpha.10b\beta]$ ]-10-=(acetyloxy)octahydro-3,5-

dihydroxy-4-methyl-8-= [(2-methyl-1-oxo-2-

butenyl)oxy]-4-(3a,6a,7,7a-=tetrahydro-6a-hydroxy-7amethyl-2,7-methano= furo[2,3-b]oxireno[e]oxepin-1a(2H)-yl)-1H,7H=naphtho[1,8-bc',4,4a-c']difuran-

5,10a(8H)-= dicarboxylate

azamethiphos S-6-chloro-2,3-dihydro-2-oxo-1,3-oxazolo[4,5-

b]=pyridin-3-ylmethyl O,O-dimethyl phosphorothioate

azimsulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-[1-methyl-4-=(2-

methyl-2H-tetrazol-5-yl)-pyrazol-5-yl= sulfonyl]urea

S-(3,4-dihydro-4-oxobenzo[d]-[1,2,3]-triazin-3-yl=methyl) azinphos-ethyl

O,O-diethyl phosphorodithioate

azinphos-methyl S-(3,4-dihydro-4-oxobenzo[d]-[1,2,3]-triazin-3-yl=methyl)

O,O-dimethyl phosphorodithioate

aziprotryne 4-azido-N-isopropyl-6-methylthio-1,3,5-triazin-2-= ylamine

azithiram bis(3,3-dimethylthiocarbazoyl) disulfide

azocyclotin tri(cyclohexyl)-1H-1,2,4-triazol-1-yltin

azothoate 0,4-(4-chlorophenylazo)phenyl O,O-dimethyl=

phosphorothioate

Common names

Chemical names

azoxystrobin

methyl (E)-2-{2-[6-(2-cyanophenoxy)pyrimidin=-4-

yloxy]phenyl}-3-methoxyacrylate

Bacillus fimus

Bacillus pumilus

Bacillus sphaericus

Bacillus subtilis

Bacillus subtilis var. amyloliquefaciens

Bacillus subtilis MBI -

600

Bacillus subtilis QST -

713

Bacillus thuringiensis

**Bacillus** thuringiensis delta

endotoxin

**Bacillus** thuringiensis isolates for control of the Plutella group of

Lepidoptera

Bacillus thuringiensis isolates for control of

Coleoptera

Bacillus thuringiensis isolates for control of the

Spodoptera group of

Lepidoptera

Bacillus

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Common names

Chemical names

thuringiensis isolates for control of the Lepidoptera and Coleoptera

Bacillus thuringiensis
encapsulated deltaendotoxins for
control of Coleoptera

Bacillus thuringiensis isolate for control of soilinhabiting Coleoptera

Bacillus
thuringiensis
encapsulated deltaendotoxins for
control of
Spodoptera group of
Coleoptera

Bacillus thuringiensis isolates for control of Diptera

Bacillus
thuringiensis
encapsulated deltaendotoxins for
control of Plutella of
Lepidoptera

barban 4-chlorobut-2-ynyl 3-chlorocarbanilate

Beauveria brongniartii

Beaveria bassiana -

Beauveria bassiana (Balsamo) Vuillemin

Common names	Chemical names
beflubutamid	(RS)-N-benzyl-2-( $\alpha$ , $\alpha$ , $\alpha$ ,4-tetrafluoro- $m$ -tolyloxy)= butyramide
benalaxyl	methyl N-phenylacetyl-N-2,6-xylyl-DL-alaninate
benalaxyl-M	methyl N-pheylacetyl-N-2,6-xylyl-D-alaninate
benazolin (including salts and esters)	4-chloro-2-oxobenzothiazolin-3-ylacetic acid
bendiocarb	2,2-dimethyl-1,3-benzodioxol-4-yl methyl= carbamate methyl 2-{5-ethyl-2-[4-(1,2,3,6-tetrahydro-3-= methyl-
benfendizone	2,6-dioxo-4-trifluoromethylpyrimidin-1-=
	yl)phenoxymethyl]phenoxy}propionate
benfluralin	N-butyl-N-ethyl- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-2,6-dinitro-p-= toluidine
benfuracarb	ethyl N-[2,3-dihydro-2,2-dimethylbenzofuran-7-= yloxycarbonyl(methyl)aminothiol]-N-isopropyl- $\beta$ -= alaninate
benfuresate	2,3-dihydro-3,3-dimethylbenzofuran-5-yl= ethanesulfonate
benodanil	2-iodobenzanilide
benofluor	4'-ethylthio-2'-(trifluoromethyl)methane= sulfonanilide
benomyl	methyl 1-(butylcarbamoyl)benzimidazol-2-yl= carbamate
bensulfuron (including salts and esters)	α-(4,6-dimethoxypyrimidin-2-ylcarbamoyl= sulfamoyl) o-toluic acid

Common names bensulide	Chemical names S-2-benzenesulfonamidoethyl O,O-di-isopropyl= phosphorodithioate
bensultap	S,S'-2-dimethylaminotrimethylene di(benzene= thiosulfonate)
bentaluron	1-(1,3-benzothiazol-2-yl)-3-isopropylurea
bentazone (including salts)	3-isopropyl-1H-2,1,3-benzothiadiazin-4(3H)-one= 2,2-dioxide
benthiavalicarb (including salts and esters)	$[(S)-1-\{[(1R)-1-(6-fluoro-1,3-benzothiazol-2-yl)=ethyl] carbamoyl\}-2-methylpropyl] carbamic acid$
benthiocarb	S-(4-chlorobenzyl)-N,N-diethylthiolcarbamate
bentranil	2-phenyl-3,1-benzoxazinone
benzadox (including salts)	benzamido-oxyacetic acid
benzalkonium chloride	mixture of alkylbenzyldimethylammonium chlorides
benzamacril (including esters)	2-cyano-3-(N-methylbenzylamino)acrylic acid
benzamizole	N[3-(1-ethyl-3-methylpropyl)isoxazol-5-yl]-2,6-= dimethoxybenzamide
benzamorf	morpholinium 4-dodecylbenzenesulfonate
benzipram	N-benzyl-N-isopropyl-3,5-dimethylbenzamide
benzofenap	2-[4-(2,4-dichloro-m-toluoyl)-1,3-dimethyl=pyrazol-5-yloxy]-4'-methylacetophenone
benzoximate	3-chloro-α-ethoxyimino-2,6-dimethoxybenzyl= benzoate
benzoylprop (including esters)	N-benzoyl-N-(3,4-dichlorophenyl)-DL-alaninate

## Common names benzthiazuron

## Chemical names

## 1-(1,3-benzothiazol-2-yl)-3-methylurea

beta-cyfluthrin

a reaction mixture comprising four diastereoisomeric pairs of enantiomers:

- (i) (R)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl (1R)-= cis-3-(2,2-dichlorovinyl)-2,2-dimethylcyclo= propanecarboxylate + (S)- $\alpha$ , (1S)-cis-;
- (ii) (S)- $\alpha$ , (1R)-cis-+ (R)- $\alpha$ , (1S)-cis-;
- (iii) (R)- $\alpha$ , (1R)-trans- + (S)- $\alpha$ , (1S)-trans-; and
- (iv) (S)- $\alpha$ , (1R)-trans- + (R)- $\alpha$ , (1S)-trans- . (contain < 2% diastereoisomer I, 30-40% diastereoisomer II, < 3% diastereoisomer III and 53-67% diastereoisomer IV)

#### beta-cypermethrin

reaction mixture comprising the enantiomeric pair (R)α-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-=dichlorovinyl)-2,2-dimethylcyclopropane= carboxvlate: and (S)- $\alpha$ -cvano-3-phenoxybenzyl= (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethyl= cyclopropanecarboxylate in ratio approximately 2:3 with the enantiomeric pair (R)- $\alpha$ -cyano-3-phenoxy= (1S,3R)-3-(2,2-dichlorovinyl)-2,2-dimethyl= benzyl cyclopropanecarboxylate; (S)- $\alpha$ -cyano-3-= and phenoxybenzyl (1R,3S)-3-(2,2-dichlorovinyl)-2,2-= dimethylcyclopropanecarboxylate or reaction mixture comprising the enantiomeric pair (R)- $\alpha$ -cyano-3-phenoxybenzyl (1S)-cis-3-(2,2-=dichlorovinyl)-2,2-dimethylcyclopropane= carboxylate; and (S)- $\alpha$ -cyano-3-phenoxybenzyl=(1R)cis-3-(2,2-dichlorovinyl)-2,2-dimethyl= cyclopropanecarboxylate in ratio approximately 2:3 with the enantiomeric pair (R)- $\alpha$ -cyano-3-= phenoxybenzyl (1S)-trans-3-(2,2-dichlorovinyl)-= 2,2dimethylcyclopropanecarboxylate; and (S)-α-cyano-3phenoxybenzyl (1R)-trans-3-(2,2-= dichlorovinyl)-2,2dimethylcyclopropane=carboxylate

BHC (including all isomers)
- see also HCH

1,2,3,4,5,6-hexachlorocyclohexane

Common names	Chemical names
bifenazate	isopropyl 3-(4-methoxybiphenyl-3-yl)carbazate
	or
	isopropyl 2-(4-methoxybiphenyl-3-yl) hydrazine= formate
bifenox	methyl 5-(2,4-dichlorophenoxy)-2-nitrobenzoate
bifenthrin	2-methylbiphenyl-3- ylmethyl (Z)-(1RS,3RS)-3-(2-e chloro-3, 3,3-trifluoroprop-1-enyl)-2,2-dimethyl= cyclopropanecarboxylate
bilanafos or bialaphos (including salts and esters)	(2 <i>S</i> )-2-amino-4- [hydroxyl (methyl) phosphinoyl] =butyryl-L-alanyl-L-alanine
binapacryl	2-sec-butyl-4,6-dinitrophenyl 3-methylbut-2-enoate
bioallethrin ((S)- cyclopentenyl isomer) or S- bioallethrin	(S)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1R,= 3R)-2,2-dimethyl-3-(2-methylprop-enyl)cyclo= propanecarboxylate
bioallethrin or d-trans allethrin	(RS)-3-ally-2-methyl-4-oxocyclopent-2-enyl (1R,=3R)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclo=propanecarboxylate
biopermethrin	3-phenoxybenzyl(1R)-trans-3-(2,2-dichlorovinyl)=-2,2-dimethyl cyclopropanecarboxylate
bioresmethrin	5-benzyl-3-furylmethyl(1R,3R)-2,2-dimethyl-3-(2-= methylprop-1-enyl)cyclopropanecarboxylate
biphenyl	biphenyl
bismerthiazol	5,5'-(methylenediimino)bis-1,3,4-thiadiazole-2= (3H)-thione
bispyribac (including salts and esters)	2,6-bis(4,6-dimethoxypyrimidin-2-yloxy)benzoic acid

Common names Chemical names

bistrifluron 1-[2-chloro-3,5-bis(trifluoromethyl)phenyl]-3=

(2,6-difluorobenzoyl)urea

bitertanol 1-(biphenyl-4-yloxy)-3,3-dimethyl-1-(1H-1,2,4-=

triazol-1-yl)butan-2-ol [ratio of racemates (1RS,2RS) and (1RS,2SR) is 20:80]

blasticidin-S 1-(4-amino-1,2-dihydro-2-oxopyrimidin-1-yl)-4-=

[(S)-3-amino-5-(1- methylguanidino)valeramido]-

= 1,2,3,4-tetradeoxy- $\beta$ -D-erythro-hex -2-

enopyranu= ronic acid

bordeaux mixture a mixture, with or without stabilising agents, of

calcium hydroxide and copper(II) sulfate

boscalid 2-chloro-*N*-(4'-chlorobiphenyl-2-yl)nicotinamide

BPMC or fenobucarb 2-s-butylphenyl N-methylcarbamate

brodifacoum 3-[3-(4'-bromobiphenyl-4-yl)-1,2,3,4-tetrahydro=-

1-naphthyl]-4-hydroxycoumarin

bromacil 5-bromo-3-sec-butyl-6-methyluracil

bromadiolone 3-[3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-=

phenylpropyl]-4-hydroxycoumarin

bromethalin  $\alpha,\alpha,\alpha$ -trifluoro-N-methyl-4,6,dinitro-N-(2,4,6-=

tribromophenyl)-o-toluidine

bromfenvinfos 2-bromo-1-(2,4-dichlorophenyl)vinyl diethyl=

phosphate

bromobonil 2,6-dibromo-4-cyanophenyl tetrahydrofurfuryl=

carbonate

bromobutide 2-bromo-3,3-dimethyl-N-(1-methyl-1-phenyl=

ethyl)butyramide

bromocyclen 5-bromomethyl-1,2,3,4,7,7-hexachlorobicyclo=

[2.2.1]hept-2-ene

Common names	Chemical names
bromofenoxim	3,5-dibromo-4-hydroxybenzaldehyde 2,4-dinitro= phenyloxime
bromophos	O-4-bromo-2,5-dichlorophenyl O,O-dimethyl= phosphorothioate
bromophos-ethyl	O-4-bromo-2,5-dichlorophenyl O,O-diethyl= phosphorothioate
bromopropylate	isopropyl 4,4'-dibromobenzilate
bromoxynil (including salts and esters)	3,5-dibromo-4-hydroxybenzonitrile
brompyrazon	5-amino-4-bromo-2-phenylpyridazin-3(2H)-one
bromuconazole	1-[(2RS,4RS:2RS,4SR)-4-bromo-2-(2,4-dichloro=phenyl)tetrahydrofurfuryl]-1H-1,2,4-triazole
bronopol	2-bromo-2-nitropropane-1,3-diol
bufencarb	Reaction product in which the main components are:
	(i) 3-(1-methylbutyl)phenyl methylcarbamate; and
	(ii) 3-(1-ethylpropyl)phenyl methylcarbamate
bupirimate	5-butyl-2-ethylamino-6-methylpyrimidin-4-yl=dimethylsulfamate
buprofezin	2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-= thiadiazinan-4-one
butacarb	3,5-di-tert-butylphenyl methylcarbamate
butachlor	N-butoxymethyl-2-chloro-2',6'-diethylacetanilide
butafenacil	1-(allyloxycarbonyl)-1-methylethyl 2-chloro-5-= [1,2,3,6-tetrahydro-3-methyl-2,6-dioxo-4- (tri= fluoromethyl)pyrimidin-1-yl]benzoate

Common names Chemical names butam N-benzyl-N-isopropylpivalamide

butamifos O-ethyl O-6-nitro-m-tolyl sec-butyl phos=

phoramidothioate

butathiofos O-2-tert-butylpyrimidin-5-yl O,O-diethyl=

phosphorothioate

butenachlor (Z)-N-but-2-enyloxymethyl-2-chloro-2',6'-=

diethylacetanilide

buthidazole 3-(5-tert-butyl-1,3,4-thiadiazol-2-yl)-4-hydroxy= -

1-methyl-2-imidazolidone

buthiobate butyl 4-tert-butylbenzyl N-(3-pyridyl)dithio=

carbonimidate

buthiuron 1-(5-butylsulfonyl-1,3,4-thiadiazol-2-yl)-1,3=

dimethylurea

butocarboxim 3-(methylthio)butanone O-methylcarbamoyloxime

butonate dimethyl 1-butyryloxy-2,2,2-trichloroethylphos=

phonate

butopyronoxyl butyl 3,4-dihydro-2,2-dimethyl-4-oxo-2H-pyran= -

6-carboxylate

butoxycarboxim 3-methylsulfonylbutanone O-methylcarbamoyl=

oxime

butralin N-sec-butyl-4-tert-butyl-2,6-dinitroaniline

butroxydim (5RS)-5-(3-butyryl-2,4,6-trimethylphenyl)-2-

[(EZ)= -1-(ethoxyimino)propyl]-3-

hydroxycyclohex-2-en= -1-one

buturon 3-(4-chlorophenyl)-1-methyl-1-(1-methylprop-2-=

ynyl)urea

butylate S-ethyl di-isobutylthiocarbamate

cacodylic acid hydroxydimethylarsine oxide

Common names Chemical names

cadusafos S,S-di-sec-butyl O-ethyl phosphorodithioate

calciferol (3β,5Z,7E,22E)-9,10-secoergosta-5,7,10(19),22-=

tetraen-3-ol

calcium cyanide calcium cyanide

calcium polysulfide calcium polysulfide

cambendichlor 2,2'-(phenylimino)diethylene bis(3,6-dichloro-o-=

anisate)

camphechlor a mixture of chlorinated camphenes containing

67-= 69% chlorine

Candida oleophila -

capsaicin -

captafol N-(1,1,2,2-tetrachloroethylthio)cyclohex-4-ene-

= 1,2-dicarboximide

captan N-(trichloromethylthio)cyclohex-4-ene-1,2-=

dicarboximide

carbamorph morpholinomethyl dimethyldithiocarbamate

carbanolate 6-chloro-3,4-xylyl methylcarbamate

carbaryl 1-naphthyl methylcarbamate

carbasulam methyl 4-(methoxycarbonylsulfamoyl)

carbanilate

carbendazim methyl benzimidazol-2-ylcarbamate

carbetamide (R)-1-(ethylcarbamoyl)ethyl carbanilate

carbofuran 2,3-dihydro-2,2-dimethylbenzofuran-7-yl

methyl= carbamate

chinomethionat

chlobenthiazone

Common names Chemical names carbophenothion S-4-chlorophenylthiomethyl O,O-diethyl phos= phorodithioate carbosulfan 2,3-dihydro-2,2-dimethylbenzofuran-7-yl (dibutyl= aminothio)methylcarbamate carboxazole methyl 5-tert-butyl-1,2-oxazol-3-ylcarbamate carboxin 5,6-dihydro-2-methyl-1,4-oxathi-ine-3-carbox= anilide cafenstrole N,N-diethyl-3-mesitylsulfonyl-1H-1,2,4triazole-= 1-carboxamide carfentrazone (RS)-2-chloro-3-{2-chloro-5-[4-(difluoromethyl) = 4,5-dihydro-3-methyl-5-oxo-(including salts and esters) 1*H*-1,2,4-triazol-1-yl] -4-fluorophenyl} = propionic acid carpropamid a mixture of (1R,3S)-2,2-dichloro-N-[I-1-(4chloro = phenyl) ethyl]-1-ethyl-3methylcyclopropane= carboxamide, (1S,3R)-2,2dichloro-N-[I-1-(4-=chlorophenyl)ethyl]-1ethyl-3-methylcyclo= propanecarboxamide, (1S,3R)-2,2-dichloro-N-[(S)=-1-(4chlorophenyl)ethyl]-1-ethyl-3-methylcyclo= propanecarboxamide and (1R,3S)-2,2-dichloro-N=[(S)-1-(4-chlorophenyl)ethyl]-1-ethyl-3methyl= cyclopropanecarboxamide where the first two cited comprise at least 95% of the total cartap (including S,S'-(2-dimethylaminotrimethylene) bis(thio= salts) carbamate) (RS)-5-isopropenyl-2-methylcyclohex-2-en-1carvone one or (RS)-p-mentha-6,8-dien-2-one

6-methyl-1,3-dithiolo[4,5-b]quinoxaline-2-one

4-chloro-3-methylbenzothiazol-2(3H)-one

Common names	Chemical names	
chlomethoxynil or chlomethoxyfen	5-(2,4-dichlorophenoxy)-2-nitroanisole	
chloprazophos	O-(3-chloro-7-methylpyrazolo[1,5-d]pyrimidin=2-yl)O,O-diethyl phosphorothioate	
chloralose	(R)-1,2-0-(2,2,2-trichloroethylidene)- $\alpha$ -D-gluco= furanose	
chloramben	3-amino-2,5-dichlorobenzoic acid	
chlorantraniliprole	3-bromo-N-[4-chloro-2-methyl-6-(methyl=carbomoyl)phenyl-1-(3-chloropyridine-2-yl)1H-pyrazole-5-carboxamide	
chloraniformethan	N-[2,2,2-trichloro-1-(3,4-dichloroanilino)ethyl]= formamide	
chloranil	tetrachloro-p-benzoquinone	
chloranocryl	3',4'-dichloro-2-methylacrylanilide	
chlorazifop	(±)-2-[4-(3,5-dichloro-2-pyridyloxy)phenoxy]= propionic acid	
chlorazine	6-chloro-N <sup>2</sup> ,N <sup>2</sup> ,N <sup>4</sup> ,N <sup>4</sup> -tetraethyl-1,3,5-triazine-2,4- = diamine	
chlorbenside	4-chlorobenzyl 4-chlorophenyl sulfide	
chlorbicyclen	1,2,3,4,7,7-hexachloro-5,6-bis(chloromethyl)-= 8,9,10-trinorborn-2-ene	
chlorbromuron	3-(4-bromo-3-chlorophenyl)-1-methoxy-1-= methylurea	
chlorbufam	1-methylprop-2-ynyl 3-chlorocarbanilate	
chlordane	1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-= 4,7-methanoindane	
chlordecone	perchloropentacyclo[5.3.0.0 <sup>2,6</sup> .0 <sup>3,9</sup> .0 <sup>4,8</sup> ]decane-5-= one	

Common names	Chemical names
chlordimeform (including salts)	$N^2$ -(4-chloro-o-tolyl)- $N^1$ , $N^1$ -dimethylformamidine
chlorethoxyfos	(±)-O,O-diethyl O-(1,2,2,2-tetrachloroethyl)= phosphorothioate
chloreturon	3-(3-chloro-4-ethoxyphenyl)-1,1-dimethylurea
chlorfenac (including salts)	(2,3,6-trichlorophenyl)acetic acid
chlorfenapyr	4-bromo-2-(4-chlorophenyl)-1-ethoxymethyl-5-= trifluoromethyl-1 <i>H</i> -pyrrole-3-carbonitrile
chlorfenazole	2-(2-chlorophenyl)benzimidazole
chlorfenethol	1 1,1-bis-(4-chlorophenyl)ethanol
chlorflurenol (including salts and esters)	(RS)-2-chloro-9-hydroxyfluorene-9-carboxylic acid
chloridazon	5-amino-4-chloro-2-phenylpyridazin-3(2H)-one
chlorimuron (including salts and esters)	2-(4-chloro-6-methoxypyrimidin-2-ylcarbamoyl= sulfamoyl)benzoic acid
chlormephos	S-chloromethyl O,O-diethyl phosphorodithioate
chlornitrofen	4-nitrophenyl 2,4,6-trichlorophenyl ether
chloroacetic acid (including salts)	chloroacetic acid
chlorobenzilate	ethyl 4,4'-dichlorobenzilate
chlorodinitronaphthal ene	1-chloro-2,4-dinitronaphthalene
chloromebuform	$N^1$ -butyl- $N^2$ -(4-chloro-o-tolyl)- $N^1$ -methylforma= midine

Common names Chemical names

chloromethiuron 3-(4-chloro-o-tolyl)-1,1-dimethylthiourea

chloroneb 1,4-dichloro-2,5-dimethoxybenzene

chlorophacinone 2-[2-(4-chlorophenyl)-2-phenylacetyl]indan-

1,3= dione

chloropicrin trichloronitromethane

chloropon 2,2,3-trichlorpropionic acid

chloropropylate isopropyl 4,4'-dichlorobenzilate

chlorothalonil tetrachloroisophthalonitrile

chlorotoluron 3-(3-chloro-p-tolyl)-1,1-dimethylurea

chloroxuron 3-[4-(4-chlorophenoxy)phenyl]-1,1-

dimethylurea

chloroxynil 3,5-dichloro-4-hydroxybenzonitrile

chlorphoxim 2-(2-chlorophenyl)-2-(diethoxyphosphino=

thioyloxyimino)acetonitrile

chlorphthalim N-(4-chlorophenyl)-1-cyclohexane-1,2-dicarbox=

imide

chlorprocarb methyl 3-[1-(chloromethyl)propylcarbamoyloxy]=

carbanilate

chlorpropham isopropyl 3-chlorocarbanilate

chlorpyrifos O,O-diethyl O-3,5,6-trichloro-2-pyridyl=

phosphorothioate

chlorpyrifos-methyl O,O-dimethyl O-3,5,6-trichloro-2-pyridyl=

phosphorothioate

chlorquinox 5,6,7,8-tetrachloroquinoxaline

Common names Chemical names

chlorsulfuron 1-(2-chlorophenylsulfonyl)-3-(4-methoxy-6-=

methyl-1,3,5-triazin-2-yl)urea

chlorthal tetrachloroterephthalic acid

(including esters)

chlorthiamid 2,6-dichlorothiobenzamide

chlorthiophos O-2,5-dichloro-4-methylthiophenyl O,O-diethyl=

phosphorothioate

chlozolinate ethyl  $(\pm)$ -3-(3,5-dichlorophenyl)-5-methyl-2,4-=

dioxo-oxazolidine-5-carboxylate

Chondrostereum

purpureum

chromafenozide 2'-tert-butyl-5-methyl-2'-(3,5-xyloyl)chromane-6-

= carbohydrazide

Chrysoperla carnea

cinidon-ethyl ethyl (Z)-2-chloro-3-[2-chloro-5-(cyclohex-1-ene-

= 1,2-dicarboximido)phenyl]acrylate

cinmethylin (1RS,2SR,4SR)-1,4-epoxy-p-menth-2-yl 2-

methyl= benzyl ether

cinosulfuron 1,(4,6-dimethoxy-1,3,5-triazin-2-yl)-3-[2-(2-=

methoxyethoxy)phenylsulfonyl]urea

citronella

clethodim  $(\pm)$ -2-[(E)-1-[(E)-3-chloroallyloxyimino]propyl-5-

= [2-(ethylthio)propyl]-3-hydroxycyclohex-2-

enone

cliodinate 2-chloro-3,5-di-iodo-4-pyridyl acetate

(R)-2-[4-(5-chloro-3-fluoro-2-pyridyloxy)= clodinafop

(including esters) phenoxy|propionic acid

cloethocarb 2-(2-chloro-1-methoxyethoxy)phenyl=

methylcarbamate

## Common names Chemical names

clofentezine 3,6-bis(2-chlorophenyl)-1,2,4,5-tetrazine

(±)-2-[4-(4-chlorophenoxy)phenoxy] propionic clofop

(including esters) acid

clomazone 2-(2-chlorobenzyl)-4,4-dimethyl-1,2-

oxazolidin=-3-one

(RS)-2-(2,4-dichloro-m-tolyloxy) clomeprop

propionanilide

cloprop

(including salts and

esters)

(RS)-2-(3-chlorophenoxy)propionic acid

cloproxydim (±)-2-[1-(3-chloroallyloxy)iminobutyl]-5-(2-=

ethylthiopropyl)-3- hydroxycyclohex-2-enone

clopyralid

(including esters)

3,6-dichloropyridine-2-carboxylic acid

cloransulam (including salts and

esters)

3-chloro-2-(5-ethoxy-7-fluoro[1,2,4]triazolo= [1,5-c]pyrimidin-2-ylsulfonamido)benzoic acid

or

3-chloro-*N*-(5-ethoxy-7-fluoro[1,2,4]triazolo= [1,5-c]pyrimidin-2-ylsulfonyl)anthranilic acid

clothianidin (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-

methyl-= 2-nitroguanidine

Colletotrichum gloeosporioides f. Sp.

Aeschynomene

Coniothyrium minitans

copper hydroxide copper hydroxide

copper oxychloride dicopper chloride trihydroxide (approximate

composition)

Common names Chemical names

copper sulfate copper sulfate

copper sulfate, basic copper sulfate

coumachlor 3-[1-(4-chlorophenyl)-3-oxobutyl]-4-hydroxy=

coumarin

coumafury 3-[1-(2-fury)-3-oxobutyl]-4-hydroxycoumarin

coumaphos O-3-chloro-4-methyl-2-oxo-2H-chromen-7-yl

O,O= -diethyl phosphorothioate

coumatetralyl 4-hydroxy-3-(1,2,3,4-tetrahydro-1-naphthyl)=

coumarin

coumithoate O,O-diethyl O-(7,8,9,10-tetrahydro-6-oxo-6H-

= benzo[c]chromen-3-yl) phosphorothioate

4-CPA 4-chlorophenoxyacetic acid

credazine 3-(2-methylphenoxy)-pyridazine

crimidine 2-chloro-N,N,6-trimethylpyrimidin-4-amine

crotoxyphos 1-phenylethyl 3-(dimethoxyphosphinoyloxy)=

isocrotonate

crufomate 4-tert-butyl-2-chlorophenyl

methylmethylphos= phoramidate

cryolite trisodium hexafluoroaluminate(3-

Cryptolaemus

montrouzieri

cufraneb ethylenebis(dithiocarbamate) mixed metal

complex containing not less than 8.15% (m/m) of zinc, 8.05% (m/m) of manganese, 5.5% (m/m) of copper and 1.0% (m/m) of iron

cumyluron 1-(2-chlorobenzyl)-3-(1-methyl-1-

phenylethyl)= urea

Common names Chemical names

cupric hydrazinium

sulphate

copper (II) dihydrazinium disulfate

cuprobam tricopper dichloride dimethyldithiocarbamate

cuprous oxide copper (I) oxide

cyanamide calcium cyanamide

cyanatryn 2-(4-ethylamino-6-methylthio-1,3,5-triazin-2-=

ylamino)-2-methylpropiononitrile

cyanazine 2-(4-chloro-6-ethylamino-1,3,5-triazin-2-yl=

amino)-2-methylpropiononitrile

cyanofenphos O-4-cyanophenyl O-ethyl

phenylphosphonothioate

cyanophos O-4-cyanophenyl O,O-dimethyl

phosphorothioate

cyanthoate S-[N-(1-cyano-1-

methylethyl)carbamoylmethyl]= O,O-diethyl

phosphorothioate

cyazofamid 4-chloro-2-cyano-*N*,*N*-dimethyl-5-*p*-tolylimid=

azole-1-sulfonamide

cyclafuramid N-cyclohexyl-2,5-dimethyl-3-furamide

cycloate S-ethyl N-cyclohexyl (N-ethyl)thiocarbamate

cycloprothrin (RS)-α-cyano-3-phenoxybenzyl (RS)-2,2-

dichloro= -1-(4-

ethoxyphenyl)cyclopropanecarboxylate

cycloxydim (±)-2-[1-(ethoxyimino)butyl]-3-hydroxy-5-

thian-3= -ylcyclohex-2-enone

cycluron 3-cyclo-octyl-1,1-dimethylurea

Cydia pomonella granulosis virus

trans-isomers]

Common names Chemical names cyflufenamid  $(Z)-N-[\alpha-(cyclopropylmethoxyimino)-2,3$ difluoro= -6-(trifluoromethyl)benzyl]-2phenylacetamide cyfluthrin (RS)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl= (1RS,3RS; 1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-= dimethylcyclopropanecarboxylate cyhalofop (R)-2-[4-(4-cyano-2-fluorophenoxy) (including esters) phenoxy]= propionic acid cyhalothrin (RS)-α-cyano-3-phenoxybenzyl (1RS,3RS)-3--2-chloro-3,3,3-trifluoropropenyl]-2,2dimethyl= cyclopropanecarboxylate or (RS)-α-cyano-3-phenoxybenzyl (1RS)-cis-3-[(Z)=-2-chloro-3,3,3-trifluoropropenyl]-2,2dimethyl= cyclopropanecarboxylate cyhexatin tricyclohexyltin hydroxide cymoxanil 1-(2-cyano-2-methoxyiminoacetyl)-3-ethylurea (Z)-cyanomethoxyimino(phenyl)acetonitrile cyometrinil Cydia pomonella granulosis virus cypendazole 1-(5-cyanopentylcarbamoyl) benzimidazol = -2-ylcarbamatecypermethrin  $RS-\alpha$ -cyano-3-phenoxybenzyl (1RS, 3RS; 1RS, 3SR) = -3-(2,2-dichlorovinyl)-2,2dimethylcyclopropane=Carboxylate 1-methyl-4-phenylpyridinium cyperquat cyphenothrin [ (1R)-(RS)-α-cyano-3-phenoxybenzyl (IRS, 3RS:

1RS, 3SR)= -2,2-dimethyl-3-(2-methylprop-1-

enyl)cyclo= propanecarboxylate

Common names cyprazine	Chemical names 6-chloro-N <sup>2</sup> -cyclopropyl-N <sup>4</sup> -isopropyl-1,3,5-
ovmrozolo	tria= zine-2,4-diamine N-[5-(2-chloro-1,1-dimethylethyl)-1,3,4-
cyprazole	thiadi= azol-2-yl]cyclopropanecarboxamide
cyproconazole	(2RS,3RS;2RS,3SR)-2-(4-chlorophenyl)-3-cyclo= propyl-1-(1H-1,2,4-triazol-1-yl)butan-2-ol
cyprodinil	4-cyclopropyl-6-methyl- <i>N</i> -phenylpyrimidin-2-amine
cyprofuram	$(\pm)$ - $\alpha$ -[N-(3-chlorophenyl)cyclopropane= carboxamido] $\gamma$ -butyrolactone
cypromid	3',4'-dichlorocyclopropanecarboxyanilide
cyromazine	N-cyclopropyl-1,3,5-triazine-2,4,6-triamine
2,4-D (including salts and esters)	(2,4-dichlorophenoxy)acetic acid
2,4-DB (including salts and esters)	4-(2,4-dichlorophenoxy)butyric acid
Dacnusa sibirica	-
DAEP	S-2-acetamidoethyl O,O-dimethyl phosphorodithioate
daimuron	1-(1-methyl-1-phenylethyl)-3-p-tolylurea
dalapon (including salts)	2,2-dichloropropionic acid
Dazomet	3,5-dimethyl-1,3,5-thiadiazinane-2-thione
DDT	isomer pp'-DDT: 1,1,1-trichloro-2,2-bis-(4=chlorophenyl)ethane isomer op-DDT:1,1,1=trichloro-2-(2-chlorophenyl)-2-(4=chlorophenyl)ethane

demeton-S-

methylsulphone

Common names	Chemical names	
debacarb	2-(2-ethoxyethoxy)ethyl benzimidazol-2-yl= carbamate	
decafentin	decyltriphenylphosphonium bromochlorotri= phenyl stannate(IV)	
n-decanol	decan-1-ol	
decarbofuran	2,3-dihydro-2-methylbenzofuran-7-yl-methyl= carbamate	
delachlor	2-chloro-N-(isobutoxymethyl)acet-2',6'-xylidide	
deltamethrin	(S)-α-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2- = dibromovinyl)-2,2-dimethylcyclopropane= carboxylate	
demephion	a mixture of O,O dimethyl O-2-methylthioethyl= phosphorothioate and O,O-dimethyl S-2-= methylthioethyl phosphorothioate	
demeton	a mixture of demeton-O and demeton-S	
demeton methyl	a mixture of demeton-O-methyl and demeton-S-= methyl	
demeton-O	O,O-diethyl O-2-ethylthioethyl phosphorothioate	
demeton-O methyl	2-ethylthioethyl dimethyl phosphorothionate	
demeton-S	O,O-diethyl S-2-ethylthioethyl phosphorothioate	
demeton-S-methyl	S-2-ethylthioethyl O,O-dimethyl phosphorothioate	

S-2-ethylsulfonylethyl phosphoro= thioate

O,O-dimethyl

Common names	Chemical names	
2,4-DEP	a mixture of:	
	(a) tris [2-(2,4-dichlorophenoxy)ethyl] phosphate; and	
	(b) bis[2-(2,4-dichlorophenoxy)ethyl] phosphonate	
desmedipham	ethyl 3-phenylcarbamoyloxyphenylcarbamate	
desmetryne	N²-isopropyl-N⁴-methyl-6-methylthio-1,3,5-= triazine-2,4-diamine	
diafenthiuron	1-tert-butyl-3-(2,6-di-isopropyl-4-phenoxy= phenyl) thiourea	
dialifos	S-2-chloro-1-phthalimidoethyl O,O-diethyl= phosphorodithioate	
di-allate	S-2,3-dichloroallyl di-isopropyl(thiocarbamate)	
diamidafos	phenyl N,N'-dimethylphosphorodiamidate (1)	
diatomaceous earth	-	
diazinon	O,O-diethyl O-2-isopropyl-6-methylpyrimidin-4-yl= phosphorothioate	
dibromochloropropane	1,2-dibromo-3-chloropropane (1)	
dicamba (including salts and esters)	3,6-dichloro-o-anisic acid	
dicapthon	O-2-chloro-4-nitrophenyl O,O-dimethyl= phosphorothioate	
dichlobenil	2,6-dichlorobenzonitrile	
dichlofenthion	O-2,4-dichlorophenyl O,O-diethyl phosphorothioate	
dichlofenthion	O-2-4-dichlorophenyl O,O-diethyl phosphoro=	

Common names	Chemical names	
	thioate	
dichlofluanid	$\begin{aligned} N\text{-dichlorofluoromethylthio-N',N'-dimethyl-N-} \\ = phenylsulfamide \end{aligned}$	
dichlofop-P-methyl	methyl (R)-2-[4-(2,4-dichlorophenoxy) phenoxy]= propionate	
dichlone	2,3-dichloro-1,4-naphthoquinone	
dichloralurea	1,3-bis(2,2,2-trichloro-1-hydroxyethyl)urea	
dichlormate	3,4-dichlorobenzyl methylcarbamate	
dichlorophen (including salts)	4,4'-dichloro-2,2'- methylenediphenol	
1,3 dichloropropene	(EZ)-1,3-dichloropropene	
dichlorprop (including salts and esters)	(RS)-2-(2,4-dichlorophenoxy)propionic acid	
dichlorprop-P (including salts and esters)	(R)-2-(2,4-dichlorophenoxy)propionic acid	
dichlorvos	2,2-dichlorovinyl dimethyl phosphate	
dichlozoline	3-(3,5-dichlorophenyl)-5,5-dimethyl-1,3-oxazol= idine-2,4-dione	
diclobutrazol	(2RS,3RS)-1-(2,4-dichlorophenyl)-4,4-dimethyl-2-= (1H-1,2,4-triazol-1-yl)pentan-3-ol	
diclofop (including esters)	(RS)-2-[4-(2,4-dichlorophenoxy)phenoxy]= propionic acid	
diclomezine	6-(3,5-dichloro-4-methylphenyl)pyridazin-3(2H)-= one	
dicloran	2,6-dichloro-4-nitroaniline	

Common names Chemical names

dicofol 2,2,2-trichloro-1,1-bis-(4-chlorophenyl) ethanol

dicrotophos 3-dimethoxyphosphinoyloxy-N,N-

dimethyliso= crotonamide

dicryl 3',4'-dichloro-2-methylacrylanilide

dicyclanil 4,6-diamino-2-cyclopropylaminopyrimidine-5-

= carbonitrile

dicyclocymet toluylene diisocyanate and 4,4'-methylenebis-=

(cyclohexyl isocyanate)

dicyclosulam 2',6'-dichloro-5-ethoxy-7-

> fluoro[1,2,4]triazolo= [1,5-c]pyrimidine-2-

sulfonanilide

dieldrin (HEOD) (1R,4S,4aS,5R,6R,7S,8S,8aR)-1,2,3,4,10,10=

> hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7epoxy-= 1,4:5,8-dimethanonaphthalene

dienochlor perchloro-1,1'-bicyclopenta-2,4-diene

diethamquat 1,1'-bis(diethylcarbamoylmethyl)-4,4'-

bipyridinium

diethatyl

(including salts and

esters)

N-chloroacetyl-N-(2,6-diethylphenyl)glycine

diethofencarb isopropyl 3,4-diethoxycarbanilate

diethyltoluamide N,N diethyl-m-toluamide

difenacoum 3-(3-biphenyl-4-yl-1,2,3,4-tetrahydro-1-

naphthyl)= -4-hydroxycoumarin

difenoconazole cis,trans-3-chloro-4-[4-methyl-2-(1H-1,2,4-

triazol= -1-ylmethyl)-1,3-dioxolan-2-yl]phenyl-

4- chloro= phenyl ether

 $(E)-(\pm)-4-[4-(\alpha,\alpha,\alpha-trifluoro-p$ difenopenten

tolyloxy) phenoxy]= pent-2-enoic acid (including esters)

Common names Chemical names difenoxuron 3-[4-(4-methoxyphenoxy)phenyl]-1,1dimethylurea difenzoquat 1,2-dimethyl-3,5-diphenylpyrazolium (including salts) difethialone 3-[(1RS,3RS;1RS,3SR)-3-(4'-bromobiphenyl-4-v1)-= 1,2,3,4tetrahydro-1,naphthyl]-4hydroxy-1-= benzothi- in-2-one where ratios of the racemates (1RS,3RS) to (1RS,3SR) lie in the range 0-15 to 85 = -100diflovidazine 3-(2-chlorophenyl)-6-(2,6-difluorophenyl)-1,2,4,5= tetrazine diflubenzuron 1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)urea diflufenican 2',4'-difluoro-2-( $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-m-tolyloxy)= nicotinanilide diflufenzopyr 2',6'-dichloro-5-ethoxy-7-fluoro [1,2,4](including salts) triazolo [1,5-=c]pyrimidine-2-sulfonanilide diflumetorim (*RS*)-5-chloro-*N*-{1-[4-(difluoromethoxy) propyl}-6-methylpyrimidin-4phenyl] ylamine Diglyphus isaea dihydroazadirachtin dimefox tetramethylphosphorodiamidic fluoride (1) dimefuron 3-[4-(5-tert-butyl-2,3-dihydro-2-oxo-1,3,4diazol-3-yl)-3-chlorophenyl]-1,1oxa=

dimepiperate S-1-methyl-1-phenylethyl piperidine-1-carbo= thioate

dimethachlor 2-chloro-N-(2-methoxyethyl)aceto-2',6'-

dimethylurea

xylidide

Common names	Chemical names N2-(1,2-dimethylpropyl)-N4-ethyl-6-
dimethametryn	methylthio= 1,3,5-triazine-2,4-diamine
dimethenamid	(RS)-2-chloro-N-(2,4-dimethyl-3-thienyl)-N-(2-= methoxy-1-methylethyl)acetamide
dimethipin	2,3-dihydro-5,6-dimethyl-1,4-dithi-ine 1,1,4,4- = tetraoxide
dimethirimol	5-butyl-2-dimethylamino-6-methylpyrimidin-4-ol
dimethoate	2-dimethoxyphosphinothioylthio-N-methyl= acetamide
	or
	O,O-dimethyl S-methylcarbamoylmethyl phosphoro= dithioate
dimethomorph	(E,Z)-4-[3-(4-chlorophenyl)-3-(3,4-dimethoxy= phenyl)acryloyl]morpholine (E to Z normally ratio 1:1)
dimethrin	2,4-dimethylbenzyl(1RS)-cis,trans-2,2-dimethyl= -3-(2-methylprop-1-enyl) cyclopropanecarboxylate
dimethyl disulfide	dimethyl disulfide
dimethylvinphos	(Z)-2-chloro-1-(2,4-dichlorophenyl)vinyl dimethyl=phosphate
dimetilan	1-dimethylcarbamoyl-5-methylpyrazol-3-yl=dimethylcarbamate
dimexano	O,O-dimethyl dithiobis(thioformate)
dimidazon	4,5-dimethoxy-2-phenylpyridazin-3(2H)-one
dimoxystrobin	( <i>E</i> )-2-(methoxyimino)- <i>N</i> -methyl-2-[ $\alpha$ -(2,5-= xylyloxy)- $o$ -tolyl]acetamide

2-cyclohexyl-4,6-dinitrophenol (1)

dinex

Common names	Chemical names	
diniconazole	(E)-(RS)-1-(2,4-dichlorophenyl)-4,4-dimethyl- 2-= (1H-1,2,4-triazol-1-yl)pent-1-en-3-ol	
dinitramine	$N^1, N^1$ -diethyl-2,6-dinitro-4-trifluoromethyl-m-= phenylenediamine	
dinobuton	2-sec-butyl-4,6-dinitrophenyl isopropyl carbonate	
dinocap	2,6-dinitro-4-octylphenyl crotonates and 2,4-= dinitro-6-octylphenyl crotonates in which 'octyl' is a mixture of 1-methylheptyl,1-ethylhexyl and 1-propylpentyl groups	
dinocton	a mixture of:	
	(i) 2,4-dinitro-6-(1-propypentyl)phenyl methyl= carbonate;	
	(ii) 2-(1-ethylhexy)- 4,6-dinitrophenyl methyl = carbonate;	
	(iii) 2,6-dinitro-4- (1-propylpentyl) phenyl methyl = carbonate; and	
	(iv) 4-(1-ethylhexyl)-2,6-dinitrophenyl methyl = carbonate	
dinofenate	2-sec- butyl -4,6-dinitrophenyl 2,4-dinitrophenyl= carbonate	
dinopenton	isopropyl 2-(1-methylbutyl)-4,6-dinitrophenyl= carbonate	
dinoprop	4,6-dinitro-o-cymen-3-ol	
dinosan	2-(1-methylbutyl)-4,6-dinitrophenol (1)	
dinoseb (including salts and esters)	2-sec-butyl-4,6-dinitrophenol	
dinosulfon	S-methyl O-2-(1-methylheptyl)-4,6-dinitrophenyl= thiocarbonate	
dinotefuran	(EZ)-(RS)-1-methyl-2-nitro-3-(tetrahydro-3-	

Common names Chemical names

furyl= methyl)guanidine

dinoterb

(including salts and

esters)

2-tert-butyl-4,6-dinitrophenol

dinoterbon 2-tert-butyl-4,6-dinitrophenyl ethyl carbonate

diofenolan a mixture of (2RS,4SR)-4-(2-ethyl-1,3-

dioxolan= -4-ylmethoxy)phenyl phenyl ether (50%-80%) and (2RS,4RS)-4-(2-ethyl-1,3-dioxolan-4-ylmethoxy)= phenyl phenyl ether

(50%-20%)

dioxabenzofos (RS)-2-methoxy-4H-benzo-1,3,2 $\lambda^5$ -benzodioxa=

phosphinine-2-sulfide

dioxacarb 2-(1,3-dioxolan-2-yl)phenyl methylcarbamate

dioxathion S,S'-(1-4-dioxane-2,3-diyl) O,O,O',O'-

tetraethyl=

bis(phosphorodithioate)

diphacinone 2-(diphenylacetyl)indan-1,3-dione

diphenamid N,N-dimethyldiphenylacetamide

diphenyl sulfone diphenyl sulfone

diphenylamine diphenylamine

dipropetryn 6-ethylthio- N<sup>2</sup>,N<sup>4</sup>-di-isopropyl-1,3,5-triazine-

2,4-= diamine

dipyrithione di-2-pyridyl disulfide 1,1'-dioxide

diquat 9,10-dihydro-8a,10a-diazoniaphenanthrene

(including salts)

6,7-dihydrodipyrido[1,2-*a*:2',1'-*c*]pyrazine-5,8-

diium

or

or

Common names Chemical names

1,1'-ethylene-2,2'-bipyridyldiylium

disul 2-(2-4-dichlorophenoxy)ethyl hydrogen sulphate

disulfoton O,O-diethyl S-2-ethylthioethyl

phosphorodithioate ditalimfos O,O-diethyl

phthalimidophosphonothioate

dithianon 5,10-dihydro-5,10-dioxanaphtho[2,3-b]-1,4-

dithi= ine-2,3-dicarbonitrile

dithicrofos S-(6-chloro-3,4-dihydro-2H-1-benzothi-in-4-yl)

O,O= -diethylphosphorodithioate

dithiopyr S,S'-dimethyl 2-difluoromethyl-4-isobutyl-6-

tri= fluoromethylpyridine-3,5- dicarbothioate

diuron 3-(3,4-dichlorophenyl)-1,1-dimethylurea

DMPA (RS)-(O-2,4-dichlorophenyl O-methyl

isopropyl= phosphoroamidothioate)

DNOC 4.6-dinitro-o-cresol

(including salts)

dodemorph 4-cyclododecyl-2,6-dimethylmorpholine

(including esters)

dodicin N-[2-(2-dodecylaminoethylamino)ethyl]glycine

dodine 1-dodecylguanidinium acetate

dofenapyn 4-(pent-4-ynyloxy)phenyl phenyl ether

drazoxolon 4-(2-chlorophenylhydrazono)-3-

methylisoxazol-= 5(4H)-one

edifenphos O-ethyl S,S'-diphenyl phosphorodithioate

eglinazine N-(4-chloro-6-ethylamino-1,3,5-triazin-2-

(including esters) yl)glycine

emamectin benzoate a mixture containing 90% of

(10E, 14E, 16E, 22Z) =

(1R,4S,5'S,6S,6'R,8R,12S,13S,20R,21, 24S)-6'-[(S)= sec-butyl]-21,24-dihydroxy-5',11,13,22tetra= methyl-2-oxo-3,7,19-trioxatetracyclo=

	1 cstretues
Common names	Chemical names [15.6.1.1 <sup>4.8</sup> .0 <sup>20.24</sup> ]pentacosa-10,14,16,22-tetraene= -6-spiro-2'-(5',6'-dihydro-2'H-pyran)-12-yl 2,6-= dideoxy-3-O-methyl-4-O-(2,4,6-trideoxy-3-O-= methyl-4-methylamino-α-L-lyxo-hexo= pyranosyl)-α-L-arabino-hexopyranoside and 10% of (10E,14E,16E,22Z)-(1R,4S,5'S,6S,6'R,8R,12S,= 13S,20R,21R,24S )-21, 24-dihydroxy-6'-isopropyl-= 5',11,13,22-tetramethyl-2-oxo-3,7,19-trioxatetra= cyclo[15.6.1.1 <sup>4.8</sup> .0 <sup>20.24</sup> ]pentacosa-10,14,16,22-= tetraene-6-spiro-2'-(5',6'-dihydro-2'H-pyran)-12-yl= 2,6-dideoxy-3-O-methyl-4-O-(2,4,6-trideoxy-3-O-= methyl-4-methylamino-α-L-lyxo-hexopyranosyl)= -α-L-arabino-hexopyranoside
empenthrin [(EZ)-(1R) isomers]	(E)-(RS)-1-ethynyl-2-methylpent-2-enyl= (1RS,3RS;1R,3SR)-2,2-dimethyl-3-(2-methylprop= -1- enyl) cyclopropanecarboxylate
Encarsia Formosa	-
endosulfan	(1,4,5,6,7,7-hexachloro-8,9,10-trinorborn-5-en=2,3-ylenebismethylene) sulfite
endothal (including salts)	7-oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
endothion	S-5-methoxy-4-oxo-4H-pyran-2-ylmethyl O,O=dimethyl phosphorothioate
endrin	(1R,4S,4aS,5S,6S,7R,8R,8aR)-1,2,3,4,10,10-hexa= chloro-1,4,4a,5,6,8,8a-octahydro-6,7-epoxy-= 1,4:5,8-dimethanonaphthalene
EPBP	O-2,4-dichlorophenyl O-ethyl phenylphosphono= thioate
EPN	O-ethyl O-4-nitrophenyl phenylphosphonothioate
epofenonane	6,7-epoxy-3-ethyl-7-methylnonyl 4-ethylphenyl ether

 $\label{eq:condition} \begin{tabular}{ll} (2RS,3SR)-1-[3-(2-chlorophenyl)-2,3-epoxy-2-(4-=fluorophenyl)propyl]-1H-1,2,4-triazole \end{tabular}$ 

epoxiconazole

ethion

Common names	Chemical names
epronaz	N-ethyl-N-propyl-3-propylsulphony-1H-1,2,4-= triazole-1-carboxamide
EPTC	S-ethyl dipropylthiocarbamate
erbon	2-(2-4,5-trichlorophenoxy)ethyl 2,2-dichloro= propionate
Eretmocerus eremicus	-
ergocalciferol	(5Z,7E,22E)-(3S)-9,10-secoergosta-5,7-10(19),= 22-tetraen-3-ol
esfenvalerate	(S)-α-cyano-3-phenoxybenzyl (S)-2-(4-chloro= phenyl)-3-methylbutyrate
esprocarb	S-benzyl 1,2- dimethylpropyl(ethyl)thiocarbamate
etacelasil	2-chloroethyltris(2-methoxyethoxy)silane
etaconazole	(±)-1-[2-(2,4-dichlorophenyl)-4-ethyl-1,3-= dioxolan-2-ylmethyl]-1H-1,2,4-triazole
etem	5,6-dihydro-(1 <i>H</i> ,3 <i>H</i> )-imidazo[2,1-c]-1,2,4-dithia= zole-3-thione
ethaboxam	(RS)-N-( $\alpha$ -cyano-2-thenyl)-4-ethyl-2- (ethylamino)= -1,3-thiazole-5-carboxamide
ethalfluralin	$N$ -ethyl- $\alpha$ - $\alpha$ - $\alpha$ -trifluoro- $N$ -(2-methylallyl)-2,6- = dinitro- $p$ -toluidine
ethametsulfuron (including salts and esters)	2-[(4-ethoxy-6-methylamino-1,3,5-triazin-2-yl)= carbamoylsulfamoyl]benzoic acid
ethidimuron	1-(5-ethylsulfonyl-1,3,4-thiadiazol-2-yl)1,3-= dimethylurea
ethiofencarb	$\alpha$ -ethylthio-o-tolyl-methylcarbamate
ethiolate	S-ethyl diethylthiocarbamate

O,O,O',O'-tetraethyl

S,S'-methylene

Common names Chemical names

bis(phospho= rodithioate)

ethiprole 5-amino-1-(2,6-dichloro-α,α,α-trifluoro-*p*-

tolyl)-4-= ethylsulfinylpyrazole-3-carbonitrile

ethirimol 5-butyl-2-ethylamino-6-methylpyrimidin-4-ol

ethoate-methyl S-ethylcarbamoylmethyl O,O-dimethyl

phosphoro= dithioate

ethofenprox or

2-(4-ethoxyphenyl)-2-methylpropyl 3etofenprox

phenoxy= benzyl ether

ethofumesate  $(\pm)$ -2-ethoxy-2,3-dihydro-3,3-

dimethylbenzofuran-= 5-yl methanesulfonate

ethoprophos O-ethyl S,S-dipropyl phosphorodithioate

ethoxyquin 1,2-dihydro-2,2,4-trimethylquinolin-6-yl ethyl

ether

1-(4,6-dimethoxypyrimidin-2-yl)-3-(2-ethoxy= ethoxysulfuron

phenoxysulfonyl) urea

ethyl hexanediol 2-ethylhexane-1,3-diol

ethylene dibromide ethylene dibromide

or

1.2-dibromoethane

etinofen α-ethoxy-4,6-dinitro-o-cresol

etnipromid (RS)-2-[5-(2,4-dichlorophenoxy)-2-

nitrophenoxy]= -N-ethylpropionamide

etobenzanid 2',3'-dichloro-4-ethoxymethoxybenzanilide

(RS)-5-tert-butyl-2-[2-(2,6-difluorophenyl)-4,5etoxazole

= dihydro-1,3-oxazol-4-yl]phenetole

etridiazole ethyl 3-trichloromethyl-1,2,4-thiadiazol-5-yl

ether

etrimfos O-6-ethoxy-2-ethylpyrimidin-4-yl O,O-

dimethyl= phosphorothioate

Common names Chemical names

EXD O,O-diethyl dithiobis(thioformate)

3-anilino-5-methyl-5-(4-phenoxyphenyl)-1,3-=

famoxadone oxazolidine-2,4-dione

famphur O,4-dimethylsulfamoylphenyl O,O-dimethyl=

phosphorothioate

fenamidone (S)-1-anilino-4-methyl-2-methylthio-4-phenyl=

imidazolin-5-one

fenaminosulf sodium 4-dimethylaminobenzenediaosulfonate

fenamiphos ethyl 4-methylthio-m-tolyl isopropylphosphora

= midate

fenapanil (RS)-2-(imidazol-1-ylmethyl)-2-phenylhexane

= nitrile

fenarimol (RS)-2,4'-dichloro- $\alpha$ -(pyrimidin-5-yl)

benzhydryl= alcohol

fenasulam methyl 4-[2-(4-chloro-o-tolyloxy)acetamido]=

phenylsulfonylcarbamate

fenazaflor phenyl 5,6-dichloro-2-

trifluoromethylbenzimida= zole-1-carboxylate

fenazaquin 4-tert-butylphenethyl quinazolin-4-yl ether

fenbuconazole (RS)-4-(4-chlorophenyl)-2-phenyl-2-(1H-1,2,4-

= triazol-1-ylmethyl)butyronitrile

fenbutatin oxide bis[tris(2-methyl-2-phenylpropyl)tin] oxide

fenchlorazole 1-(2,4-dichlorophenyl)-5-trichloromethyl-1H-=

(including esters) 1,2,4-triazole-3-carboxylic acid

fenchlorphos O,O-dimethyl O-2,4,5-trichlorophenyl

phosphoro= thioate

fenethacarb 3,5-diethylphenyl methylcarbamate

fenfluthrin 2,3,4,5,6-pentafluorobenzyl(1R)-trans-3-(2,2-

di= chlorovinyl)-2,2-

dimethylcyclopropanecarboxylate

Common names Chemical names

fenfuram 2-methyl-3-furanilide

fenhexamid 2',3'-dichloro-4'-hydroxy-1-

methylcyclohexane= carboxanilide

(1RS,2RS)-2-nitro-1-phenyltrimethylene fenitropan di

(acetate)

fenitrothion O,O-dimethyl O-4-nitro-m-tolyl

phosphorothioate

fenobucarb or BPMC 2-sec-butylphenyl methylcarbamate

fenoprop (including esters and

salts)

 $(\pm)$ -2-(2,4,5-trichlorophenoxy) propionic acid

fenothiocarb S-4-phenoxybutyl dimethylthiocarbamate

fenoxacrim 3',4'-dichloro-1,2,3,4-tetrahydro-6-hydroxy-

> 1,3-= dimethyl-2,4-dioxopyrimidine-5-

carboxanilide

fenoxanil mixture of 85% (R)-N-[(RS)-1-cyano-1,2-

> dimethyl= propyl]-2-(2,4-dichlorophenoxy) propionamide and 15% (S)-N-[(RS)-1-cyano-1,2-dimethylpropyl]-2-= (2,4-dichlorophenoxy)

propionamide

fenoxaprop  $(\pm)$ -2-[4-(6-chlorobenzoxazol-2-yloxy)

(including esters) phenoxy]= propionic acid

fenoxaprop-P (R)-2-[4-(6-chloro-1,3-benzoxazol-2-yloxy)=

(including esters) phenoxy|propionic acid

fenoxycarb ethyl 2-(4-phenoxyphenoxy)ethylcarbamate

fenpiclonil 4-(2,3-dichlorophenyl)pyrrole-3-carbonitrile

(RS)-cyano(6-phenoxy-2-pyridyl)methyl= fenpirithrin

> (1RS,3RS;1RS,3SR)-3-(2,2dichlorovinyl)-

2,2-= dimethylcyclopropanecarboxylate

fenpropathrin (RS)- $\alpha$ -cyano-3-phenoxybenzyl 2,2,3,3-tetra=

methylcyclopropanecarboxylate

piperidine

Common names Chemical names fenpropidin (RS)-1-[3-(4-tert-butylphenyl)-2-

methylpropyl]=

fenpropimorph (±)-cis-4-[3-(4-tert-butylphenyl)-2-

methylpropyl]= -2,6-dimethylmorpholine

fenpyroximate tert-butyl (E)- $\alpha$ -(1,3-dimethyl-5-

phenoxypyrazol= -4-ylmethyleneamino-oxy)-

p-toluate

fenson 4-chlorophenyl benzensulfonate

fensulfothion O,O-diethyl O-4-methysulfinylphenyl

phosphoro= thioate

fenteracol 2-(2,4,5-trichlorophenoxy)ethanol (1)

fenthiaprop  $(\pm)$ -2-[4-(6-chlorobenzothiazol-2-

yloxy)phenoxy]= propionic acid

fenthion O,O-dimethyl O-4-methylthio-m-tolyl

phosphoro= thioate

fentin triphenyltin

fentin acetate triphenyltin(IV) acetate

fentin hydroxide triphenyltin(IV) hydroxide

fentrazamide 4-(2-chlorophenyl)-*N*-cyclohexyl-*N*-ethyl-4,5-=

dihydro-5-oxo-1*H*-tetrazole-1-carboxamide

fentrifanil N-(6-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-m-tolyl) $\alpha$ - $\alpha$ - $\alpha$ -tri=

fluoro-4,6-dinitro-o-toluidine

fenuron 1,1-dimethyl-3-phenylurea

fenvalerate (RS)-α-cyano-3-phenoxybenzyl (RS)-2-(4-

chloro= phenyl)-3-methylbutyrate

ferbam iron(III) dimethyldithiocarbamate

or

iron(3+) dimethyldithiocarbamate

or

Common names Chemical names

ferric dimethyldithiocarbamate

ferimzone (Z)-2'-methylacetophenone 4,6-

dimethylpyrimi= din-2-ylhydrazone

ferrous sulfate iron(II) sulfate

fipronil 5-amino-1-(2,6-dichloro-α,α,α-trifluoro-*p*-

tolyl)-4= -[(trifluoromethyl)sulfinyl]pyrazole-

3-carbonitrile

flampro-M N-benzoyl-N-(3-chloro-4-fluorophenyl)-D-

(including esters) alanine

flamprop N-benzoyl-N-(3-chloro-4-fluorophenyl)-DL-

(including esters) alanine

flazasulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-(3-trifluoro

= methyl-2-pyridylsulfonyl) urea

flocoumafen 4-hydroxy-3-[1,2,3,4-tetrahydro-3-[4-(4-

trifluoro= methylbenzyloxy)phenyl]-1-naphthyl]-coumarin (mixture of cis to trans isomers in ratio the range 60:40 to 40:60)

flonicamid *N*-cyanomethyl-4-(trifluoromethyl)

nicotinamide

florasulam 2',6',8-trifluoro-5-methoxy[1,2,4]triazolo[1,5-

c]= pyrimidine-2-sulfonanilide

fluacrypyrim methyl (E)-2- $\{\alpha$ -[2-isopropoxy-6-(trifluoro

methyl)pyrimidin-4-yloxy]-*o*-tolyl}-3-methoxy

acrylate

fluazifop (RS)-2 [4-(5-trifluoromethyl-2-pyridyloxy)=

(including esters) phenoxy|propionic acid

fluazifop-P (R)-2-[4-(5-trifluoromethyl-2-pyridyloxy)phe=

(including esters) noxy]propionic acid

fluazinam 3-chloro-N-(3-chloro-5-trifluoromethyl-2-

pyridyl)=  $-\alpha - \alpha - \alpha - \alpha - trifluoro$  2,6-dinitro-p-

toluidine

Common names Chemical names

fluazuron 1-[4-chloro-3-(3-chloro-5-trifluoromethyl-2-=

pyridyloxy)phenyl]-3-(2,6-difluorobenzoyl)

urea

flubendiamide 3-iodo-N'-(2-mesyl-1,1-dimethylethyl)-N-{4-=

[1,2,2,2-terrafluoro-1-(trifluomethyl)ethyl]-o-=

tolyl}phthalamide

flubenzimine (2Z,4E,5Z)-N<sup>2</sup>,3-diphenyl-N<sup>4</sup>,N<sup>5</sup>-bis(trifluoro

=methyl)-1,3-thiazolidine-2,4,5-

triylidenetriamine

4,5-dihydro-3-methoxy-4-methyl-5-oxo-N-[2-= flucarbazone (including salts)

(trifluoromethoxy)phenylsulfonyl]-1H-1,2,4-

tri= azole-1-carboxamide

flucetosulfuron 1-{3-[4,6-dimethoxypyrimidin-2-

> ylcarbamoyl) =sulfamoyl]-2-pyridyl}-2-

fluoropropylmethoxy= acetate

fluchloralin N-(2-chloroethyl)- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-2,6-dinitro-

N-= propyl-p-toluidine

or

N-(2-chloroethyl)-2,6-dinitro-N-propyl-4-

(tri= fluoromethyl)anilide

flucofuron 1,3-bis(4-chloro- $\alpha$ - $\alpha$ - $\alpha$ -trifluoro-m-tolyl)

flucycloxuron  $1-\{\alpha-[(EZ)-4-\text{chloro}-\alpha-\}\}$ 

> cyclopropylbenzylidene= aminooxy]-*p*tolyl}-3-(2,6-difluorobenzoyl)urea (ratio 50-

80% (*E*)- and 50–20% (*Z*)- isomers)

flucythrinate (RS)-α-cyano-3-phenoxybenzyl (S)-2-(4-

difluoro= methoxyphenyl)-3-methylbutyrate

fludioxonil 4-(2,2-difluoro-1,3-benzodioxol-4-yl)pyrrole-

3-=carbonitrile

fluenetil 2-fluoroethyl biphenyl-4-ylacetate

flufenacet 4'-fluoro-N-isopropyl-2-(5-trifluoromethyl-

1,3,4-= thiadiazol-2-yloxy)acetanilide

flufenican  $2-(\alpha,\alpha,\alpha-\text{trifluoro-m-tolyloxy})$  nicotinanilide

Common names	Chemical names

flufenoxuron 1-[4-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyloxy)-2-=

fluorophenyl]-3-2,6-difluorobenzoyl)urea

flufenprox 3-(4-chlorophenoxy)benzyl (RS)-2-(4-

ethoxy= phenyl)-3,3,3-trifluoropropyl ether

flufenpyr (including 2-chloro-5-[1,6-dihydro-5-methyl-6-oxo-4-=

salts and esters) (trifluoromethyl)pyridazin-1-yl]-4-

fluorophe= noxyacetic acid

flumethrin  $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl 3-( $\beta$ ,4-=

dichlorostyryl)-2,2-dimethylcyclopropane=

carboxylate

flumetralin N-(2-chloro-6-fluorobenzyl)-N-ethyl- $\alpha$ , $\alpha$ , $\alpha$ -

tri= fluoro-2,6-dinitro-p-toluidine

flumetsulam 2',6'-difluoro-5-methyl[1,2,4]triazolo[1,5-

a]= pyrimidine-2-sulfonanilide

flumezin 2-methyl-4- $(\alpha,\alpha,\alpha$ -trifluoro-m-tolyl)-1,2,4-=

oxadazinane-3,5-dione

flumiclorac [2-chloro-5-(cyclohex-1-ene-1,2-

(including salts) dicarboximido)= -4-fluorophenoxy]acetic

acid

flumioxazin N-(7-fluoro-3,4-dihydro-3-oxo-4-prop-2-

ynyl-2H-= 1,4-benzoxazin-6-yl)cyclohex-1-

ene-1,2-= dicarboxamide

flumipropyn (±)-N-[4-chloro-2-fluoro-5-(1-methylprop-2-

ynyl)= oxyphenyl]cyclohex-1-ene-1,2-

dicarboximide

flumorph (EZ)-4-[3-(3,4-dimethoxyphenyl)-3-(4-

fluoro= phenyl)acryloyl]morpholine

or

(EZ)-3-(3,4-dimethoxyphenyl)-3-(4-

fluorophenyl)= -1-morpholinopropenone

(50% (*E*)-isomer, 50% (*Z*)-isomer)

fluometuron 1,1-dimethyl-3- $(\alpha,\alpha,\alpha$ -trifluoro-m-tolyl)urea

Common names Chemical names fluorbenside 4-chlorobenzyl 4-fluorophenyl sulfide

fluoroacetamide 2-fluoroacetamide

fluorodifen 4-nitrophenyl  $\alpha, \alpha, \alpha$ -trifluoro-2-nitro-p-tolyl

ether

fluoroglycofen O-[5-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyloxy)-2-

(including esters) = nitrobenzoyl] glycolic acid

fluoroimide 2,3-dichloro-N-4-fluorophenyl-maleimide

fluoromidine 6-chloro-2-trifluoromethyl-3H-imidazo[4,5-

b]= pyridine

fluoronitrofen 2,4-dichloro-6-fluorophenyl 4-nitrophenyl

ether

fluothiuron 3-[3-chloro-4-(chlorodifluoromethylthio)

phenyl]-= 1,1-dimethylurea

fluotrimazole 1-(3-trifluoromethyltrityl)-1H-1,2,4-triazole

fluoxastrobin (E)-{2-[6-(2-chlorophenoxy)-5-

> fluoropyrimidin= -4-yloxy]phenyl}(5,6dihydro-1,4,2-dioxazin-3-yl)= methanone O-

methyloxime

1-[4-chloro-3-(2,2,3,3,3flupoxam

> pentafluoropropoxy= methyl)phenyl]-5phenyl-1H-1,2,4-triazole-3-= carboxamide

flupropadine 4-tert-butyl-1-[3- $(\alpha,\alpha,\alpha,\alpha',\alpha',\alpha')$ -hexafluoro-

(including salts) 3,5-= xylyl)prop-2-ynyl] piperidine

flupropanate (including salts)

2-[(4,6-dimethoxypyrimidin-2flupyrsulfuron (including salts and ylcarbamoyl)=

sulfamoyl]-6-

(trifluoromethyl) nicotinic acid esters)

fluquinconazole 3-(2,4-dichlorophenyl)-6-fluoro-2-(1H-1,2,4-

= triazol-1-yl)quinazolin-4(3H)-one

2,2,3,3-tetrafluoropropionic acid

flurazole benzyl 2-chloro-4-trifluoromethyl-1,3-

thiazole-5-= carboxylate

Common names Chemical names

flurenol 9-hydroxyfluorene-9-carboxylic acid

fluridone 1-methyl-3-phenyl-5- $(\alpha$ - $\alpha$ - $\alpha$ -trifluoro-m-

tolyl)-4-= pyridine

flurochloridone (3RS,4RS;3RS,4SR)-3-chloro-4-

chloromethyl-1-=  $(\alpha, \alpha, \alpha$ -trifluoro-m-tolyl)-

2-pyrrolidinone (in ratio 3:1)

fluroxypyr 4-amino-3,5-dichloro-6-fluoro-2-

(including esters) pyridyloxyacetic acid

flurprimidol (RS)-2-methyl-1-pyrimidin-5-yl-1-(4-

trifluoro= methoxyphenyl)propan-1-ol

flurtamone (RS)-5-methylamino-2-phenyl-4- $(\alpha, \alpha, \alpha$ -

trifluoro-= m-tolyl)furan-3(2H)-one

flusilazole bis(4-fluorophenyl)(methyl)(1H-1,2,4-

triazol-1-= ylmethyl)silane

flusulfamide 2',4-dichloro-α,α,α-trifluoro-4'-nitro-m-

toluene= sulfonanilide

fluthiacet (including {2-chloro-4-fluoro-5-[(EZ)-5,6,7,8-

salts and esters) tetrahvdro-3-= oxo-1*H*.3*H*-

[1,3,4]thiadiazolo[3,4-*a*]pyridazin-1-= ylideneamino]phenylthio}acetic acid

flutolanil  $\alpha, \alpha, \alpha$ -trifluoro-3'-isopropoxy-o-toluanilide

flutriafol (RS)-2,4'-difluoro-α-(1H-1,2,4-triazol-1-

ylmethyl)= benzhydryl alcohol

fluvalinate (RS)-α-cyano-3-phenoxybenzyl N-(2-

chloro- $\alpha$ ,  $\alpha$ ,  $\alpha$ -= trifluoro-p-tolyl)-DL-valinate

folpet N-(trichloromethylthio)phthalimide

fomesafen 5-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyloxy)-N-(including salts) methyl= sulfonyl-2-nitrobenzamide

fonofos O-ethyl S-phenyl (RS)-

ethylphosphonodithioate

foramsulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-[2-

Common names

Chemical names

(dimethyl= carbamoyl)-5-

formamidophenylsulfonyl]urea

formetanate 3-dimethylaminomethyleneaminophenyl

(including salts) = methylcarbamate

formothion S-

[formyl(methyl)carbamoylmethyl] O,O-dimethyl= phosphorodithioate

fosamine ethyl hydrogen

(including salts) carbamoylphosphonate

fosetyl ethyl hydrogen phosphonate

(including salts)

fosmethilan S-[N-(2-chlorophenyl)

butyramidomethyl]O,O-= dimethyl

phosphorodithioate

fospirate dimethyl 3,5,6-trichloro-2-pyridyl

phosphate

fosthiazate (RS)-S-sec-butyl O-ethyl 2-oxo-1,3-

thiazolidin-3-= ylphosphonothioate

fosthietan diethyl 1,3-dithietan-2-

ylidenephosphoramidate

fuberidazole 2-(2-furyl)benzimidazole

furalaxyl methyl N-(2-furoyl)-N-(2,6-xylyl)-DL-

alaninate

furalaxyl-M methyl N(2,6-furoyl)-N-(2,6-xylyl)-D-

alaninate

furametpyr (RS)-5-chloro-N-(1,3-dihydro-1,1,3-

trimethyliso= benzofuran-4-yl)-1,3-

dimethylpyrazole-4-= carboxamide

furathiocarb butyl 2,3-dihydro-2,2-dimethylbenzofuran-7-

yl= N,N'-dimethyl-N,N'-thiodicarbamate

furcarbanil 2,5-dimethyl-3-furanilide

Common names	Chemical names

furconazole (2RS,5RS;2RS,5SR)-5-(2,4-dichlorophenyl)

tetra= hydro-5-(1H,1,2,4-triazol-1-ylmethyl)-2-

furyl 2,2,2-= trifluoroethyl ether

furconazole-cis (2RS,5RS)-5-(2,4-dichlorophenyl)tetrahydro-

5 = (1H,1,2,4-triazol-1-ylmethyl)-2-furyl

2,2,2-= trifluoroethyl ether

furmecyclox methyl N-cyclohexyl-2,5-dimethylfuran-3-

carbo= hydroxamate

furophanate methyl 4-(2-furfurylideneaminophenyl)-3-

thioallo= phanate

furyloxyfen ( $\pm$ )-5-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyloxy)-2-

nitro= phenyl tetrahydro-3-furyl ether

Fusarium oxysporum

gamma-cyhalothrin (S)- $\alpha$ -cyano-3-phenoxybenzyl (1R,3R)-3-[(Z)-

2-= chloro-3,3,3-trifluoropropenyl]-2,2-

dimethyl= cyclopropanecarboxylate

or

(S)- $\alpha$ -cyano-3-phenoxybenzyl (1R)-cis-3-[(Z)-

2-= chloro-3,3,3-trifluoropropenyl]-2,2-

dimethyl= cyclopropanecarboxylate

gamma-HCH- see also lindane

gamma isomer of 1,2,3,4,5,6- hexachlorocyclo

= hexane

Gliocladium spp. -

Gliocladium catenulatum

glufosinate (including salts)

DL-homoalanin-4-yl(methyl)phosphinic acid

or

4-[hydroxy(methyl)phosphinoyl]-DL-

homoala= nine

glyodin 2-heptadecyl-2-imidazoline acetate

Common names
glyphosate
(including salts)

Chemical names
N-(phosphonomethyl)glycine

guazatine a mixture of the reaction products from (including esters) polyamines, comprising mainly

octamethylenediamine,iminodi=

(octamethylene)diamine and octamethylenebis= (imino-octamethylene)

diamine and carbamonitrile

halacrinate 7-bromo-5-chloro-8-quinolyl acrylate

halfenprox 2-(4-bromodifluoromethoxyphenyl)-2-methyl=

propyl 3-phenoxybenzyl ether

halofenozide *N-tert*-butyl-*N*'-(4-chlorobenzoyl)benzo

hydrazide

halosafen 5-(2-chloro- $\alpha$ , $\alpha$ , $\alpha$ ,6-tetrafluoro-p-tolyloxy)-N=

ethylsulfonyl-2-nitrobenzamide

halosulfuron 3-chloro-5-(4,6-dimethoxypyrimidin-2-

(including esters) ylcarba= moylsulfamoyl)

-1-methylpyrazole-4-carboxylic acid

haloxydine 3,5-dichloro-2,6-difluoropyridin-4-ol

haloxyfop (RS)-2-[4-(3-chloro-5-trifluoromethyl-2-

pyridyl= oxy) phenoxy] propionic acid

haloxyfop

(including salts and

esters)

 $(RS)\hbox{-}2\hbox{-}\{4\hbox{-}[3\hbox{-}chloro\hbox{-}5\hbox{-}(trifluoromethyl)\hbox{-}2\hbox{-}=$ 

pyridyloxy] phenoxy}propionic acid

haloxyfop-P (R)-isomer of (RS)-2-{4-[3-chloro-5-

(trifluoro= methyl)-2-

pyridyloxy]phenoxy}propionic acid

HCH 1,2,3,4,5,6-hexachlorocyclohexane

- see also BHC

Helicoverpa zea NPV -

Helicoverpa - armigera NPV

heptachlor 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-

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Common names Chemical names

4,7= -methanoindene

heptenophos 7-chlorobicyclo[3.2.0]hepta-2,6-dien-6-yl

dimethyl= phosphate

Heterorhabditiss bacteriophora

Heterorhabditis

megidis

hexachloroacetone Hexachloroacetone

hexaconazole (RS)-2-(2,4-dichlorophenyl)-1-(1H-1,2,4-

triazol-=1-yl)hexan-2-ol

1-[3,5-dichloro-4(1,1,2,2-tetrafluoroethoxy)= hexaflumuron

phenyl]-3-(2,6-difluorobenzoyl)urea

hexaflurate potassium hexafluoroarsenate

hexazinone 3-cyclohexyl-6-dimethylamino-1-methyl-

1,3,5-= triazine-2,4(1H,3H)- dione

hexylthiofos O-cyclohexyl O,S-diethyl phosphorothioate

hexythiazox (4RS,5RS)-5-(4-chlorophenyl)-N-cyclohexyl-

> 4-= methyl-2-oxo-1,3thiazolidine-3-

carboxamide

Hippodamia convergens

hydramethylnon 5,5-dimethylperhydropyrimidin-2-one

fluoromethyl- $\alpha$ -(4-trifluoromethylstyryl)=

cinnamylidenehyrazone

hydroprene ethyl (E,E)-(RS)-3,7,11-trimethyldodeca-2,4-=

dienoate

hydroxyisoxazole 3-hydroxy-5-methylisoxazole

hymexazol 5-methylisoxazol-3-ol

5,6,7,8-tetrahydro-2-methyl-4-quinolyl hyquincarb

dimethyl= carbamate

Common names	Chemical names
icaridin	(RS)-sec-butyl (RS)-2-(2-hydroxyethyl)piperi=dine-1-carboxylate
imazalil (including salts)	(±)-allyl 1-(2,4-dichlorophenyl)-2-imidazol-1- = ylethyl ether
	or
imazamethabenz (including esters)	$(\pm)$ -1- $(\beta$ -allyloxyl-2,4-dichlorophenylethyl)= imidazole
	a reaction product comprising:
	(i) (±)-6-(4-isopropyl-4-methyl-5-oxo-2- imida= zolin-2-yl)-m-toluic acid; and
	(ii) (±)-2-(4-isopropyl-4-methyl-5-oxo-2- imidaz= olin-2-yl)-p-toluic acid
imazamox (including salts and esters)	2-[( <i>RS</i> )-4-isopropyl-4-methyl-5-oxo-2-imidazolin== 2-yl]-5-methoxymethylnicotinic acid
imazapic (including salts and esters)	2-[( <i>RS</i> )-4-isopropyl-4-methyl-5-oxo-2-imidazolin-= 2-yl]-5-methylnicotinic acid
imazapyr (including salts)	2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-2-yl)= nicotinic acid
imazaquin (including salts)	(RS)-2-(4-isopropyl-4-methyl-5-oxo-2-imidazolin-= 2-yl)quinoline-3-carboxylic acid
imazethapyr (including salts)	(RS)-5-ethyl-2-(4-isopropyl-4-methyl-5-oxo-2-imi= dazolin-2-yl)nicotinic acid
imazosulfuron	1-(2-chloroimidazo[1,2-a]pyridin-3-ylsulfonyl) -3-= (4,6-dimethoxypyrimidin-2-yl)urea
imibenconazole	S-(4-chlorobenzyl) N-(2,4-dichlorophenyl)-2-=(1H-1,2,4-triazol-1-yl)acetimidothioate
imidacloprid	1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin= -2-ylideneamine
iminoctadine	1,1'-iminodi(octamethylene)diguanidine

(including esters)

imiprothrin a mixture containing 20% of 2,5-dioxo-3-prop-

2-= ynylimidazolidin-1-ylmethyl (1R,3S)-2,2-dime= thyl-3-(2-methylprop-1-enyl) cyclopropane= carboxylate and 80% of 2,5-dioxo-3-prop-2-= ynylimidazolidin-1-ylmethyl (1R,3R)-2,2-= dimethyl-3-(2-methylprop-1-

enyl)cyclopropane= carboxylate

indanofan (RS)-2-[2-(3-chlorophenyl)-2,3-epoxypropyl]-

2-= ethylindan-1,3-dione

indoxacarb methyl (S)-N-[7-chloro-2,3,4a,5-tetrahydro-4a-

(methoxycarbonyl)indeno[1,2-

e][1,3,4]oxadiazin== 2-ylcarbonyl]-4'-

(trifluoromethoxy)carbanilate

iodobonil allyl 4-cyano-2,5-di-iodophenyl carbonate

iodomethane iodomethane

iodosulfuron 4-iodo-2-[3-(4-methoxy-6-methyl-1,3,5-

triazin-2-= yl)ureidosulfonyl]benzoic acid

ioxynil

(including salts and

esters)

4-hydroxy-3,5-di-iodobenzonitrile

ipazine 6-chloro-N<sup>2</sup>,N<sup>2</sup>-diethyl-N<sup>4</sup>-isopropyl-1,3,5-tri=

azine-2,4-diamine

IPBC 3-iodo-2-propynyl butyl carbamate

ipconazole (1RS,2SR,5RS;1RS,2SR,5SR)-2-(4-

chlorobenzyl)-5-= isopropyl-1- (1H-1,2,4-

triazol-1-ylmethyl)= cyclopentanol

iprobenfos S-benzyl O,O-di-isopropyl phosphorothioate

iprodione 3-(3,5-dichlorophenyl)-N-isopropyl-2,4-

dioxo= imidazolidine-1-carboxamide

iprovalicarb isopropyl 2-methyl-1-[(1-p-toylyethyl)carba=

moyl]-(S)-propylcarbamate

iprymidam 6-chloro-N<sup>4</sup>-isopropylpyrimidine-2,4-diamine

isamidifos O-ethyl S-(N-methylcarbaniloylmethyl) N-iso=

propylphosphoramidothioate

isazofos O,5-chloro-1-isopropyl-1H-1,2,4-triazol-3-yl-

O,O-= diethyl phosphorothioate

isobenzan 1,3,4,5,6,7,8,8-octachloro-1,3,3a,4,7,7a-

hexahydro-= 4,7-methanoisobenzofuran

isocarbamid N-isobutyl-2-oxoimidazolidine-1-carboxamide

isocil 5-bromo-3-isopropyl-6-methyluracil

isodrin (1R,4S,5R,8S)-1,2,3,4,10,10-hexachloro-

1,4,4a,5,= 8,8a-hexahydro-1,4:5,8-

dimethanonaphthalene

isofenphos isopropyl O-[ethoxy-N-isopropylamino

(thiophos= phoryl)]salicylate

isomethiozin 6-tert-butyl-4-isobutylideneamino-3-

methylthio-= 1,2,4-triazin-5-(4H)-one

isonoruron a mixture of (i) 1,1-dimethyl-3-(perhydro-4,7-

= methanoinden-1-yl)urea and (ii) 1,1-dimethyl-3-= (perhydro-4,7-methanoinden-2-

yl)urea

isopamphos 3-nonyloxypropylammonium

methylphosphonate

isophenfos-methyl O-methyl O-2-isopropoxycarbonylphenyl N-

iso= propyl phosphoramidothioate

isopolinate S-isopropyl perhydroazepine-1-carbothioate

isoprocarb o-cumenyl methylcarbamate

or

2-isopropylphenyl methylcarbamate

isopropalin 4-isopropyl-2,6-dinitro-N,N-dipropylaniline

isoprothiolane di-isopropyl 1,3-dithiolan-2-ylidenemalonate

isoproturon 3-p-cumenyl-1,1-dimethylurea

or

3-(4-isopropylphenyl)-1,1-dimethylurea

isopyrimol` 1-(4-chlorophenyl)-2-methyl-1-pyrimidin-5-

yl=

propan-1-ol

isothioate S-2-isopropylthioethyl O,O-dimethyl

phosphoro= dithioate

isouron 3-(5-tert-butylisoxazol-3-yl)-1,1-dimethylurea

isovaledione 3-(3,5-dichlorophenyl)-1-isovalerylhydantoin

isoxaben N-[3-(1-ethyl-1-methylpropyl)isoxazol-5-yl]-

2,6-= dimethoxybenzamide

isoxaflutole (5-cyclopropyl-1,2-oxazol-4-yl)( $\alpha$ , $\alpha$ , $\alpha$ -

trifluoro-2-= mesyl-*p*-tolyl)methanone

isoxapyrifop (RS)-2-[2-(4-(3,5-dichloro-2-pyridyloxy)phe=

noxy)propionyl]oxazolidine

isoxathion O,O-diethyl O-5-phenylisoxazol-3-yl

phosphoro= thioate

jodfenphos O-2,5-dichloro-4-iodophenyl O,O-dimethyl

phos= phorothioate

jojoba oil -

karanjin 3-methoxy-2-phenyl-4H-furo[2,3-h]chromen-

4-one

karbutilate 3-(3,3-dimethylureido)phenyl tert-

butylcarbamate

kasugamycin 1L-1,3,4/2,5,6-1-deoxy-2,3,4,5,6-

(including salts) pentahydroxy= cyclohexyl 2-amino-2,3,4-6-

tetradeoxy-4-(α-= iminoglycino)-α-D-arabino-

hexopyranoside= hydrochloridehydrate

kelevan ethyl 5-(1,2,3,4,6,7,8,9,10,10-decachloro-5-

hydro= xypentacyclo[5.3.0.0<sup>2,6</sup>.0<sup>3,9</sup>.0<sup>4,8</sup>]dec-5-

yl)-4-oxo= valerate

kinoprene prop-2-ynyl- $(\pm)$ -(E,E)-3,7,11-trimethyldodeca-

= 2,4-dienoate

kresoxim-methyl methyl (E)-methoxyimino[2-(o-

tolyloxymethyl)= phenyl]acetate

Lagenidium giganteum

lambda-cyhalothrin reaction product comprising equal quantities of

(R)= - $\alpha$ -cyano-3-phenoxybenzyl (1*S*,3*S*)-3-[(*Z*)-2-= chloro-3,3,3-trifluoropropenyl]-2,2-dimethyl= cyclopropanecarboxylate and (*S*)- $\alpha$ -cyano-3-= phenoxybenzyl (1*R*,3*R*)-3-[(*Z*)-2-

chloro-3,3,3-= trifluoropropenyl]-2,2-

dimethylcyclopropane= carboxylate

or of

(R)- $\alpha$ -cyano-3-phenoxybenzyl (1*S*)-cis-3-[(*Z*)-2-= chloro-3,3,3-trifluoropropenyl]-2,2-dimethyl= cyclopropanecarboxylate and (*S*)- $\alpha$ -cyano-3-= phenoxybenzyl (1*R*)-cis-3-[(*Z*)-2-chloro-3,3,3-= trifluoropropenyl]-2,2-

dimethylcyclopropane= carboxylate

laminarine -

lead arsenate diplumbic hydrogen arsenate

Lecanicillium lecanii -

lenacil 3-cyclohexyl-1,5,6,7-tetrahydrocyclopenta=

pyrimidine-2,4(3H)-dione

Leptomastix dactylopii

-

leptophos (RS)-(O-4-bromo-2,5-dichlorophenyl O-

methyl= phenylphosphonothioate)

*d*-limonene *d*-limonene

Common names	Chemical names
	or
	(R)-4-isopropenyl-1-methylcyclohexene

*p*-mentha-1,8-diene

or

lindane (gamma BHC or gamma HCH) gamma isomer of 1,2,3,4,5,6-hexachlorocyclo=

hexane (not less than 99%)

linuron 3-(3,4-dichlorophenyl)-1-methoxy-1-

methylurea

lirimfos O-6-ethoxy-2-isopropylpyrimidin-4-yl O,O-

dimethyl= phosphorothioate

lufenuron (RS)-1-[2,5-dichloro-4-(1,1,2,3,3,3-

hexafluoro= propoxy)phenyl]-3-(2,6-

difluorobenzoyl)urea

lythidathion S-5-ethoxy-2,3-dihydro-2-oxo-1,3,4-

thiadiazol-3-= ylmethyl O,O-dimethyl

phosphorodithioate

Macrolophus caliginosus

-

malathion diethyl (dimethoxythiophosphorylthio)

succinate

or

S-1,2-bis(ethoxycarbonyl)ethyl O,O-dimethyl=

phosphorodithioate

maleic hydrazide 6-hydroxy-2*H*-pyridazin-3-one

or

1,2-dihydropyridazine-3,6-dione

malonoben 2-(3,5-di-tert-butyl-4-ydroxybenzylidene)=

malononitrile

Mamestra brassicae

**ACT 149** 

Common names Chemical names

**NPV** 

Mamestra

configurata NPV

mancopper ethylenebis (dithiocarbamate) mixed metal

complex containing about 13.7% manganese

and about 4% copper

mancozeb manganese ethylenebis(dithiocarbamate)=

(polymeric) complex with zinc salt

ynyloxyenethyl]-2-(prop-2-ynyloxy)acetamide

maneb manganese ethylenebis(dithiocarbamate)=

(polymeric)

mazidox tetramethylphosphorodiamidic azide

MCPA (including

salts and esters)

(4-chloro-2-methylphenoxy)acetic acid

or

4-chloro-o-tolyloxyacetic acid

MCPA-thioethyl S-ethyl 4-chloro-o-tolyloxythioacetate

**MCPB** 

(including salts)

4-(4-chloro-o-tolyloxy)butyric acid

mebenil o-toluanilide

mecarbam S-(N-ethoxycarbonyl-N-

methylcarbamoylmethyl)= O,O-diethyl

phosphorodithioate

mecarbinzid methyl 1-(2-methylthioethylcarbamoyl) benz=

imidazol-2-ylcarbamate

mecarphon (RS)-[S-(N-methoxycarbonyl-N-methylcarba=

moylmethyl) O-methyl

methylphosphonodithioate]

mecoprop (including

salts and esters)

(RS)-2-(4-chloro-o-tolyloxy)propionic acid

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# Common names Chemical names mecoprop-P (R)-2-(4-chloro-o-tolyloxy)propionic acid (including salts and esters) medinoterb 6-tert-butyl-3-methyl-2,4-dinitrophenol (including acetate) mefenacet 2-(1,3-benzothiazol-2-yloxy)-Nmethylacetanilide 5'-(1,1,1-trifluoromethanesulfonamido)aceto-= mefluidide 2',4'-xylidide S-4,6-diamino-1,3,5-triazin-2-ylmethyl O,O-= menazon phosphorodithioate mepanipyrim N-(4-methyl-6-prop-1-ynylpyrimidin-2yl)aniline mephosfolan diethyl 4-methyl-1,3-dithiolan-2-ylidene phos= phoramidate mepiquat 1,1-dimethylpiperidinium (including salts) 3'-isopropoxy-o-toluanilide mepronil mercuric chloride mercury(II) chloride or mercury(2+) chloride or mercuric chloride mercuric oxide mercury(II) oxide or mercury(2+) oxide or mercuric oxide mercurous chloride dimercury(I) chloride

or

Common names

Chemical names

dimercury(1+) chloride

or

mercurous chloride

mesoprazine 6-chloro-N<sup>2</sup>-isopropyl-N<sup>4</sup>-(3-methoxypropyl)-

= 1,3,5-triazine-2,4-diamine

mesosulfuron-methyl (including salts and

esters)

2-[(4,6-dimethoxypyrimidin-2-ylcarbamoyl)= sulfamoyl]- $\alpha$ -(methanesulfonamido)-p-toluic

acid

mesotrione 2-(4-mesyl-2-nitrobenzoyl)cyclohexane-1,3-

dione

mesulfenfos O,O-dimethyl O-4-methylsulfinyl-m-tolyl

phos= phorothioate

metaconazole (1RS,5RS;1RS,5SR)-5-(4-chlorobenzyl)-2,2-=

dimethyl-1-(1H-1,2,4-triazol-1-ylmethyl)cyclo= pentanol

metaflumizone (EZ)-2'-[2-(cyanophenyl)-1-α,α,α-trifluoro-m-

= tolyl)ethylidene]-4-

(trifluoromethoxy)carbanilo= hydrate

metalaxyl methyl N-(methoxyacetyl)-N-(2,6-xylyl)-DL-=

alaninate

metalaxyl-M methyl N-(methoxyacetyl)-N-(2,6-xylyl)-D-=

alaninate

metaldehyde 2,4,6,8-tetramethyl-1,3,5,7-tetraoxacyclo-

octane

metam

(including salts)

methyldithiocarbamic acid

metamifop (R)-2-[4-(6-chloro-1,3-benzoxazol-2-yloxy)=

phenoxy]-2'-fluoro-N-methylpropionanilide

metamitron 4-amino-3-methyl-6-phenyl-1,2,4-triazin-5-

(4H)-= one

Metarhizium

Chemical names

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anisoliae

Metarhizium anisopliae var. acridium

Common names

Metarzhium anisopliae var. anisopliae

Metarhizium anisopliae isolate

ICIPE 30

Metarhizium anisopliae isolate

ICIPE 69

Metarhizium flavoride var. flavoviride

metazachlor

2-chloro-N-(pyrazol-1-ylmethyl)acet-2',6'-

xylidide

metazoxolon 4-(3-chlorophenylhydrazono)-3-methy-1,2-=

oxazol-5(4H)-one

metflurazon 4-chloro-5-dimethylamino-2- $(\alpha,\alpha,\alpha$ -trifluoro-

m-= tolyl) pyridazin-3(2H)-one

methabenzthiazuron 1-benzothiazol-2-yl-1,3-dimethylurea

methacrifos methyl(E)-3-(dimethoxyphosphinothioyloxy)-

2-= methylacrylate

methalpropalin  $\alpha, \alpha, \alpha$ -trifluoro-N-(2-methylallyl)-2,6-dinitro-

N-= propyl-p-toluidine

methamidophos O,S-dimethyl phosphoramidothioate

methasulfocarb S-4-methylsulfonyloxyphenyl

methylthiocarbamate

methazole 2-(3,4-dichlorophenyl)-4-methyl-1,2,4-

oxadiazol= idine-3,5-dione

methfuroxam 2,4,5-trimethyl-3-furanilide

methhoxyfenozide N-tert-butyl-N'-(3-methoxy-o-toluoyl)-3,5-

xylo= hydrazide

methidathion S-2,3-dihydro-5-methoxy-2-oxo-1,3,4-

thiadiazol-= 3-ylmethyl O,O-dimethyl

phosphorodithioate

methiobencarb S-4-methoxybenzyl diethylthiocarbamate

methiocarb 4-methylthio-3,5-xylyl methylcarbamate

methiuron 1,1-dimethyl-3-m-tolyl-2-thiourea

methocrotophos (E)-2-(N-methoxyl-N-methylcarbamoyl)-1-=

methylvinyl dimethyl phosphate

methometon 6-methoxyl-N<sup>2</sup>,N<sup>4</sup>-bis(3-methoxypropyl)-

1,3,5-= triazine-2,4-diamine

methomyl S-methyl N-(methylcarbamoyloxy)

thioacetimidate

methoprene isopropyl (E,E)-(RS)-11-methoxy-3,7,11-tri=

methyldodeca-2,4-dienoate

methoprotryne N<sup>2</sup>-isopropyl-N<sup>4</sup>-(3-methoxypropyl)-6-methyl=

thio-1,3,5-triazine-2,4-diamine

methoquin-butyl butyl 3-methylquindine-4-carboxylate

methothrin 4-(methoxymethyl)benzyl chrysanthemum

monocarboxylate

or

[4-(methoxymethyl)phenyl]methyl 2,2-

dimethyl= -3-(2-methylprop-1-enyl)

cyclopropane-1-= carboxylate

or

2,2-dimethyl-3-(2-

methylpropyl)cyclopropane= carboxylic acid

p-(methoxymethyl)benzyl ester

methoxychlor 1,1,1-trichloro-2,2-bis(4-methoxyphenyl)

ethane

methyl bromide bromomethane

methyl iodide methyl iodide or iodomethane - *see* iodomethane

methyl methyl isothiocyanate

isothiocyanate

methylarsonic acid (including salts eg: MSMA and

DSMA)

methylarsonic acid

methylarsenic sulfide methylarsenic sulfide

methylmercury dicyandiamide 1-cyano-3-(methylmercurio)guanidine

metiram zinc ammoniate ethylenebis(dithiocarbamate)-

= poly (ethylenethiuram disulfide)

metobenzuron  $(\pm)$ -1-methoxy-3-[4-(2-methoxy-2,4,4-

trimethyl= chroman-7-yloxy)phenyl]-1-

methylurea

metobromuron 3-(4-bromophenyl)-1-methoxy-1-methylurea

metofluthrin 2,3,5,6-tetrafluoro-4-(methoxymethyl) benzyl

 $metolachlor \\ 2-chloro-6'-ethyl-N-(2-methoxy-1-$ 

methylethyl)= aceto-o-toluidide

metolcarb m-tolyl methylcarbamate

metominostrobin (*E*)-2-(methoxyimino)-*N*-methyl-2-(2-phenoxy=

phenyl)acetamide

metosulam 2',6'-dichloro-5,7-dimethoxy-3'-methyl[1,2,4]=

triazolo[1,5-a]pyrimidine-2-sulfonanilide

metoxadiazone 5-methoxy-3-(2-methoxyphenyl)-1,3,4-

oxadiazol= -2(3H)-one

metoxuron 3-(3-chloro-4-methoxyphenyl)-1,1-

dimethylurea

metrafenone 3'-bromo-2,3,4,6'-tetramethoxy-2',6-dimethyl=

benzophenone

metribuzin 4-amino-6-tert-butyl-3-methylthio-1,2,4-triazin-

= 5(4H)-one

metsulfovax

(including esters)

 $2,\!4\text{-}dimethyl-1,\!3\text{-}thiazole-5\text{-}carbox anilide}$ 

metsulfuron 2-(4-methoxy-6-methyl-1,3,5-triazin-2-ylcar=

(including esters) bomoylsulfamoyl)benzoic acid

mevinphos methyl-3-(dimethoxyphosphinoyloxy)but-2-=

enoate

mexacarbate 4-dimethylamino-3,5-xylyl methylcarbamate

milbemectin a mixture of (10E,14E,16E,22Z)-

(1R,4S,5'S,6R,6'R,= 8R,13R,20R,21R,24S)-6'ethyl-21,24-dihydroxy-= 5',11,13,22-

tetramethyl-3,7,19-trioxatetracyclo= [15.6.1.1<sup>4.8</sup>.0.<sup>20.24</sup>]pentacosa-10,14,16,22-

tetraene-= 6-spiro-2'-tetrahydropyran-2-one and

(10E,14E,16E,22Z)-

(1R,4S,5'S,6R,6'R,8R,13R,20R,= 21R,24S)-21,24-dihydroxy-5',6',11,13,22-penta= methyl 3,7,19-trioxatetracyclo[15.6.1.1.<sup>4.8</sup>.0.<sup>20.24</sup>]= pentacosa-10,14,16,22-tetraene-6-spiro-2'-tetra= hydropyran-2-one in the ratio 7 to 3

milneb 4,4',6,6'-tetramethyl-3.3'-ethylenedi-1,3,5-

thia= diazinane-2-thione

mipafox N,N'-di-isopropylphosphorodiamidic fluoride

mirex dodecachloropentacyclo[5.3.0.0<sup>2,6</sup>.0<sup>3.9</sup>.0<sup>5.8</sup>]

decane

molinate S-ethyl azepane-1-carbothioate

monalide 4'-chloro-2,2-dimethylvaleranilide

monisouron 1-(5-tert-butyl-1,2-oxazol-3-yl)-3-methylurea

monocrotophos dimethyl (E)-1-methyl-2-(methylcarbamoyl)

vinyl= phosphate

monolinuron 3-(4-chlorophenyl)-1-methoxy-1-methylurea

monuron 3-(4-chlorophenyl)-1,1-dimethylurea

monuron-TCA 3-(4-chlorophenyl)-1,1-dimethyluronium=

trichloroacetate

morfamquat 1,1'-bis(3,5-

dimethylmorpholinocarbonylmethyl)= 4,4'-

bipyridinium

morphothion O,O-dimethyl S-morpholinocarbonylmethyl

phos= phorodithioate

MTMC m-tolyl methylcarbamate

myclobutanil 2-p-chlorophenyl-2-(1H-1,2,4-triazol-1-

ylmethyl)= hexanenitrile

myclozolin (RS)3-(3,5-dichlorophenyl)-5-methoxymethyl-

5-= methyl-1,3-oxazolidine-2,4-dione

Myrothecium verrucaria

nabam disodium ethylenebis (dithiocarbamate)

naled 1,2-dibromo-2,2-dichloroethyl dimethyl

phosphate

naproanilide N-phenyl-2-(2-naphthyloxy)propionamide

napropamide (RS)-N,N-diethyl-2-(1-naphthyloxy)

propionamide

naptalam (including

salts)

N-1-napthylphthalamic acid

natamycin (8E,14E,16E,18E,20E)-(1R, 3S, 5R, 7R, 12R,

22R,24S,= 25R,26S)-22-(3-amino-3,6-dideoxyβ-D-manno= pyranosyloxy) -1,3,26-trihydroxy-12-methyl-10= oxo-6,11,28-trioxatricyclo [22.3.1.0.<sup>5,7</sup>]octacosa-= 8,14,16,18,20-

pentaene-25-carboxylic acid

neburon 1-butyl-3-(3,4-dichlorophenyl)-1-methylurea

niclosamide (including salts)

2',5-dichloro-4'-nitrosalicylanilide

nicosulfuron 2-(4,6-dimethoxypyrimidin-2-ylcarbamoyl=

sulfamoyl)-N,N-dimethylnicotinamide

nicotine (S)-3-(1-methylpyrrolidin-2-yl)pyridine

nifluridide 6'-amino- $\alpha$ , $\alpha$ , $\alpha$ ,2,2,3,3,-heptafluoro-5'-nitro=

propion-m-toluidide

nipyraclofen 1-(2,6-dichloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-p-tolyl)-4-

nitro= pyrazol-5-ylamine

nitenpyram (E)-N-(6-chloro-3-pyridylmethyl)-N-ethyl-N'-

= methyl-2-nitrovinylidenediamine

nithiazine 2-nitromethylene-1,3-thiazinane

nitralin 4-methylsulfonyl-2,6-dinitro-N,N-

dipropylaniline

nitrapyrin 2-chloro-6-trichloromethylpyridine

nitrilacarb 4,4-dimethyl-5-(methylcarbamoyloxyimino)=

pentanenitrile

nitrofen 2,4-dichlorophenyl 4-nitrophenyl ether

nitrofluorfen 2-chloro-α,α,α-trifluoro-p-tolyl-4-nitrophenyl

ether

nitrothal-isopropyl di-isopropyl 5-nitroisophthalate

nonanoic acid nonanoic acid

norbormide 5- $(\alpha$ -hydroxy- $\alpha$ -2-pyridylbenzyl)-7- $(\alpha$ -2-

pyridyl= benzylidene)-8,9,10-trinorborn-5-ene-

2.3-= dicarboximide

norflurazon 4-chloro-5-methylamino-2- $(\alpha-\alpha-\alpha-trifluoro-m-$ 

= toly) pyridazin-3(2H)-one

nornicotine 3-(pyrrolidin-2-yl)pyridine

noruron 3-(hexahydro-4,7-methanoindan-5-yl)-1,1-di=

methylurea

Nosema locustae -

nuarimol ( $\pm$ )-2-chloro-4'-fluoro- $\alpha$ -(pyrimidin-5-

yl)benz= hydryl alcohol

octhilinone 2-octylisothiazol-3(2H)-one

ofurace  $(\pm)$ - $\alpha$ -(2-chloro-N-2,6-xylylacetamido)- $\gamma$ -=

butyrolactone

oleic acid

(including salts)

oleic acid

omethoate O,O-dimethyl S-methylcarbamoylmethyl=

phosphorothioate

orbencarb S-2-chlorobenzyl diethylthiocarbamate

orthosulfamuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-[2-

dimethyl= carbamoyl)phenylsulfamoyl] urea

oryzalin 3,5-dinitro-N<sup>4</sup>,N<sup>4</sup>-dipropylsulfanilamide

oxadiargyl 5-tert-butyl-3-[2,4-dichloro-5-(prop-2-

ynyloxy)= phenyl]-1,3,4-oxadiazol-2(3H)-one

oxadiazon 5-tert-butyl-3-(2,4-dichloro-5-

isopropoxyphenyl)= 1,3,4-oxadiazol-2(3H)-

one

oxadixyl 2-methoxy-N-(2-oxo-1,3-oxazolidin-3-

yl)aceto-= 2',6'-xylidide

oxamyl N,N-dimethyl-2-methylcarbamoyloxyimino-2-

= (methylthio)acetamide

oxapyrazon 5-bromo-1,6-dihydro-6-oxo-1-

phenylpyridazin-4-= yloxamic acid

oxasulfuron oxetan-3-yl 2-[(4,6-dimethylpyrimidin-2-yl)=

carbamoylsulfamoyl] benzoate

oxaziclomefone 3-[1-(3,5-dichlorophenyl)-1-methylethyl]-3,4-

= dihydro-6-methyl-5-phenyl-2*H*-1,3-oxazin-

4-one

oxine-copper bis(quinolin-8-olato)copper

oxolinic acid 5-ethyl-5,8-dihydro-8-oxo[1,3]dioxolo[4,5-g]=

quinoline-7-carboxylic acid

oxpoconazole fumarate

{(RS)-2-[3-(4-chlorophenyl)propyl]-2,4,4-tri= methyl-1,3-oxazolidin-3-yl} (imidazol-1-yl)=

methanonem

oxycarboxin 5,6-dihydro-2-methyl-1,4-oxathi-ine-3-

carboxani= lide 4,4-dioxide

oxydemeton-methyl S-2-ethylsulfinylethyl O,O-dimethyl

phosphoro =thioate

oxydeprofos S-2-ethylsulfinyl-1-methylethyl O,O-

dimethyl= phosphorothioate

oxydisulfoton O,O diethyl S-2-ethylsuphinyl ethyl

phosphoro= dithioate

oxyfluorfen 2-chloro-α,α,α-trifluoro-p-tolyl 3-ethoxy-4-

nitro= phenyl ether

paclobutrazol (2RS,3RS)-1-(4-chlorophenyl)-4,4-dimethyl-2-

= (1H-1,2,4-triazol-1-yl)pentan-3-ol

Paecylomyces

fumosoroseus

Paecylomyces

lilacinus

Pantoea

agglomerans

parafluron 1,1-dimethyl-3- $(\alpha,\alpha,\alpha$ -trifluoro-p-tolyl) urea

paraquat 1,1'-dimethyl-4,4'-bipyridinium

(including salts)

parathion O,O-diethyl O-4-nitrophenyl phosphorothioate

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Common names	Chemical	names
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parathion-methyl O,O-dimethyl O-4-nitrophenyl

phosphorothioate

paris green copper aceto-arsenite

pebulate S-propyl butyl(ethyl) thiocarbamate

pefurazoate pent-4-enyl N-furfuryl-N-imidazol-1-

ylcarbonyl-= DL-homoalaninate

penconazole 1-(2,4-dichloro-β-propylphenethyl)-1H-1,2,4-=

triazole

pencycuron 1-(4-chlorobenzyl)-1-cyclopentyl-3-phenylurea

pendimethalin N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine

Peniophora gigantea -

penoxsulam 3-(2,2-difluoroethoxy)-*N*-(5,8-dimethoxy

[1,2,4]= triazolo[1,5-c] pyrimidin-2-yl)- $\alpha,\alpha,\alpha$ -

trifluoro= toluene-2-sulfonamide

pentachlorophenol

(including salts)

pentachlorophenol

pentanochlor 3'-chloro-2-methylvalero-p-toluidide

penthiopyrad (RS)-N-[2-(1,3-dimethylbutyl)-1-methyl-3-

(tri=fluoromethyl)-1H-pyrazole-4-carboxamide

pentoxazone 3-(4-chloro-5-cyclopentyloxy-2-fluorophenyl)-

5-= isopropylidene-1,3-oxazolidine-2,4-dione

perfluidone 1,1,1-trifluoro-2'-methyl-4'(phenylsulphonyl)=

methane sulphonanilide

permethrin 3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-

di= chlorovinyl)-2,2-

dimethylcyclopropanecarboxylate

pethoxamid 2-chloro-*N*-(2-ethoxyethyl)-*N*-(2-methyl-1-

phenyl= prop-1-enyl) acetamide

phenisopham isopropyl 3-[ethyl(phenyl)carbamoyloxy]

carba= nilate

phenkapton S-2,5-dichlorophenylthiomethyl O,O-diethyl

phos= phorodithioate

phenmedipham methyl 3-(3-methylcarbaniloyloxy) carbanilate

or

3-methoxycarbonylaminophenyl 3-

methylcarba =nilate

phenmedipham-ethyl 3-ethoxycarbonylaminophenyl 3'-methylcarba

=nilate

phenobenzuron 1-benzoyl-1-(3,4-dichlorophenyl)-3,3-dimethyl

=urea

phenothrin 3-phenoxybenzyl (1RS)-cis-trans-2,2-

dimethyl-3-= (2-methylprop-1-enyl)

cyclopropanecarboxylate

 $phenothrin \hbox{$[(1R)$-}$ 

isomers]

3-phenoxybenzyl (1R)-cis-trans-2,2-dimethyl-

3-= (2-methylprop-1-enyl)

cyclopropanecarboxylate

phenothrin[(1R)trans-isomers] 3-phenoxybenzyl (1R)-cis-trans-2,2dimethyl-3-= (2-methylprop-1-enyl)

or d-phenothrin cyclopropanecarboxylate (contain  $\geq$  95% (1R)-

isomers,  $\geq 75\%$  trans isomers)

phenthoate S-α-ethoxycarbonylbenzyl O,O-dimethyl

phosphor= rothioate

phenyl mercury

acetate

phenylmercury(II) acetate

or

phenylmercury(2+) acetate

or

phenylmercuric acetate

Common names phenylmercury chloride	Chemical names phenylmercury(II) chloride
emoride	or
	phenylmercury(2+) chloride
	or
	phenylmercuric chloride
phenylmercury derivative of	o-(phenylmercuriooxy)phenol
pyrocatechol	or
	phenylmercuric pyrocatecholate
phenylmercury nitrate	phenylmercury(II) nitrate
mtrate	or phenylmercury(2+) nitrate
	or
	phenylmercuric nitrate
phenylmercury salicylate	phenylmercury(II) salicylate
	or
	phenylmercury(2+) salicylate
	or
	phenylmercuric salicylate
2-phenylphenol (including salts)	biphenyl-2-ol
Phlebiopsis gigantea	-

O,O-diethyl S-ethylthiomethyl phosphorodithioate

O,O-bis(4-chlorophenyl) N-acetimidoylphos= phoramidothioate

phorate

phosacetim

phosalone S-6-chloro-2,3-dihydro-2-oxobenzoxazol-3-yl=

methyl O,O-diethyl phosphorodithioate

phosdiphen (including esters)

bis(2,4-dichlorophenyl) ethyl phosphate

phosfolan diethyl 1,3-dithiolan-2-

ylidenephosphoramidate

phosmet O,O-dimethyl S-phthalimidomethyl

phosphoro= dithioate

phosnichlor O-4-chloro-3-nitrophenyl O,O-dimethyl phos=

phorothioate

phosphamidon 2-chloro-2-diethylcarbamoyl-1-methylvinyl=

dimethyl phosphate

phosphine (including

salts)

phosphine

phoxim O,O-diethyl  $\alpha$ -cyanobenzylideneaminooxy=

phosphonothioate

or

(EZ)-2-(diethoxyphosphinothioyloxyimino)-2-

= phenylacetonitrile

phoxim methyl O,O-dimethyl  $\alpha$ -cyanobenzylineneamino-oxy=

phosphonothioate

Phytophthora palmivora

-

Phythium

oligandrium

picloram (including

salts)

4-amino-3,5,6-trichloropyridine-2-carboxylic

acid

picolinafen 4'-fluoro-6- $(\alpha,\alpha,\alpha$ -trifluoro-m-tolyloxy)

pyridine-= 2-carboxanilide

picoxystrobin methyl (E)-3-methoxy-2-{2-[6-

(trifluoromethyl)-= 2-

pyridyloxymethyl] phenyl} acrylate

Common names pimaricin	Chemical names (8E,14E,16E,18E,20E)- (1S,3R,5S,7S,12R,24R, = 25S,26R)-22-(3-amino-3,6-dideoxy-β-D-= mannopyranosyloxy)-1,3,26-trihydroxy-12-= methyl-10-oxo-6,11,28-trioxatricyclo= [22.3.1.0 <sup>5.7</sup> ] octacosa-8,14,16,18,20-pentaene= -25-carboxylic acid
pindone (including salts)	2-pivaloylindan-1,3-dione
pinoxaden	8-(2,6-diethyl-p-tolyl)-1,2,4,5-tetrahydro-7-oxo-= 7H-pyrozolo[1,2-d][1,4,5]oxadiazepin-9-yl 2,2-= dimethylpropionate
piperalin	3-(2-methylpiperidino)propyl 3,4-dichloro= benzoate
piperonyl butoxide	2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether
piperophos	S-2-methylpiperidinocarbonylmethyl O,O-di= propyl phosphorodithioate
piprotal	5-[bis[2-(2-butoxyethoxy) ethoxy] methyl]1,3- = benzodioxole
pirimetaphos	2-diethylamino-6-methylpyrimidin-4-yl methyl= methylphosphoramidate
pirimicarb	2-dimethylamino-5,6-dimethylpyrimidin-4-yl=dimethylcarbamate
pirimiphos-ethyl	O-2-diethylamino-6-methylpyrimidin-4-yl,O,O-= diethyl phosphorothioate
pirimiphos-methyl	O-2-diethylamino-6-methylpyrimidin-4-yl= O,O-dimethyl phosphorothioate
PMA	phenylmercury acetate
polynactins	consist of one or more of the following

substance:

(1) [1R(1R\*,2R\*,5R\*,7R\*, 10S\*, 11S\*, 14S\*, 16S\*,= 19R\*, 20R\*, 23R\*, 25R\*, 28S\*, 29S\*, 32S\*,= 34S\*)]—5,14,23,32-

#### Common names

#### Chemical names

tetraethyl-2,11,20,29== tetramethyl-4,13,22,31,37,38,39,40-octaoxa= pentacyclo[32.2.1,1<sup>7,10</sup>.1<sup>16.19</sup>.1<sup>25,28</sup>]tetra= contane-3,12,21,30-tetrone (tetranectin);

- (2) [1R(1R\*,2R\*,5R\*,7R\*,10S\*,11S\*,14S\*, 16S\*,=19R\*,20R\*,23R\*,25R\*,28S\*,29S\*, 32S\*,34S\*)]-= 5,14,23-triethyl-2,11,20,29,32-pentamethyl-= 4,13,22,31,37,38,39,40-octaoxapentacyclo = [32.2.1. 1<sup>7,10</sup>,1<sup>16.19</sup>,1<sup>25,28</sup>]tetracontane-= 3,12,21,30-tetrone (trinactin); and
- (3) [1R(1R\*,2R\*,5R\*,7R\*,10S\*,11S\*,14S\*, 16S\*,=19R\*,20R\*,23R\*,25R\*,28S\*,29S\*, 32S\*,34S\*)]-= 5,23-diethyl-2,11,14,20,29,32-hexamethyl-= 4,13,22,31,37,38,39,40-octaoxapentacyclo = [32.2.1. 1<sup>7,10</sup>.1<sup>16.19</sup>.1<sup>25,28</sup>]tetracontane-= 3,12,21,30-tetrone (dinactin)

#### polychloroterpenes

heptachloro-2,2-dimethyl-3-methyleneorbornane

## polyoxins

consist of one or more of the following substance:

- (1) polyoxine B: 5-(2-amino-5-O-carbamoyl-2-deoxy-L- xylon= amido)-1,5-dideoxy-1-(1,2,3,4-tetrahydro-5-= hydroxymethyl-2,4-dioxopyrimidin-1yl)-β-D-= allofuranuronic acid
- (2) polyoxine D or polyoxorim: 5-(2-amino-5-O-carbamoyl-2-deoxy-L-= xylonamido)-1-(5-carboxy-1,2,3,4-tetrahydro-= 2,4dioxopyrimidin-1-yl)-1,5-dideoxy-β-D-= allofuranuronic acid

#### polyoxorim

5-(2-amino-5-O-carbamoyl-2-deoxy-L-xylonami= do)-1-(5-carboxy-1,2,3,4-tetrahydro-2,4-dioxopyri= midin-1-yl)-1,5-dideoxy-β-D-allofuranuronic acid

Common names	Chemical names
prallethrin	(S)-2-methyl-4-oxo-3-prop-2-ynylcyclopent-2- = enyl(1R)-cis-trans-2,2-dimethyl-3-(2- methyl= prop-1-enyl)cyclopropanecarboxylate
pretilachlor	2-chloro-2',6'-diethyl-N-(2-propoxyethyl)= acetanilide
primidophos	O,O-diethyl O-(2-N-ethylacetamido-6-methyl= pyrimidin-4-yl) phosphorothioate
primisulfuron (including esters)	2-[4,6-bis(difluoromethoxy)pyrimidin-2-yl= carbamoylsulfamoyl] benzoic acid
probenazole	3-allyloxy-1,2-benzothiazole 1,1-dioxide
	or
	3-allyloxy-1,2-benz[d]isothiazole 1,1-dioxide
prochloraz (including salts)	N-propyl-N-[2-(2,4,6-trichlorophenoxy)ethyl]= imidazole-1-carboxamide
proclonol	4,4'-dichloro-α-cycloproplbenzhydrol
procyazine	2-(4-chloro-6-cyclopropylamino-1,3,5-triazine- 2-= ylamino)-2-methylpropionitrile
procymidone	N-(3,5-dichlorophenyl)-1,2-dimethylcyclopropane= -1,2-dicarboximide
prodiamine	5-dipropylamino- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-4,6-dinitro-o-= toluidine
profenofos	O-4-bromo-2-chlorophenyl O-ethyl S-propyl= phosphorothioate
profluralin	$N$ -(cyclopropylmethyl)- $\alpha$ , $\alpha$ , $\alpha$ trifluoro-2,6-di=nitro- $N$ -propyl-p-toluidine
profoxydim	$(5RS)$ -2-{ $(EZ)$ -1-[ $(2RS)$ -2-(4-chlorophenoxy)= propoxyimino]butyl}-3-hydroxy-5-[ $(3RS)$ -thian-3-= yl]cyclohex-2-en-1-one
Proglinazine (including salts and esters)	N-(4-chloro-6-isopropylamino-1,3,5-triazin-2-yl)= glycine

promecarb 3-isopropyl-5-methylphenyl methylcarbamate

prometon N<sup>2</sup>,N<sup>4</sup>-di-isopropyl-6-methoxy-1,3,5-triazine-

2.4 = diamine

N<sup>2</sup>,N<sup>4</sup>-di-isopropyl-6-methylthio-1,3,5-triazineprometryne

= 2.4-diamine

propachlor 2-chloro-N-isopropylacetanilide

propamocarb (including salts) propyl 3-(dimethylamino) propylcarbamate

3',4'-dichloropropionanilide propanil

propaphos 4-(methylthio)phenyl dipropyl phosphate

propaquizafop 2-isopropylideneamino-oxyethyl (R)-2-[4-(6-=

choroquinoxalin-2-yloxy) phenoxy]propionate

2-(4-tert-butylphenoxy) cyclohexyl prop-2propargite

ynyl= sulfite

6-chloro- N<sup>2</sup>,N<sup>4</sup>-di-isopropyl-1,3,5-triazine 2,4propazine

= diamine

(E)-O-2-isopropoxycarbonyl-1-methylvinyl Opropetamphos

= methylethylphosphoramidothioate

isopropyl carbanilate propham

propiconazole  $(\pm)$ -1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-=

dioxolan-2-ylmethyl]-1H-1,2,4-triazole

propineb polymeric zinc propylenebis(dithiocarbamate)

2-chloro-6'-ethyl-N-isopropoxymethylaceto-opropisochlor

= toluidide

propoxur 2-isopropoxyphenyl methylcarbamate

propoxycarbazone

methyl 2-[(4,5-dihydro-4-methyl-5-oxo-3-= (including salts) propoxy-1*H*-1,2,4-triazol-1-yl)carboxamido=

sulfonyl] benzoate

propyl isome dipropyl 5,6,7,8-tetrahydro-7-methylnaphthol=

[2,3-d]-1,3-dioxole-5,6-dicarboxylate

propyzamide 3,5-dichloro-N-(1,1-dimethylpropynyl)

benzamide

proquinazid 6-iodo-2-propoxy-3-propylquinazolin-4(3*H*)-

one

prosulfalin n-(4-dipropylamino-3,5-dinitrophenylsulfonyl)-

= S,S-dimethylsulfimide

prosulfocarb S-benzyl dipropylthiocarbamate

prosulfuron 1-(4-methoxyl-6-methyl-1,3,5-triazin-2-yl)-3-

[2-= (3,3,3-trifluoropropyl)-phenylsulfonyl]

urea

prothidathion S-2,3-dihydro-5-isopropyoxy-2-oxo-1,3,4-

thiadi= azol-3-ylmethyl O,O-diethyl

phosphorodithioate

prothiocarb S-ethyl (3-dimethylaminopropyl)

thiocarbamate

prothioconazole (RS)-2-[2-(1-chlorocyclopropyl)-3-(2-chloro=

phenyl)-2-hydroxypropyl]-2,4-dihydro-1,2,4-=

triazole-3-thione

prothiofos O,2,4-dichlorophenyl O-ethyl S-propyl=

phosphorodithioate

prothoate O,O-diethyl S-isopropylcarbamoylmethyl=

phosphorodithioate

proxan (including

salts)

prynachlor

O-isopropyl hydrogen dithiocarbonate

2-chloro-N-(1-methylprop-2-ynyl)acetanilide

Pseudomonas T. 1

aurefaciens Tx-1

Pseudomonas

cepacia

Pseudomonas

chlorophis

-

Pseudomonas

fluorescens

Pseudomonas gladioli

Pseudomonas

syringae

Pseudomonas tolassii

bacteriophage

Pseudozyma flocculosa

pymetrozine (E)-4,5-dihydro-6-methyl-4-(3-

pyridylmethylene= amino)-1,2,4-triazin-3(2H)-

one

pyracarbolid 3,4-dihydro-6-methyl-2H-pyran-5-

carboxanilide

pyraclofos (RS)-[O-1-(4-chlorophenyl)pyrazol-4-yl O-

ethyl= S-propyl phosphorothioate]

pyraclostrobin methyl {2-[1-(4-chlorophenyl) pyrazol-3-

yloxy= methyl]phenyl} (methoxy) carbamate

pyraflufen

(including salts and

esters)

2-chloro-5-(4-chloro-5-difluoromethoxy-1-= methylpyrazol-3-yl)-4-fluorophenoxyacetic

acid

pyrazolynate 4-(2,4-dichlorobenzoyl)-1,3-

dimethylpyrazol-5-= yltoluene-4-sulfonate

5-amino-4-chloro-2-phenyl-3-pyridazone pyrazon

pyrazophos ethyl 2-diethoxyphosphinothioyloxy-5-methyl=

pyrazolo[1,5-a]pyrimidine-6-carboxylate

pyrazosulfuron (including esters) 5-(4,6-dimethoxypyrimidin-2-ylcarbamoyl= sulfamoyl)-1-methylpyrazole-4-carboxylic acid

2-[4-(2,4-dichlorobenzoyl)-1,3pyrazoxyfen

dimethylpyrazol-= 5-yloxylacetophenone

Common names	Chemical names
--------------	----------------

pyresmethrin 5-benzyl-3-furylmethyl(E)-(1R)-trans-3-(2-=

methoxycarbonylprop-1-enyl)-2,2dimethylcyclo= propanecarboxylate

pyrethrins six insecticidal constituents present in extracts

of the flowers Pyrethrum cinerariaefolium and

other species

pyribenzoxim benzophenone *O*-[2,6-bis(4,6-dimethoxy=

pyrimidin-2-yloxy)benzoyl] oxime

pyributicarb O,3-tert-butylphenyl-6-methoxy-2-pyridyl=

(methyl)thiocarbamate

pyriclor 2,3,5-trichloropyridin-4-ol

pyridaben 2-tert-butyl-5-(4-tert-butylbenzylthio)-

4-chloro= pyridazin-3-(2H)-one

pyridalyl 2,6-dichloro-4-(3,3-dichloroallyloxy)phenyl 3-

[5-= (trifluoromethyl)-2-pyridyloxy] propyl

ether

pyridate 6-chloro-3-phenylpyridazin-4-yl S-octylthio=

carbonate

pyridinitril 2,6-dichloro-4-phenylpyridine-3,5-

dicarbonitrile

pyrifenox 2',4'-dichloro-2-(3-pyridyl)acetophenone

(E,Z)-O-= methyloxime

pyriftalid (RS)-7-(4,6-dimethoxypyrimidin-2-ylthio)-3-=

methyl-2-benzofuran-1(3H)-one

pyrimethanil N-(4,6-dimethylpyrimidin-2-yl) aniline

pyrimidifen 5-chloro-N-[2-[4-(2-ethoxyethyl)-2,3-

dimethyl= phenoxy]ethyl]-6-ethylpyrimidin-4-

amine

pyrimitate O-2-dimethylamino-6-methylpyrimidin-4-yl

O,O-= diethyl phosphorothioate

pyrinuron 1-(4-nitrophenyl)-3-(3-pyridylmethyl) urea

pyriproxyfen 4-phenoxyphenyl (RS)-2-(2-pyridyloxy) propyl

ether

pyrithiobac-sodium sodium 2-chloro-6-(4,6-dimethoxypyrimidin-2-

= ylthio)benzoate

pyroquilon 1,2,5,6-tetrahydropyrrolo[3,2,1-ij] quinolin-4-

one

pyroxychlor 2-chloro-6-methoxy-4-trichloromethylpyridine

quinalphos O,O-diethyl O-quinoxalin-2-yl

phosphorothioate

quinalphos-methyl O,O-dimethyl O-quinoxalin-2-yl

phosphorothioate

quinazamid p-benzoquinone mopnosemicarbazone

quinclorac 3,7-dichloroquinoline-8-carboxylic acid

quinconazole 3-(2,4-dichlorophenyl)-2-(1H-1,2,4-traizol-1-

yl)= quinazolin-4(3H)-one

quinmerac 7-chloro-3-methylquinoline-8-carboxylic acid

quinoclamine 2-amino-3-chloro-1,4-naphtoquinone

quinonamid 2,2-dichloro-N-(3-chloro-1,4-naphthoquinon-2-

yl)= acetamide

quinothion O,O-diethyl O-2-methylquinolin-4-yl

phosphoro= thioate

quintiofos O-ethyl O-8-quinolyl phenylphosphonothioate

quintozene pentachloronitrobenzene

quizalofop (RS)-2-[4-(6-chloroquinoxalin-2-yloxy)

(including esters) phenoxy]= propionic acid

quizalofop-P (R)-2-[4-(6-chloroquinoxalin-2-yloxy)

(including esters) phenoxy]= propionic acid

rabenzazole 2-(3,5-dimethylpyrazol-1-yl)-1H-benzmidazole

Common names Chemical names red squill from Urginea (Scilla) maritima

resmethrin 5-benzyl-3-furylmethyl (1RS,3RS;1RS,3SR) -

2,2-= dimethyl-3-(2-methylprop-1-enyl)

cyclopopane= carboxylate

rhodethanil 3-chloro-4-ethylaminophenyl thiocyanate

richlamide (RS)-N-(1-butoxy-2,2,2-trichloroethyl)

salicylamide

rimsulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-(3-ethyl=

sulfonyl-2-pyridylsulfonyl) urea

rosemary oil -

rotenone (2R,6aS,12aS)-1,2,6,6a,12,12a-hexahydro-2-=

isopropenyl-8,9-dimethoxychromeno[3,4-

b]furo= [2,3-h]chromen-6-one

ryania extract of the plant *Ryania speciosa* Vahl.

(Flacourtiaceae)

ryanodine (2S,3S,4R,4aS,5S,5aS,8S,9R,9aR,9bR)-

2,3,4a,5a,9,= 9b-hexahydro-3-isopropyl-2a,5,8-trimethyl per= hydro-2,5-methanobenzo [1,2]pentaleno[1,6-bc]= furan-4-ylpyrrole-2-

carboxylate

sabadilla a mixture of alkaloids from the seeds of

Schoenocaulon officinale

schradan octamethylpyrophosphoric tetraamide

scilliroside  $3\beta$ -( $\beta$ -D-glucopyranosyloxy)-17 $\beta$ -(2-oxo-2H-=

pyran-5-yl)-14β-androst-4-ene-6β,8,14-triol 6-

= acetate

sebuthylazine N<sup>2</sup>-sec-butyl-6-chloro-N<sup>4</sup>-ethyl-1,3,5-triazine-

2.4 = diamine

secbumeton N<sup>2</sup>-sec-butyl-N<sup>4</sup>-ethyl-6-methoxy-1,3,5-

triazine-= 2,6-diamine

sesamex (RS)-5-{1-[2-(2-ethoxyethoxy)ethoxy]ethoxy}-

1,3-= benzodioxole

sesamin 2,6-bis-(3,4-methylenedioxyphenyl)-3,7-

dioxabi= cyclo[3,30]-octane

sesone 2-(2,4-dichlorophenoxy) ethyl sodium sulphate

sethoxydim  $(\pm)$ -(EZ)-2-(1-ethoxyiminobutyl)-5-[2-

(ethylthio)= propyl]-3-hydroxycyclohex-2-

enone

siduron 1-(2-methylcyclohexyl)-3-phenylurea

silafluofen (4-ethoxyphenyl)[3-(4-fluoro-3-

phenoxyphenyl)= propyl](dimethyl) silane

silthiofam *N*-allyl-4,5-dimethyl-2-(trimethylsilyl)

thiophene-= 3-carboxamide

simazine 6-chloro-N<sup>2</sup>,N<sup>4</sup>-diethyl-1,3,5-triazine-2,4-

diamine

simeconazole (RS)-2-(4-fluorophenyl)-1-(1H-1,2,4-triazol-1-

yl)-= 3-(trimethylsilyl) propan-2-ol

simeton  $N^2, N^4$ -diethyl-6-methoxy-1,3,5-triazine-2,4-=

diamine

simetryn N2,N4-diethyl-6-methylthio-1,3,5-triazine-2,4-

= diamine

S-methoprene isopropyl (2E,4E)-(7S)-11-methoxy-3,7,11-tri=

methyldodeca-2,4-dienoate

S-metolachlor a mixture of (aRS,1S)-2-chloro-6'-ethyl-N-(2-=

methoxy-1-methylethyl) aceto-o-toluidide and (aRS,1R) )-2-chloro-6'-ethyl-N-(2-methoxy-1-

= methylethyl)aceto-o-toluidide in the

proportion 80-100% to 20-0%

sodium arsenite -

sodium chlorate sodium chlorate

sodium fluoroacetate sodium fluoroacetate

sodium metaborate sodium metaborate tetrahydrate

soft soap -

Chemical names

sophamide S-methoxymethylcarbamoylmethyl O,O-dimethyl= phosphorodithioate spinosad a mixture of: (2R,3aR,5aR,5bS,9S,13S,14R,16aS,16bR)-2- $(6 = \text{deoxy-}2,3,4 - \text{tri-}O - \text{methyl-}\alpha - \text{L-}$ mannopyrano= syloxy)-13-(4-dimethylamino-2,3,4,6-tetradeoxy-=  $\beta$ -D-erythopyranosyloxy)-9-ethyl-2,3,3a,5a,5b,=6,7,9,10,11,12,13,14,15,16a,16bhexadecahydro-= 14-methyl-1H-8oxacyclododeca[b]as-indacene-= 7,15-dione and (2S,3aR,5aS,5bS,9S, 13S,14R,=  $16aS, 16bS)-2-(6-deoxy-2, 3, 4-tri-O-methyl-\alpha-$ L-= mannopyranosyloxy)-13-(4dimethylamino-= 2,3,4,6-tetradeoxy-β-Derythopyranosyloxy)-9-= ethyl-2,3,3a,5a,5b,6,7,9,10,11,12,13,14,15, 16a,= 16b-hexadecahydro-4,14-dimethyl-1H-8-oxa= cyclododeca[b]as-indacene-7,15-dione in the proportion 50-95% to 50-5% spirodiclofen 3-(2,4-dichlorophenyl)-2-oxo-1oxaspiro[4.5]dec-= 3-en-4-yl 2,2dimethylbutyrate spiromesifen 3-mesityl-2-oxo-1-oxaspiro[4.4]non-3-en-4-yl 3,3 = -dimethylbutyratespiroxamine 8-tert-butyl-1,4-dioxaspiro[4.5]decan-2ylmethyl= (ethyl)(propyl)amine Spodoptera exigua spodoptera exigua multicapsid nuclear

polyhedrosis virus

Spodoptera litura NPV

**NPV** 

Common names

Steinernema feltiae

Steinernema scapterisci

Steinernema - carpocapsae

Steinernema glaseri

Steinernema kraussei

Steinernema riobrave -

Streptomyces griseoviridis

-

Streptomyces lydicus

streptomycin O,2-deoxy-2-methylamino-α-L-

glucopyranosyl==  $(1\rightarrow 2)$ -O-5-deoxy-3-C-formyl- $\alpha$ -L-lyxofuranosyl==  $(1\rightarrow 4)$ -N3,N3-

diamidino-D-streptamine

strychnine strychnidin-10-one

sulcofuron (including salts)

5-chloro-2-[4-chloro-2-[3-(3,4-dichlorophenyl)=

ureido]phenoxy]benzenesulfonic acid

sulcotrione 2-(2-chloro-4-mesylbenzoyl)cyclohexane-1,3-=

dione

sulfallate 2-chloroally diethyldithiocarbamate

sulfanamide 4-aminobenzenesulphonamide

sulfaquinoxaline 4-amino-N-2-quinoxalinyl

or

N-(2-Quinoxalinyl) sulfanilamide

sulfasulfuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-[2-ethane=

sulfonyl-imidazo[1,2-a]pyridine) sulfonyl] urea

sulfentrazone 2',4'-dichloro-5'-(4-difluoromethyl-4,5-

dihydro= -3-methyl-5-oxo-1H-1,2,4-triazol-1-

yl)methane= sulfonanilide

sulfluramid N-ethylperfluoro-octane-1-sulfonamide

sulfometuron 2-[3-(4,6-dimethylpyrimidin-2-yl)ureido

(including esters) sulfonyl]= benzoic acid

sulfotep O,O,O',O'-tetraethyl dithiopyrophosphate

sulfoxide 2-(1,3-benzodioxol-5-yl)ethyl octyl sulfoxide

sulfur sulfur

sulglycapin azepan-1-ylcarbonymethyl methylsulfamate

sulphuryl fluoride sulfuryl fluoride

sulprofos O-ethyl O-4 (methylthio) phenyl S-propyl

phos= phorodithioate

sultropen 2,4-dinitrophenyl pentyl sulfone

swep methyl 3,4-dichlorocarbanilate

Syngrapha falcifera

**NPV** 

2,4,5-T (2,4,5-trichlorophenoxy)acetic acid

(including salts and

esters)

Talaromyces flavus -

tar oils -

tau-fluvalinate (RS)-α-cyano-3-phenoxybenzyl N-(2-chloro-=

 $\alpha, \alpha, \alpha$ -trifluoro-p-tolyl)-D-valinate

tazimcarb N-methyl-1-(3,5,5-trimethyl-4-oxo-1,3-

thiazol= idin-2-ylideneamino-oxy) formamide

2,4,5-TB 4-(2,4,5-trichlorophenoxy) butyric acid

2,3,6-TBA 2,3,6-trichlorobenzoic acid

(including salts)

(-----)

TCA trichloroacetic acid

(including salts)

TCMTB 2-(thiocyanatomethylthio)-1,3-benzothiazole

tebuconazole (RS)-1-p-chlorophenyl-4,4-dimethyl-3-(1H-

1,2,4-= triazol-1-ylmethyl)pentan-3-ol

tebufenozide N-tert-butyl-N'-(4-ethylbenzoyl)-3,5-

dimethyl= benzohydrazide

tebufenpyrad *N-*(4-*tert*-butylbenzyl)-4-chloro-3-ethyl-1-

methyl= pyrazole-5-carboxamide

tebupirimfos O-(2-tert-butylpyrimidin-5-yl)O-ethyl O-

isopropyl= phosphorothioate

tebutam N-benzyl-N-isopropylpivalamide

tebuthiuron 1-(5-tert-butyl-1,3,4-thiadiazol-2-yl)1,3-

dimethyl= urea

tecloftalam 3,4,5,6-tetrachloro-N-(2,3-dichlorophenyl)=

phthalamic acid

tecnazene 1,2,4,5-tetrachloro-3-nitrobenzene

tecoram N',N',N',N'-tetramethyl-N,N'-ethylenedi

(thiuram disulfide)

teflubenzuron 1-(3,5-dichloro-2,4-difluorophenyl)-3-(2,6-di=

fluorobenzoyl)urea

tefluthrin 2,3,5,6-tetrafluoro-4-methylbenzyl (Z)-

(1RS,3RS)= 3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2= dimethylcyclopropanecarboxylate

temephos O,O,O',O'-tetramethyl O,O'-thiodi-p-

phenylene= bis(phosphorothioate)

TEPP tetraethyl pyrophosphate

tepraloxidim  $(5RS)-2-\{(EZ)-1-[(2E)-3-(EZ)-1-[(2E)-2-[(2E)-$ 

chloroallyloxyimino]= propyl}-3-hydroxy-5-perhydropyran-4-ylcyclo= hex-2-en-1-one

terallethrin (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl-=

2,2,3,3-tramethylcyclopropanecarboxylate

terbacil 3-tert-butyl-5-chloro-6-methyluracil

terbucarb 2,6-di-tert-butyl-p-tolyl methylcarbamate

#### Common names Chemical names terbuchlor N-butoxymethyl-6'-tert-butyl-2-chloroacet-o-= toluidide terbufos S-tert-butylthiomethyl O,O-diethylphosphoro= dithioate N<sup>2</sup>-tert-butyl-N<sup>4</sup>-ethyl-6-methoxy-1,3,5terbumeton triazine-= 2,4-diamine terbuthylazine N<sup>2</sup>-tert-butyl-6-chloro-N<sup>4</sup>-ethyl-1,3,5-triazine-2.4 = diamine2,6-di-t-butyl-4-methylphenyl Nterbutol methylcarbamate terbutryn N<sup>2</sup>-tert-butyl-N<sup>4</sup>-ethyl-6-methylthio-1,3,5triazine-= 2,4-diamine tetrachlorvinphos (Z)-2-chloro-1-(2,4,5-trichlorophenyl)vinyl= dimethyl phosphate tetraconazole (RS)-2-(2,4-dichlorophenyl)-3-(1H-1,2,4triazol-= 1-yl)propyl 1,1,2,2-tetrafluoroethyl ether tetradifon 4-chlorophenyl 2,4,5-trichlorophenyl sulfone tetrafluron 1,1-dimethyl-3-[3-(1,1,2,2-tetrafluoroethoxy)= phenyl] urea tetramethrin cyclohex-1-ene-1,2-dicarboximidomethyl= (1RS,3RS;1RS,3SR)-2,2- dimethyl-3-(2methyl= prop-1-enyl) cyclopropanecarboxylate cyclohex-1-ene-1,2-dicarboximidomethyl= tetramethrin[(1R)isomers] (1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylpropor d-tetramethrin 1-= enyl) cyclopropanecarboxylate tetrasul 4-chlorophenyl 2,4,5-trichlorophenyl sulphide

2-chloro-N-(3-methoxy-2-thenyl)-2',6'-

dimethyl= acetanilide

thenylchlor

Common names theta-cypermethrin

Chemical names

1:1 mixture of the two enantiomers (R)- $\alpha$ cyano-= 3-phenoxybenzyl (1S,3R)-3-(2,2-

dichlorovinyl)-= 2,2-

dimethylcyclopropanecarboxylate and (S)- $\alpha$ -cyano-3-phenoxybenzyl (1R,3S)-3-(2,2-di=chlorovinyl)-2,2-dimethylcyclopropane=

carboxylate

or

1:1 mixture of the two enantiomers (*R*)-α-cyano-= 3-phenoxybenzyl (1*S*)-*trans*-3-(2,2-

dichloro= vinyl)-2,2-

dimethylcyclopropanecarboxylate and (*S*)-α-cyano-3-phenoxybenzyl (1*R*)-*trans*-3-(2,2-= dichlorovinyl)-2,2-dimethylcyclopropane=

carboxylate

thiabendazole

2-(thiazol-4-yl)benzimidazole

thiacloprid

(*Z*)-3-(6-chloro-3-pyridylmethyl)-1,3-thiazolidin-2= -ylidenecyanamide

thiadifluor

3-(4-chlorophenyl)-N<sup>2</sup>-methyl-N<sup>4</sup>,N<sup>5</sup>-bis(trifluoro= methyl)-1,3-thiazolidine-2,4,5-

triylidenetriamine

thiamethoxam

3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-= 1,3,5-oxadiazinan-4-ylidene(nitro) amine

thiazafluron

1,3-dimethyl-1-(5-trifluoromethyl-1,3,4-thia=diazol-2-yl) urea

thiazopyr

methyl 2-difluoromethyl-5-(4,5-dihydro-1,3= thiazol-2-yl)-4-isobutyl-6-trifluoromethyl=

nicotinate

thicrofos

S-(6-chloro-3,4-dihydro-2H-1-benzothi-in-4-

yl)= O,O-diethyl phosphorothioate

thicyofen

(±)-3-chloro-5-ethylsulfinylthiophene-2,4-=

dicarbonitrile

thidiazuron

1-phenyl-3-(1,2,3-thiadiazol-5-yl) urea

Common names thifensulfuron (including esters)	Chemical names 3-(4-methoxy-6-methyl-1,3,5-triazin-2-ylcarba = moylsulfamoyl) thiophen-2-carboxylic acid
thifluzamide	2',6'-dibromo-2-methyl-4'-trifluoromethoxy-4- = trifluoromethyl-1,3-thiazole-5-carboxanilide
thiobencarb	S-4-chlorobenzyl diethylthiocarbamate
thiocarboxime	3-[1-(methylcarbamoyloxyimino) ethylthio]= propionitrile
thiochlorfenphim	N-(4-chlorophenylthiomethyl) phthalimide
thiocyclam (including salts)	N,N-dimethyl-1,2,3-trithian-5-ylamine
thiodicarb	3,7,9,13-tetramethyl-5,11-dioxa-2,8,14-trithia- = 4,7,9,12-tetra-azapentadeca-3,12-diene-6,10- = dione
thiofanox	1-(2,2-dimethyl-1-methylthiomethylpropylidene=amino-oxy)-N-methylformamide
thiometon	S-2-ethylthioethyl O,O-dimethylphosphorodithioate
thionazin	O,O-diethyl O-pyrazin-2-yl phosphorothioate
thiophanate	diethyl 4,4'-(O-phenylene)bis(3-thioallophanate)
thiophanate-methyl	dimethyl 4,4'-(O-phenylene)bis(3-thioallo=phanate)
thioquinox	1,3-dithiolo[4,5-b] quinoxaline-2-thione
thiosultap (including salts and esters)	dihydrogen <i>S,S'</i> -[2-(dimethylamino) trimethylene]= di(thiosulfate)
thiram	tetramethylthiuram disulfide
tiadinil	dihydrogen <i>S,S</i> '-[2-(dimethylamino)trimethy= lene]di (thiosulfate)

Common names	Chemical names
tiocarbazil	S-benzyl di-sec-butylthiocarbamate

tioclorim 6-chloro-5-(methylthio) pyrimidine-2,4-

diamine

tioxymid 5-isothiocyanato-2-methoxy-N,N-dimethyl -m-

= toluamide

tolclofos-methyl O,2,6-dichloro-p-tolyl-O,O-dimethyl

phosphoro= thioate

tolfenpyrad 4-chloro-3-ethyl-1-methyl-*N*-[4-(*p*-tolyloxy)=

benzyl]pyrazole-5-carboxamide

tolyfluanid N-dichlorofluoromethylthio-N',N'-dimethyl-N-

p-= tolylsulfamide

topramezone [3-(4,5-dihydro-1,2-oxazol-3-yl)-4-mesyl-o-

tolyl]= (5-hydroxy-1-methyl-1H-pyrazol-4yl)

methanone

tralkoxydim 2-[1-(ethoxyimino)propyl]-3-hydroxy-5-

mesityl= cyclohex-2-enone

tralomethrin (S)- $\alpha$ -cyano-3-phenoxybenzyl(1R,3S)1-2,2-di=

methyl-3[(RS)-1,2,2,2-tetrabromoethyl]cyclo=

propanecarboxylate

transfluthrin 2, 3,5,6-tetrafluorobenzyl(1R,3S)-3-(2,2- di=

chlorovinyl) 2,2-dimethylcyclopanecarboxylate

transpermethrin 3-phenoxybenzyl (1RS)-trans-3-(2,2-dichloro=

vinyl)-2,2-dimethylcyclopropanecarboxylate

Trichoderma

harzianum isolate T-

22

Trichoderma harzianum Rifai isolate TH 35 and TH

315

Trichoderma

harzianum isolate T-

39

Common names Chemical names

Trichoderma harzianum and

Trichoderma viride

Trichoderma polysporum and Trichoderma harzianum

Trichoderma stromaticum

Trichoderma virens

Trichoderma viride

triadimefon 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-

1,2,4-= triazol-1-yl)butan-2-one

triadimenol (1RS,2RS;1RS,2SR)-1-(4-chlorophenoxy)-3,3-

= dimethyl-1-(1H-1,2,4- triazol-1-yl)butan-2-ol

tri-allate S-2,3,3-trichloroally di-isopropyl

(thiocarbamate)

triamiphos 5-amino-3-phenyl-1H,-1,2,4-triazol-1-yl-

N,N,N',= N'-tetramethylphosphonic diamide

triapenthenol (E)-(RS)-1-cyclohexyl-4,4-dimethyl-2-(1H-

1,2,4= triazol-1-yl)pent-1-en-1-ol

triarathene 5-(4-chlorophenyl)-2,3-diphenylthiophene

triarimol (*RS*)-2,4-dichloro-α-(pyrimidin-5-yl)

benzhydryl= alcohol

triasamate ethyl(3-tert-butyl-1-dimethylcarbomyl-1H-

1,2,4-= triazol-5-ylthio) acetate

triasulfuron 1-[2-(2-chloroethoxy)phenylsulfonyl]-3-(4-=

methoxy-6-methyl-1,3,5-triazin-2-yl) urea

triazamate ethyl (3-*tert*-butyl-1-dimethylcarbamoyl-1*H*-=

1,2,4-triazol-5-ylthio)acetate

Common names Chemical names

triazbutil 4-butyl-4H-1,2,4-triazole

triaziflam (RS)-N-[2-(3,5-dimethylphenoxy)-1-

methylethyl]=

-6-(1-fluoro-1-methylethyl)-1,3,5-triazine-2,4-

= diamine

triazophos O,O-diethyl O-1-phenyl-1H,1,2,4-triazol-3-yl=

phosphorothioate

triazoxide 7-chloro-3-imidazol-1-yl-1.2,4-benzotriazine 1-

oxide

tribenuron 2-[4-methoxy-6-methyl-1,3,5-triazin-2-yl=

(including esters) (methyl)carbamoylsulfamoyl] benzoic acid

tribufos S,S,S-tributyl phosphorotrithioate

tricamba 3,5,6-trichloro-o-anisic acid

trichlorfon dimethyl 2,2,2-trichloro-1-hydroxyethyl=

phosphonate

trichloronat O-ethyl-O,2,4,5-trichlorophenyl

ethylphosphono= thioate

triclopyr

(including salts and

esters)

3,5,6-trichloro-2-pyridyloxyacetic acid

tricyclazole 5-methyl-1,2,4-triazolo[3,4-b][1,3]

benzothiazole

tridemorph 2,6-dimethyl-4-tridecylmorpholine

tridiphane (RS)-2-(3,5-dichlorophenyl)-2-(2,2,2-

trichloro= ethyl)oxirane

trietazine 6-chloro-N<sup>2</sup>,N<sup>2</sup>,N<sup>4</sup>-triethyl-1,3,5-triazine-2,4-=

diamine

trifenmorph 4-tritylmorpholine

trifenofos O-ethyl S-propyl O-2,4,6-trichlorophenyl=

phosphorothioate

Common names	Chemical names
trifloxystrobin	methyl (E)-methoxyimino-{(E)- $\alpha$ -[1-( $\alpha$ , $\alpha$ , $\alpha$ -tri=fluoro-m-tolyl)ethylideneaminooxy]-o-tolyl}= acetate
trifloxysulfuron (including salts)	1-(4,6-dimethoxypyrimidin-2-yl)-3-[3-(2,2,2-tri= fluoroethoxy)-2-pyridylsulfonyl] urea
triflumizole	( <i>E</i> )-4-chloro- $\alpha$ , $\alpha$ , $\alpha$ -trifluoro-N-(1-imidazol-1-yl-2-= propoxyethylidene)-o-toluidine
triflumuron	1-(2-chlorobenzoyl)-3-(4-trifluoromethoxy= phenyl) urea
trifluralin	$\alpha,\alpha,\alpha\text{-trifluoro-2,6-dinitro-N,N-dipropyl-p-toluidine}$
triflusulfuron (including esters)	2-[4-dimethylamino-6-(2,2,2-trifluoroethoxy)-= 1,3,5-triazin-2-ylcarbamoylsulfamoyl]-m-toluic acid
trifop (including esters)	(RS)-2-[4- $(\alpha,\alpha,\alpha$ -trifluoro-p-tolyloxy)phenoxy]= propionic acid
trifopsime	acetone (R)-O-[2-[4- $(\alpha,\alpha,\alpha$ -trifluoro-p-tolyloxy)= phenoxy]propionyl] oxime
triforine	$N, N'-[piperazine-1, 4-diylbis[(trichloromethyl)\\ methylene]] diformamide$
trimethacarb	a reaction product comprising 3,4,5-trimethyl= phenyl methylcarbamate (I) and 2,3,5-trimethyl= phenyl methylcarbamate(II) in a ratio between 3.5:1 and 5.0:1 m/m
trimeturon	3-(4-chlorophenyl)-1,1,2-trimethylisourea
trinexapac (including salts and esters)	( <i>RS</i> )-4-cyclopropyl(hydroxy) methylene-3,5-= dioxocyclohexanecarboxylic acid
tripropindan	1-(6-isopropyl-1,1,4-trimethylindan-5-yl) propan-= 1-one
tritac	1-(2,3,6-trichlorobenzyloxy) propan-2-ol

Common names Chemical names

triticonazole (±)-(E)-5(4-chlorobenzylidene)-2,2-dimethyl-

1-= (1H-1,2,4-triazol-1-ylmethyl)

cyclopentanol

tritosulfuron 1-[4-methoxy-6-(trifluoromethyl)-1,3,5-triazin-

2-= yl]-3-[2-(trifluoromethyl) benzenesulfonyl]

urea

uniconazole (E)-(RS)-1-(4-chlorophenyl)-4,4-dimethyl-2-

(1H=1,2,4-triazol-1-yl) pent-1-en-3-ol

uniconazole-P (E)-(S)-1-(4-chlorophenyl)-4,4-dimethyl-2-

(1H=1,2,4-triazol-1-yl) pent-1-en-3-ol

Vairimorpha necatrix -

validamycin (1R,2R,3S,4S,6R)-2,3-dihydroxy-6-hydroxy=

methyl-4-[(1*S*,4*R*,5*S*,6*S*)-4,5,6-trihydroxy-3-= hydroxymethylcyclohex-2-enylamino]

cyclohexyl=  $\beta$ -D-glucopyranoside

vamidothion O,O-dimethyl S-2(1-methylcarbamoylethythio)

= ethyl phosphorothioate

vernolate S-propyl dipropylthiocarbamate

Verticillium lecanii -

vinclozolin (RS)-3-(3,5-dichlorophenyl)-5-methyl-5-vinyl-

1,3-= oxazolidine-2,4-dione

vitamine D3  $(3\beta,5Z,7E)$ -9,10-secocholesta-5,7,10(19)-trien-

3-o1

warfarin (RS)-4-hydroxy-3-(3-oxo-1-phenylbutyl)

coumarin

Xanthomonas

campestris pv. Poannua

xylachlor 2-chloro-N-isopropylacet-2',3'-xylidide

xylylcarb 3,4-xylyl methylcarbamate

zarilamid (RS)-4-chloro-N-[cyano(ethoxy)methyl]=

Common names	Chemical names
	benzamide
zeta-cypermethrin	mixture of the stereoisomers ( $S$ )- $\alpha$ -cyano-3-= phenoxybenzyl (1 $RS$ ,3 $RS$ ;1 $RS$ ,3 $SR$ )-3-(2,2-di= chlorovinyl)-2,2-dimethylcyclopropane= carboxylate where the ratio of the ( $S$ );(1 $RS$ ,3 $RS$ ) isomeric pair to the ( $S$ );(1 $RS$ ,3 $RS$ ) isomeric pair lies in the ratio range 45-55 to 55-45 respectively
zinc phosphide	trizinc diphosphide
zineb	zinc ethylenebis(dithiocarbamate)
ziram	zinc bis(dimethyldithiocarbamate)
zolaprofos	O-ethyl S-3-methylisoxazol-5-ylmethyl S- propyl phosphorodithioate
zoxamide	( <i>RS</i> )-3,5-dichloro- <i>N</i> -(3-chloro-1-ethyl-1-methyl-2-= oxopropyl)- <i>p</i> -toluamide
ZXI 8901	3-(4-bromophenoxy)-α-cyanobenzyl 2-[4-(di=fluoromethoxy)phenyl]-3-methylbutanoate
-	N-acethylthiazolidine-4-carboxylic acid
-	4-allyl-2-methoxyphenol
-	4-aminopyridine
-	3-allyloxy-1,2-benzothiazole 1,1-dioxide
-	4-amino-6-tert-butyl-3-ethylthio-1,2,4-triazin- 5= (4H)-one
-	diammonium ethylenebis(dithiocarbamate)
-	$6$ -azido- $N^2$ -tert-butyl- $N^4$ -ethyl-1,3,5-triazine-2,4-= diamine
-	1,2-benzisothiazolin-3-one
-	6-benzylaminopurine

Common names	Chemical names 5-benzyl-3-furylmethyl(E)-(1R)-cis-2,2- dimethyl= -3-(2-oxothiolan-3-ylindenemethyl) cyclopropane= carboxylate
-	S-benzyl O,O-diethyl-phosphorothioate
-	S-benzyl O-ethyl phenylphosphorothioate
-	bis(2-chloroethyl)ether
-	bis(2-chloro-1-methylethyl) ether
-	bis(2-chloro-3-methylethyl) ether
-	bis(4-chlorophenoxy) methane
-	1,1-bis(4-chlorophenyl)-2-ethoxyethanol
-	1,1-bis (4-chlorophenyl)-2-nitropropane with 1,1-= bis(4-chlorophenyl)-2-nitrobutane
-	bis (dimethylthiocarbomoylthio) methyl arsine
-	$N^2$ , $N^4$ -bis(3-methoxypropyl)-6-methylthio l, 3,5-= triazine-2,4-diamine
-	S,S-bis(1-methylpropyl) phosphorodithioate
-	bis-O,O-di-(n-propyl) phosphorothionic anhydride
-	bis(diethoxyphosphinothioyl)disulfide with bis= (di-isopropoxyphosphinothioyl) disulfide
-	bis(8-hydroxyquinolinium) sulfate
-	bis (methylmercuric) sulphate
-	bis(tributyltin) oxide
-	(1R,2R,4R)-Born-2-yl thioctanathoacetate
-	1-bromo-2-chloroethane
-	3-bromo-1-chloroprop-1-ene

Common names	Chemical names 3-bromo-N-[4-chloro-2-methyl-6-(methyl=carbomoyl)phenyl-1-(3-chloropyridine-2-
_	yl)1H-= pyrazole-5-carboxamide 3-(4-bromophenoxy)-α-cyanobenzyl 2-[4-(di=
	fluoromethoxy)phenyl]-3-methylbutanoate
-	2-(2-butoxyethoxy)ethyl piperonylate
-	2-(2-butoxyethoxy)ethyl thiocyanate
-	butoxy(polypropylene glycol)
-	3-[N-butyl-N-acetyl]-aminopropionic acid,ethyl ester
-	(RS) sec-butylamine
-	N-butyl-1,2-benzisothiazolin-3-one
-	2-tert-butylamino-4-ethylamino-6-methoxy-s= triazine
-	6-tert-butyl-3-isopropyl[1,2]thiazolo [3,4-d]= pyrimidin-4(5H)-one
-	6-tert-butyl-3-isopropylisothiazolo [3,4-d]= pyrimidin-4(5H)-one
-	6-tert-butyl-3-isopropyl[1,2]oxazolo [5,4-d]= pyrimidin-4 (5H)-one
-	butyl (R)-2-[4-(4-cyano-2-fluorophenoxy)= phenoxy]propionate
-	2-(p-t-butylphenoxy) cyclohexylpropynyl sulphite
-	1-tert-butyl-5-cyano-N-methylpyrazole-4-= carboxamide
-	2-(4-tert-butylphenoxy)-1-methylethyl 2-= chloroethyl sulphite
-	6-tert-butyl-3-propyl-1,2-oxazolo[5,4-d]= pyrimidin-4(5H)-one

Common names	Chemical names
-	cadmium calcium copper zinc chromate sulfate
-	(E)-2-chlorobenzoyl(2,3-dihydro-4-phenyl-1,3- = thiazol-2-ylidene) acetonitrile
-	2-(2-chlorobenzyl)-4,4-dimethyl-1,2-oxazolidin-3-= one
-	2-chloro-N-(2-cyanoethyl) acetamide
-	2-chloroethylphosphonic acid
-	2-chloro-6'-ethyl-N-isopropoxymethylaceto-o- = toluidide
-	O,2-chloro-4-methylthiophenyl O-methylethyl= phosphoramidothioate
-	O,3-chloro-4-nitrophenyl O,O-dimethyl phos= phorothioate
-	1-chloro-2-nitropropane
-	2-chloro-N-(1-methyl-2-propynyl)acetamide
-	(2RS,3SR)-1-[3-(2-chlorophenyl)-2,3-epoxyl-2- = (4-fluorophenyl) propyl]-1H-1,2,4-triazole
-	1-(4-chlorophenoxy)-1-(imidazol-1-yl)-3,3-= dimethylbutanone
-	1-(4-chlorophenyl)-3-(2,6-dichlorobenzoyl) urea
-	5-chloro-2-methyl-4-isothiazolin-3-one
-	5-chloro-4-phenyl-1,2-dithiol-3-one
-	3-(4-chlorophenyl)-5-methylrhodanine
-	4-chlorophenyl phenyl sulfone
-	S-[[[4-chlorophenyl]thio]methyl]O,O-dimethyl= phosphorodithioate
-	$\label{eq:continuous} \begin{tabular}{ll} (E)-N'-[(6-chloro-3-pyridyl)methyl]-N^2-cyano-N'-= methylacetamidine \end{tabular}$

Chemical names

-	2-chlorovinyl diethyl phosphate
-	$(RS)-\alpha\text{-}[N\text{-}(3\text{-}chloro\text{-}2,6\text{-}xylyl)\text{-}2\text{-}methoxy\text{=}}\\ acetamido]-\gamma\text{-}butyrolacetone$
-	2-(4-chloro-3,5-xylyloxy)ethanol
-	(±)-cis-1-(4-chlorophenyl)-2-(1H-1,2,4-triazol-1-= yl)cycloheptanol
-	copper bis(3-phenylsalicylate)
-	copper zinc chromate
-	m-cumenyl methylcarbamate
-	[(α-cyano-4-fluoro-3-phenoxy)3-2-(chloro= phenyl)-2-chlorovinyl]-2,2-dimethyl-cyclo= propanecarboxylate
-	1-(2-cyano-2-methoxyiminoatyl)-3-ethylurea
-	(S)-α-cyano-3-phenoxybenzyl (1R,3S)-[(RS)-1,2-= dibromo-2,2-dichloroethyl]-2,2-dimethylcyclo= propanecarboxylate
-	1-[[2-(cyclopropylcarbonyl)phenyl]sulfamoyl]-3-= (4,6-dimethoxypyrimidin-2-yl) urea
-	N,N-diallyl-2,2-dichloroacetamide
-	1,2-dibromo-3-chloropropane
-	4-(dichloroacetyl)-1-oxa-4-azaspiro[4,5] decane
-	1,1-dichloro-2,2-bis(4-ethylphenyl) ethane
-	O-2,5-dichloro-4-iodophenyl O-ethyl= ethylphosphonothioate
-	1,2-dichloropropane
-	1,2-dichloropropane with 1,3-dichloropropane
-	1,1-dichloro-1-nitroethane

Common names

Common names	Chemical names
-	4,5-dichloro-2-n-octyl-4-isothiazolin-3-one
-	2,4-dichlorophenyl benzenesulfonate
-	2,4-dichlorophenyl-3'-methoxy-4'nitrophenyl ether
-	(RS)-N-(3,5-dichlorophenyl)-2- (methoxymethyl)= succinimide
-	N-3,5-dichlorophenylsuccinimide
-	1,3-dichloro-1,1,3,3-tetrafluoropropane-2,2-diol
-	3,4-dichlorotetrahydrothiophene 1,1-dioxide
-	2,6-dichloro-N-(4-trifluoromethylbenzyl)= benzamide
-	trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclo=propanecarboxylate
-	2,2-dichlorovinyl 2-ethylsulphinylethyl= methylphosphate
-	$N^2\text{-diethoxyphosphinothioyl-}N^2\text{-ethyl-}N^1\text{,}N^1\text{-di=}\\propylglycinamide}$
-	N,N-diethyl-3-mesitylsulfonyl-1H-1,2,4-triazole= -1-carboxamide
-	O,O-diethyl O-4-methyl-2-oxo-2H-chromen-7-yl= phosphorothioate
-	O,O-diethyl O-6-methyl-2-propylpyrimidin-4-yl= phosphorothioate
-	diethyl 5-methylpyrazol-3-yl phosphate
-	O,O-diethyl naphthalene-1,8-dicarboximido-= oxyphosphonothioate
-	N-2,3-dihydro-3-methyl-1,3-thiazol-2-ylidene-= 2,4-xylidine

Common na	mes Chemical names
-	O-(1,6-dihydro-6-oxo-1-phenylpyridazin-3-yl)= O,O-diethylphosphorothioate
-	2,3-dihydro-5-phenyl-1,4-dithi-ine 1,1,4,4-= tetraoxide di-isopropyl benzyl phosphorothioate
-	O,O-di-isopropyl S-ethylsulphinylmethyl= phosphorothiolothionate
-	dimethylarsinic acid
-	dimethyl 1,3-di(carbomethoxy)-1-propen-2-yl= phosphate
-	2-(4,5-dimethyl-1-3-dioxolan-2-yl) phenyl= methylcarbamate
-	O,O-dimethyl-S-(isopropylthio) ethyl= phosphorodithioate
-	5,5-dimethyl-3-oxocyclohex-1-enyl= dimethylcarbamate
-	dimethyl phthalate
-	dimethyl(4-piperidinocarbonyloxy-2,5-xylyl)= sulphonium toluene-4-sulphonate
-	O-4-dimethylsulfamoylphenyl O,O-diethyl= phosphorothioate
-	O,O-dimethyl O-4-sulphamoylphenyl= phosphorothioate
-	dimethyl 3,5,6-trichloropyridyl phosphorothioate
-	dimethyl 4-methylthiophenyl phosphate
-	dipropyl pyridine-2,5-dicarboxylate
-	disodium metaborate, hydrated
-	disodium octaborate, hydrated

Common names	Chemical names disodium tetraborate, hydrated
-	dithio-2,2'-bis(benzmethylamide)
-	2-(1,3-dithiolan-2-yl)phenyl dimethylcarbamate
-	(Z)-dodec-8-enol
-	ethyl butylacetylamino propionate
-	ethyl O-[5-(2-chloro- $\alpha,\alpha,\alpha$ -trifluoro-p-tolyloxy)-2-= nitrobenzyl]-DL-lactate
-	ethyl 2-chloro-3-[2-chloro-4-fluoro-5-(4-difluoro= methyl-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-= triazol-1-yl)phenyl]propionate
-	ethyl O-[2-chloro-5-(2-chloro-∝,∝,α-trifluoro-p-= tolyloxy)benzoyl]-L-lactate O-ethyl-0-2,4-dichlorophenyl thionobenzene= phosphonate
-	ethylene glycol bis (trichloroacetate)
-	N-(2-ethylhexyl)-8,9,10-trinorborn-5-ene-2,3-= dicarboximide
-	N-(ethylmercury)-p-toluene sulphonanilide
-	N-ethylmercurio-4-toluenesulphonanilide
-	2-ethyl-5-methyl-1,3-dioxan-2-yl 2-methylbenzyl= ether
-	S-(2-ethylsulphiny)isopropyl dimethyl= phosphorothiolate
-	S-ethylsulphinylmethyl O,O-di-isopropyl= phosphorodithioate
-	4-ethylthiophenyl methylcarbamate
-	2-fluoro-N-methyl-N-1-naphthylacetamide (RS)-3-furfuryl-2-methyl-4-oxocyclopent-2-enyl= (1RS)-cis-trans-2,2- dimethyl-3-(2-methylprop-1-= enyl)cyclopropanecarboxylate

Common names	Chemical names
-	hexachlorobenzene
-	a mixture of 1,1,1,7,7,7-hexafluoro-4-methyl-2,6-= bis(trifluoromethyl)-3-heptene-2,6 diol(I) and 1,1,1,7,7,7- hexafluoro-4-methylene-2,6-= bis(trifluoromethyl)-2,6-heptanediol(II)
-	1,5a,6,9,9a,9b, hexahydro-4a (4H)-dibenzofuran= carboxaldehyde
-	hexahydro-1,3,5,-tris(2-hydroxyethyl) triazine
-	hydrogen cyanide (including salts)
-	2-hydroxyethyl-n-octyl sulphide
-	N-hydroxymethyl chloroacetamide
-	1-hydroxy-1H-pyridine-2-thione
-	2-imidazolidone
-	3-iodo-2-propynylbutylcarbamate
-	isobornyl thiocyanoacetate
-	isopropyl O-[[methoxy-N-isopropylamino(thio=phosphoryl)salicylate
-	1-isopropyl-3-methylpyrazol-5-yl dimethyl= carbamate
-	2-isovalerylindan-1,3-dione
-	magnesium phosphide
-	p-menthanediol
-	mesyl(methyl)carbomoylmethylaminomethyl= phosphonic acid
-	methanesulfonyl fluoride
-	2-methoxy-4H-1,3,2-benzodioxaphosphorine-2- = sulphide

Common names	Chemical names
-	4-methoxy-3,3'-dimethylbenzophenone
-	(2-methoxyethyl)mercury(II) chloride
-	(2-methoxyethyl)mercury(II) acetate
-	(2-methoxyethyl)mercury(II) silicate
-	methylarsinediyl bis (dimethyldithiocarbamate)
-	3-methylcyclohex-2-en-1-one
-	methylene bisthiocyanate
-	1,1'-methylenedi(thiosemicarbazide)
-	1-(methylthio)-ethylideneamino carbamate
-	2-methyl-4-isothiazolin-3-one
-	S-methyl N-(carbamoyloxy)thioacetimidate
-	methyl (EZ) -1-[5-(2-chloro-α,α,α-trifluoro-p-= tolyloxy)-2-nitrophenyl]-2-methoxyethylidene= amino-oxyacetate
-	5-methyl-m-cumenyl butyryl(methyl)carbamate
-	methyl 2-[(4,6-dimethoxypyrimidin-2-yl)oxy]- 6-= [1-(methoxyimino) ethyl] benzoate
-	methyl 5-(4,6-dimethylpyrimidin-2-ylcarbamoyl= sulfamoyl)-1-(2-pyridyl)pyrazole-4-carboxylate
-	1-methyl-3-(1-methyl-1-phenylethyl)-1-phenylurea
-	3-methyl-1-phenylpyrazol-5-yl-dimethylcarbamate
-	2-(methyl-2-propynylamino) phenyl N-methyl= carbamate
-	2-methyl(prop-2-ynyl)aminophenyl methyl= carbamate

	Common names	Chemical names
-		4-methyl(prop-2-ynyl)amino-3,5-xylyl methyl= Carbamate
-		methyl 2,3,5,6-tetrachloro-N-methoxy-N-methyl= terephthalamate
-		5-methyl-6-thioxo-1,3,5-thiadiazinan-3-ylacetic acid
-		2-(2-naphthyloxy) propionanilide
-		nickel bis(dimethyldithiocarbamate)
-		N-3-nitrophenylitaconimide
-		4-(2-nitroprop-1-enyl) phenylthiocyanate
-		1,4,4a,5a,6,9,9a,9b-octahydrodibenzofuran-4a=carbaldehydeoctachlorocyclohex-2-en-1-one
-		2-n-octyl-4,4-isothiazolin-3-one
-		2-(octylthio) ethanol
-		1,7-dioxaspiro-[5.5]-undecane
-		1,1'-oxybis[2,3,3,3-tetrachloropropane]
-		2-phenyl-4h-3,1-benzoxazin-4-one
-		1-phenyl-3-(O,O-diethylthionophosphoryl)-1,2,4-= triazole
-		phenyl N,N-dimethylphosphorodiamidate
-		phenylmercury dimethyldithiocarbamate
-		phenylmercury(II) nitrate
-		Polychlorodicyclopentadiene
-		2,6-diisopropylnaphthalene
-		pyridazin-3-yl o-tolyl ether

Common names	Chemical names
-	pyridin-4-amine 2-pyridyl 1-(2,5-xylyl)ethyl sulfone 1-oxide
-	sodium (Z)-3-chloroacrylate
-	sodium hexafluorosilicate
-	sodium tetrathio(peroxocarbonate)
-	2,2',3,3'-tetrachloro-4,4'-oxydibut-2-en-4-olide
-	2,3,5,6-tetrachloro-4-(methylsulphonyl)pyridine
-	4,5,6,7-tetrachlorophthalide
-	tetrachlorothiophene
-	(Z)-tetradec-10-enyl acetate
-	O,O,O',O'-tetrapropyl dithiopyrophosphate
-	tetradecyl pyridinium bromide
-	2-thiocyanatoethyl laurate
-	tributyl phosphorotrithioite
-	tri-n-butyltin naphthenate
-	trichlorobenzyl chloride
-	2,2,2-trichloro-1-(3,4-dichlorophenyl) ethylacetate
-	4,5,7-trichloro-2,1,3-benzothiadiazole
-	4,5-7-trichlorobenzthiadiazole-2,1,3= trichlorobenzyl chloride
-	tricyclohexyltin hydroxide
-	tris(1-dodecyl-3-methyl-2-pheynlbenzimidazolium)= hexacyanoferrsate trisodium hexafluoroaluminate (3–)
-	3,5-xylyl methylcarbamate

#### SECOND SCHEDULE

[Section 2]

#### **EXEMPTED ARTICLES**

Paint for use as ordinary colouring paint

Latex preservative

#### THIRD SCHEDULE

#### Part I

## [Subsection 60(1)]

# SUBSTANCES REMOVED FROM THE CONTROL OF THE POISONS ORDINANCE, F.M. ORDINANCE No. 29 OF 1952

Names of substances		Item numbers in poisons list
1.	Dinosam: its compounds with a metal or base	128
2.	Dinoseb: its compounds with a metal or base	129
3.	Endosulfan	145
4.	Endothal: its salts	146
5.	Endrin	147
6.	Fumigants: hydrogen cyanide and methyl bromide gases	167
7.	Methyl bromide	242
8.	The following organo-tin compounds: Compounds of fentin	277
9.	The following phosphorous compounds	325
	Amiton	

Azinphos-ethyl

361

394

395

396

	Azinphos-methyl
	Chlorfenvinphos
	Demeton-O
	Demeton-S
	Demeton-O-methyl
	Demeton-S-methyl
	Dichlorvos
	Diethyl 4-methyl-7-coumarinyl phosphorothionate
	Diethyl p-nitrophenyl phosphate
	Dimefox
	Disulfoton
	Ethion
	Ethyl p-nitrophenyl phenylphosphothionate
	Mazidox
	Mecarbam
	Mevinphos
	Mipafox
	Oxydemeton-methyl
	Parathion
	Phenkapton
	Phorate
	Phosphamidon
	Scharadan
	Sulfotep
	TEPP (HETP)
	Thionazin
	Triphosphoric pentadimethylamide
	Vamidothion
10.	Sodium fluoriacetate

11. Zinc dimethyldithiocarbamate

13. Zinc phosphide

12. Zinc ethylene-bis-dithiocarbamate

#### PART II

#### [Subsection 60(1)]

#### ENTRIES DELETED FROM APPENDIX TO POISONS LIST

#### Under Agricultural and Horticultural Poisons

Dinosam: its compounds with a metal or base Dinoseb: its compounds with a metal or base

Endosulfan

Endothal: its salts

Endrin

Organo-tin compounds—Compounds of fentin

Phosphorous compounds and all entries thereunder

Zinc dimethyldihicarbamate

Zinc ethylene-bis-dithiocarbamate

Zinc phosphide

#### **Under Industrial Poisons**

Fumigants: Hydrogen cyanide and Methyl bromide gas

#### PART III

#### [Subsection 60(1)]

# SUBSTANCES REMOVED FROM THE CONTROL OF THE POISONS AND DELETERIOUS DRUGS ORDINANCE (CAP. 100) OF THE STATE OF SABAH

- $1. \ Dinitrophenols, their derivatives \ and \ their \ compounds \ used \ as \ weedkillers \ and \ insecticides$
- 2. Endosulfan
- 3. Endrin
- 4. Fumigants—hydrogen cyanide and methyl bromide gases
- 5. The following organo-tin compounds:

Compounds of fentin

- 6. Zinc dimethyldithiocarbamate
- 7. Zinc ethylene-bis-dithiocarbamate
- 8. Zinc phosphide

#### Part IV

[Subsection 64(1)]

# SUBSTANCES REMOVED FROM THE CONTROL OF THE POISONS ORDINANCE (CAP. 121) OF THE STATE OF SARAWAK

Dinosam: its compounds with a metal or a base Dinoseb: its compounds with a metal or a base

Zinc phosphide

# LAWS OF MALAYSIA

## **ACT 149**

# **PESTICIDES ACT 1974**

#### LIST OF AMENDMENTS

Amending law	Short title	In force from
Act 160	Malaysia Currency (Ringgit) Act 1975	29-08-1975
Act 157	Standards and Industrial Research Institure of Malaysia (Incorporation) Act 1975	16-09-1975
P.U. (A) 224/1976	Standards and Industrial Research Institute of Malaysia (Modification) Order 1976	16-09-1975
Act A324	Criminal Procedure Code (Amendment and Extension) Act 1976	10-01-1976
P.U. (A) 97/1976	Modification of Laws (Criminal Procedure)(Sabah and Sarawak) Order 1976	10-01-1976
Act A327	Penal Code (Amendment and Extension) Act 1976	31-03-1976
P.U. (A) 157/1978	Modification of Laws (Dangerous Drugs and Poisons)(Extension and Modification) Order 1978	01-06-1978
P.U. (A) 31/1981	Pesticides (Amendment of First Schedule) Order 1981	30-01-1981
P.U. (A) 357/1980	Subordinate Courts Act (Extension) Order 1980	01-06-1981
Act 260	Hydrogen Cyanide (Fumigation) Act 1953	24-12-1981
P.U. (A) 214/1982	Pesticides (Amendment of First and Second Schedules) Order 1982	23-07-1982

170	Laws of Malaysia	Аст 149
Amending law	Short title	In force from
P.U. (A) 22/1989	Pesticides (Amendment of Second Schedule) Order 1989	27-01-1989
P.U. (A) 391/1993	Pesticides (Amendment of First Schedule) Order 1993	26-11-1993
P.U. (A) 306/1999	Pesticides (Amendment of First Schedule) Order 1999	29-07-1999
P.U. (A) 366/2001	Pesticides (Amendment of Second Schedule) Order 2001	07-12-2001
P.U. (A) 16/2003	Pesticides (Amendment of First Schedule) Order 2003	17-01-2003
P.U. (A) 364/2003	Revision of Laws (Rectification of Pesticides Act 1974) Order 2003	19-09-2003
Act A1226	Pesticides (Amendment) Act 2004	03-03-2005
P.U. (A) 235/2011	Pesticides (Amendment of First Schedule) Order 2011	12-07-2011

# LAWS OF MALAYSIA

# **ACT 149**

# **PESTICIDES ACT 1974**

## LIST OF SECTIONS AMENDED

Section	Amending authority	In force from
2	Act A1226	03-03-2005
3	Act A1226	03-03-2005
6	Act A1226	03-03-2005
7	Act A1226	03-03-2005
8	Act A1226	03-03-2005
9	Act A1226	03-03-2005
10-10a	Act A1226	03-03-2005
12-14A	Act A1226	03-03-2005
15	Act A1226	03-03-2005
17	Act A1226	03-03-2005
20	Act A1226	03-03-2005
33	Act A1226	03-03-2005
35-35A	Act A1226	03-03-2005
44	Act A1226	03-03-2005
45A	Act A1226	03-03-2005
45в	Act A1226	03-03-2005
49	Act A1226	03-03-2005
50	Act A1226	03-03-2005
53-53A	Act A1226	03-03-2005
56-57	Act A1226	03-03-2005
First Schedule	P.U. (A) 31/1981	30-01-1981
	P.U. (A) 214/1982	23-07-1982
	P.U. (A) 391/1993	26-11-1993
	P.U. (A) 306/1999	29-07-1999

Laws of Malaysia	<b>ACT 149</b>
Amending authority	In force from
P.U. (A) 16/2003	17-01-2003
Act A1226	03-03-2005
P.U. (A) 235/2011	12-07-2011
P.U. (A) 214/1982	23-07-1982
P.U. (A) 22/1989	27-01-1989
P.U. (A) 366/2001	07-12-2001
	Amending authority P.U. (A) 16/2003 Act A1226 P.U. (A) 235/2011 P.U. (A) 214/1982 P.U. (A) 22/1989