

**Status Report  
The Birth Defect  
Prevention Act of 1984**

*A Report to the Legislature*



**California Environmental Protection Agency  
DEPARTMENT OF PESTICIDE REGULATION**

**June 1997**

California Environmental Protection Agency  
DEPARTMENT OF PESTICIDE REGULATION

Pete Wilson, Governor

Peter M. Rooney  
Acting Secretary for Environmental Protection

James W. Wells, Director  
Department of Pesticide Regulation

This report's executive summary is available on the DPR internet web site at:  
<http://www.cdpr.ca.gov>

## EXECUTIVE SUMMARY

### of the June 1997 Report to the Legislature

#### PURPOSE:

This report presents the status of the chronic health effects studies required by the Birth Defect Prevention Act (the Act) for the priority 200 active ingredients. DPR identified these active ingredients in 1985 as having the most significant data gaps, widespread use, and which were suspected of being hazardous to people. For the priority 200 active ingredients, the required health effects studies were due to the Department of Pesticide Regulation (DPR) by March 30, 1996. If pesticide registrants failed to submit the required studies, data gaps exist. A "data gap" means that DPR lacks adequate health effects studies in the following areas: chronic toxicity, mutagenicity, neurotoxicity, oncogenicity, reproductive effects, and teratology. Pesticide registrants are in compliance with the Act when DPR receives final reports for all required studies, unless later evaluation determines that any study is not adequate.

This is DPR's annual report to the Legislature on the data gaps that remain for the priority 200 active ingredients, as required by 1991 legislation (SB 550) amending the Act.

#### BACKGROUND:

The Act required DPR to acquire certain toxicological data for registered pesticide active ingredients in order to make a scientific determination that their continued uses will not cause significant adverse health effects. If the use of an active ingredient presents potential significant adverse effects, the Act requires DPR to suspend or cancel the registration of pesticide products containing those active ingredients.

In January 1986, DPR notified each registrant of pesticide products containing any of the priority 200 active ingredients of the data required to fill the data gaps. DPR found that much of the data submitted in response to the data call-in notice were from studies that did not meet the U.S. Environmental Protection Agency guidelines for conducting such studies. Because these studies had been performed some years ago, many registrants were unable to obtain additional data from the laboratories which conducted the original studies; thus, the studies

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could not be upgraded. Then registrants contracted with laboratories to begin new studies; however, most registrants failed to complete and submit new chronic health effects studies within the time frames in the law.

AMENDMENTS:

The Act was amended in 1991 and 1996. In 1991, amendments strengthened the Director's authority to suspend product registrations. They required the Director to initiate a suspension process for products containing active ingredients for which data gaps existed after December 31, 1991. These amendments provided that under certain conditions, registrants and others could petition for additional time to submit the data. However, the law clearly states that no pesticide product shall remain registered if it contains any of the priority 200 active ingredients for which data gaps exist after March 30, 1996. In March 1996, another amendment to the Act allowed continued registration of products containing two active ingredients while studies are being completed. For methyl bromide and pentachlorophenol, the studies are due by December 31, 1997.

REPORT SUMMARY:

Of the priority 200 active ingredients, 147 remain registered. Of the 53 active ingredients that are no longer registered in California, DPR suspended product registrations for six active ingredients before registrants chose not to renew them. For the active ingredients that remain registered, the report identifies study categories with adequate data, data being developed for methyl bromide and pentachlorophenol, the data at DPR pending evaluation, and inadequate data. Product registrations are suspended if data for any active ingredient cannot be upgraded with the submission of additional information.

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DPR determined that pesticide registrants filled the data gaps for 125 active ingredients. DPR also determined that sufficient data exist in the public literature to assess potential adverse health effects for nine active ingredients in lieu of submission of additional data. For eight active ingredients, DPR is evaluating submitted data. Data gaps exist for five active ingredients. DPR suspended registrations of products containing three of these active ingredients, and studies are in progress for two active ingredients, methyl bromide and pentachlorophenol. These studies are due to DPR by December 31, 1997.

The following table summarizes the June 1997 annual report.

**BIRTH DEFECT PREVENTION ACT  
REPORT SUMMARY  
JUNE 1997**

Status summary of the priority 200 pesticide active ingredients identified according to Food and Agricultural Code Section 13127(a).

- I. 53 active ingredients are no longer registered**
- a. Registrations were not renewed by registrants **47**
  - b. Registrations were suspended before the products were not renewed by registrants **6**
    - Cyhexatin
    - Coumaphos
    - Dimethylphthalate
    - Ferbam
    - Naphthalene
    - Parathion
- 

- II. 147 active ingredients are currently registered**
- a. A set of adequate data is on file **125**
    - 1 active ingredient exempted from data requirements for three years under FAC section 13127 (e)(2):  
Diclofop-methyl
  - b. Data are not required at this time (adequate data exist in public literature to assess potential adverse health effects) **9**
  - c. All data submitted (one or more studies pending review and/or data are upgradable) **8**
  - d. Active ingredients with data gaps **5**
    - 1. 2 active ingredients with one or more studies in progress. Deadline extended to 12/31/97 in FAC section 13127.32 for:  
Methyl Bromide  
PCP (Pentachlorophenol)
    - 2. 3 active ingredients have products suspended:  
Bendiocarb  
Chloroneb<sup>1</sup>  
Petroleum Distillates, Aromatic
- 

200

<sup>1</sup>One Chloroneb product was suspended; one product was granted an exemption from the data requirements; one product is being evaluated for exemption from data requirements.

**REPORT TO THE LEGISLATURE  
BIRTH DEFECT PREVENTION ACT OF 1984**

**JUNE 1997**

The Birth Defect Prevention Act of 1984, as amended, (the Act) requires the Department of Pesticide Regulation (DPR) to report annually on the status of data gaps remaining for pesticide products containing any active ingredient identified pursuant to Food and Agricultural Code (FAC) section 13127, subdivision (a). The Act required registrants to submit data by March 30, 1996. If data gaps remained after that date, the Act required DPR to suspend registrations of a pesticide product containing any active ingredient with a data gap.

This report includes a printout of the "Mandatory Health Effects Database," which lists each of the priority 200 active ingredients in alphabetical order and indicates the status of the health effects data for each active ingredient that remains registered.

For certain active ingredients, the Mandatory Health Effects Database indicates "Data Not Adequate" or "No Data on File" for certain study categories. However, the database is complete for six of these active ingredients because studies are not required for certain registered use patterns that are nonfood uses and do not result in significant, repeated, prolonged human exposure. These active ingredients are acrolein, boric acid, ortho-benzyl-para-chlorophenol, diphacinone, formaldehyde, and lithium hypochlorite. The database indicates that for six diclofop-methyl study categories, the data are not adequate. In this case, the single registered diclofop-methyl product was granted a three-year exemption from data requirements, which expires on July 9, 1999. In addition, the database indicates that for ten rotenone study categories, the data on file are not adequate. However, DPR is not requiring additional data for rotenone products because when considered collectively, DPR finds adequate data on file and in public literature to assess potential adverse health effects.

## STATUS OF THE DATA

Specific statements report the status of the required health effects data for each pesticide active ingredient in the list that follows. Each statement is explained below.

Adequate data on file - DPR determined that data on file are adequate for the study category, and no additional data are required.

Data submitted under review - Data generators submitted data for the study category and data are currently being reviewed. DPR will inform the data submitter of the status when the review is completed.

Request for reconsideration under review - DPR received a petition for reconsideration of the acceptability of the study, and is reviewing it. DPR will inform the data submitter of the status when the review is completed.

Data not adequate - DPR determined that data are not adequate for the study category, and may not be upgraded.

Data not adequate, may be upgraded - DPR determined that data are not adequate for the study category, but may be upgraded with submission of additional information. DPR has not received a petition for reconsideration.

No data on file - DPR has no data on file for the study category.

Data not required at this time - Data are not required for this study category at this time.

Commitment to generate data - DPR received a commitment to initiate the study and submit data by December 31, 1997.

Statements used when the individual study categories are not listed under the chemical name are explained below:

Health effects data are not required at this time - Adequate data exist to assess potential adverse health effects.

This active ingredient is no longer registered - There are no pesticide products currently registered in California containing this active ingredient.

There are no remaining data gaps for this chemical at this time - All required health effects studies were submitted and found to be adequate.

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
DEPARTMENT OF PESTICIDE REGULATION  
BIRTH DEFECT PREVENTION ACT OF 1984 (SB950)  
MANDATORY HEALTH EFFECTS DATA BASE  
(CURRENT STATUS BY STUDY CATEGORY)

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Chemical Name: ACEPHATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ACRROLEIN

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Data not adequate.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: ALACHLOR

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ALDICARB

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ALDRIN

This Active Ingredient is no Longer Registered.

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Chemical Name: ALKYL(50%C14,40%C12,10%C16)DIMETHYLBENZYL AMMONIUM CHLORIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ALLETHRIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ALUMINUM PHOSPHIDE

Health Effects Data are Not Required at This Time.

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Chemical Name: AMITRAZ

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: AMITROLE

This Active Ingredient is no Longer Registered.

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Chemical Name: ARSENIC PENTOXIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ARSENIC TRIOXIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ASULAM, SODIUM SALT

This Active Ingredient is no Longer Registered.

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(CURRENT STATUS BY STUDY CATEGORY)

Chemical Name: ATRAZINE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: AZINPHOS-METHYL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: BARBAN

This Active Ingredient is no Longer Registered.

Chemical Name: BENDIOCARB

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Data not adequate.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Data submitted under review.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

Chemical Name: BENOMYL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: BENTAZON, SODIUM SALT

Study Category	Study Status
Chronic Feeding - Rat.....	Adequate data on file.
Chronic Feeding - Dog.....	Request for reconsideration under review.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

Chemical Name: BORIC ACID

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Data not adequate.
Oncogenicity - Rat.....	No data on file.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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 (CURRENT STATUS BY STUDY CATEGORY)

Chemical Name: BROMACIL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: BROMOXYNIL OCTANOATE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: CAPTAFOL

This Active Ingredient is no Longer Registered.

Chemical Name: CAPTAN

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: CARBARYL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: CARBOFURAN

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: CARBON TETRACHLORIDE

This Active Ingredient is no Longer Registered.

Chemical Name: CARBOXIN

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: CHLORAMBEN

This Active Ingredient is no Longer Registered.

Chemical Name: CHLORDANE

This Active Ingredient is no Longer Registered.

Chemical Name: CHLORDIMEFORM

This Active Ingredient is no Longer Registered.

Chemical Name: CHLORFLURENOL, METHYL ESTER

This Active Ingredient is no Longer Registered.

Chemical Name: CHLORINE

Health Effects Data are Not Required at This Time.

Chemical Name: CHLOROBENZILATE

This Active Ingredient is no Longer Registered.

Chemical Name: CHLORONEB

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Data not adequate.
Oncogenicity - Rat.....	No data on file.
Oncogenicity - Mouse.....	No data on file.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Data not adequate.
Teratology - Rabbit.....	Data not adequate.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Data not adequate.
Mutagenicity - DNA Damage.....	Data not adequate.
Neurotoxicity - Hen.....	Data not required at this time.

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(CURRENT STATUS BY STUDY CATEGORY)

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Chemical Name: ORTHO-BENZYL-PARA-CHLOROPHENOL

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	No data on file.
Oncogenicity - Rat.....	Data not adequate, may be upgraded.
Oncogenicity - Mouse.....	Data not adequate, may be upgraded.
Reproduction - Rodent.....	No data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: CHLOROPICRIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CHLOROTHALONIL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CHLORPYRIFOS

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CHLORSULFURON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CHLORTHAL-DIMETHYL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: COPPER HYDROXIDE

Health Effects Data are Not Required at This Time.

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Chemical Name: COUMAPHOS

This Active Ingredient is no Longer Registered.

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Chemical Name: CREOSOTE

Study Category	Study Status
Chronic Feeding - Rat.....	Data not required at this time.
Chronic Feeding - Dog.....	Data not required at this time.
Oncogenicity - Rat.....	Data not required at this time.
Oncogenicity - Mouse.....	Data submitted under review.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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(CURRENT STATUS BY STUDY CATEGORY)

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Chemical Name: CRYOLITE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CYANAZINE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CYANURIC ACID, MONOSODIUM SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CYCLOATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: CYHEXATIN

This Active Ingredient is no Longer Registered.

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Chemical Name: 2,4-D

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: 2,4-D, DIMETHYLAMINE SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DAMINOZIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DDVP

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DEET

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DEMETON

This Active Ingredient is no Longer Registered.

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Chemical Name: DIAZINON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DICAMBA

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DICHLOBENIL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PARA-DICHLOROBENZENE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: 1,2-DICHLOROPROPANE, 1,3-DICHLOROPROPENE & RELATED C-3 COMPOUNDS

This Active Ingredient is no Longer Registered.

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Chemical Name: 1,3-DICHLOROPROPENE

There are No Remaining Data Gaps for This Chemical at This Time.

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(CURRENT STATUS BY STUDY CATEGORY)

Chemical Name: DICLOFOP METHYL

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Data not adequate.
Oncogenicity - Rat.....	Data not adequate.
Oncogenicity - Mouse.....	Data not adequate.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Data not adequate.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

Chemical Name: DICOFOL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: DIDECYL DIMETHYL AMMONIUM CHLORIDE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: DIETHATYL-ETHYL

This Active Ingredient is no Longer Registered.

Chemical Name: DIMETHOATE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: DIMETHYLPHTHALATE

This Active Ingredient is no Longer Registered.

Chemical Name: 2,4-DINITROPHENOL

This Active Ingredient is no Longer Registered.

Chemical Name: DINOCAF

This Active Ingredient is no Longer Registered.

Chemical Name: DINOSEB

This Active Ingredient is no Longer Registered.

Chemical Name: DIOXATHION

This Active Ingredient is no Longer Registered.

Chemical Name: DIPHACINONE

Study Category	Study Status
Chronic Feeding - Rat.....	No data on file.
Chronic Feeding - Dog.....	No data on file.
Oncogenicity - Rat.....	No data on file.
Oncogenicity - Mouse.....	No data on file.
Reproduction - Rodent.....	No data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	No data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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(CURRENT STATUS BY STUDY CATEGORY)

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Chemical Name: DIPHENAMID

This Active Ingredient is no Longer Registered.

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Chemical Name: DIPHENYLAMINE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DIPROPYL ISOCINCHOMERONATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DIQUAT DIBROMIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: DIURON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ENDOSULFAN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ENDOTHALL, MONO (N,N-DIMETHYL ALKYLAMINE) SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ENDRIN

This Active Ingredient is no Longer Registered.

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Chemical Name: EPN

This Active Ingredient is no Longer Registered.

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Chemical Name: EPTC

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ETHALFLURALIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ETHEPHON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ETHOFUMESATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ETHOPROP

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ETHYL ALCOHOL

Health Effects Data are Not Required at This Time.

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Chemical Name: ETHYLENE DIBROMIDE

This Active Ingredient is no Longer Registered.

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Chemical Name: ETHYLENE DICHLORIDE

This Active Ingredient is no Longer Registered.

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CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
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Chemical Name: ETHYLENE GLYCOL, MONOMETHYL ETHER

This Active Ingredient is no Longer Registered.

Chemical Name: ETHYLENE OXIDE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FENAMIPHOS

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FENARIMOL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FENSULFOTHION

This Active Ingredient is no Longer Registered.

Chemical Name: FENTHION

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FERBAM

This Active Ingredient is no Longer Registered.

Chemical Name: FLUCHLORALIN

This Active Ingredient is no Longer Registered.

Chemical Name: FLUCYTHRINATE

This Active Ingredient is no Longer Registered.

Chemical Name: FLUOMETURON

This Active Ingredient is no Longer Registered.

Chemical Name: FLUVALINATE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FOLPET

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: FORMALDEHYDE

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate, may be upgraded.
Chronic Feeding - Dog.....	Data not adequate, may be upgraded.
Oncogenicity - Rat.....	Data not adequate, may be upgraded.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Data not adequate, may be upgraded.
Teratology - Rabbit.....	Data not adequate.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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(CURRENT STATUS BY STUDY CATEGORY)

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Chemical Name: FOSAMINE, AMMONIUM SALT

This Active Ingredient is no Longer Registered.

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Chemical Name: GLYPHOSATE, ISOPROPYLAMINE SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: HEPTACHLOR

This Active Ingredient is no Longer Registered.

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Chemical Name: HYDROGEN CHLORIDE

Health Effects Data are Not Required at This Time.

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Chemical Name: IMAZALIL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: IPRODIONE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ISOPROPYL ALCOHOL

Health Effects Data are Not Required at This Time.

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Chemical Name: LINDANE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: LINURON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: LITHIUM HYPOCHLORITE

Study Category	Study Status
Chronic Feeding - Rat.....	No data on file.
Chronic Feeding - Dog.....	No data on file.
Oncogenicity - Rat.....	No data on file.
Oncogenicity - Mouse.....	No data on file.
Reproduction - Rodent.....	No data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Data not adequate.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: MALATHION

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: MALEIC HYDRAZIDE, DIETHANOLAMINE SALT

This Active Ingredient is no Longer Registered.

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Chemical Name: MALEIC HYDRAZIDE, POTASSIUM SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: MANCOZEB

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: MANEB

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: MEFLUIDIDE, DIETHANOLAMINE SALT

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: METALDEHYDE

Study Category	Study Status
Chronic Feeding - Rat.....	Adequate data on file.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Data not adequate, may be upgraded.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

Chemical Name: METAM-SODIUM

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: METHIDATHION

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: METHOMYL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: METHYL BROMIDE

Study Category	Study Status
Chronic Feeding - Rat.....	Commitment to generate data.
Chronic Feeding - Dog.....	Data submitted under review.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

Chemical Name: METHYL PARATHION

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: METHYLENE CHLORIDE

This Active Ingredient is no Longer Registered.

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Chemical Name: METHYLENEBIS (THIOCYANATE)

Study Category	Study Status
Chronic Feeding - Rat.....	Request for reconsideration under review.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Request for reconsideration under review.
Oncogenicity - Mouse.....	Request for reconsideration under review.
Reproduction - Rodent.....	Data not adequate, may be upgraded.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: METOLACHLOR

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: METRIBUZIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: MEVINPHOS

This Active Ingredient is no Longer Registered.

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Chemical Name: MOLINATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: MONOCROTOPHOS

This Active Ingredient is no Longer Registered.

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Chemical Name: MSMA

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: NALED

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: NAPHTHALENE

This Active Ingredient is no Longer Registered.

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Chemical Name: NAPROPAMIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: NAPTALAM, SODIUM SALT

This Active Ingredient is no Longer Registered.

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Chemical Name: NITRAPYRIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: NORFLURAZON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: OCTYLBICYCLOHEPTENE DICARBOXIMIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ORYZALIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: OXADIAZON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: OXAMYL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: OXYCARBOXIN

This Active Ingredient is no Longer Registered.

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Chemical Name: OXYFLUORFEN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: OXYTHIOQUINOX

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PARAQUAT DICHLORIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PARATHION

This Active Ingredient is no Longer Registered.

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Chemical Name: PCNB

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PCP

Study Category	Study Status
Chronic Feeding - Rat.....	Commitment to generate data.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Commitment to generate data.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Commitment to generate data.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: PEBULATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PENDIMETHALIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PERMETHRIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PETROLEUM DISTILLATES, AROMATIC

Study Category	Study Status
Chronic Feeding - Rat.....	No data on file.
Chronic Feeding - Dog.....	No data on file.
Oncogenicity - Rat.....	No data on file.
Oncogenicity - Mouse.....	Data not adequate.
Reproduction - Rodent.....	No data on file.
Teratology - Rat.....	No data on file.
Teratology - Rabbit.....	No data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Data not adequate.
Mutagenicity - DNA Damage.....	No data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: PHENOTHRIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ORTHO-PHENYLPHENOL

Study Category	Study Status
Chronic Feeding - Rat.....	Data submitted under review.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Data submitted under review.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: PHORATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PHOSALONE

This Active Ingredient is no Longer Registered.

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Chemical Name: PHOSMET

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: PHOSPHAMIDON

This Active Ingredient is no Longer Registered.

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Chemical Name: PHOSPHORIC ACID

Health Effects Data are Not Required at This Time.

Chemical Name: PICLORAM

This Active Ingredient is no Longer Registered.

Chemical Name: PINE OIL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PIPERONYL BUTOXIDE TECHNICAL

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PMA

This Active Ingredient is no Longer Registered.

Chemical Name: PROMETRYN

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PROPAMOCARB

This Active Ingredient is no Longer Registered.

Chemical Name: PROPARGITE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PROPETAMPHOS

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PROPOXUR

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PROPYZAMIDE

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: PYRETHRINS

There are No Remaining Data Gaps for This Chemical at This Time.

Chemical Name: RESMETHRIN

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate, may be upgraded.
Chronic Feeding - Dog.....	Data not adequate, may be upgraded.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Request for reconsideration under review.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: ROTENONE

Study Category	Study Status
Chronic Feeding - Rat.....	Data not adequate.
Chronic Feeding - Dog.....	Data not adequate.
Oncogenicity - Rat.....	Data not adequate.
Oncogenicity - Mouse.....	Data not adequate.
Reproduction - Rodent.....	Data not adequate.
Teratology - Rat.....	Data not adequate.
Teratology - Rabbit.....	Data not adequate.
Mutagenicity - Gene Mutation.....	Data not adequate.
Mutagenicity - Chromosome Aberration.....	Data not adequate.
Mutagenicity - DNA Damage.....	Data not adequate.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: SIMAZINE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: SODIUM ARSENITE

This Active Ingredient is no Longer Registered.

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Chemical Name: SULFUR

Health Effects Data are Not Required at This Time.

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Chemical Name: SULFUR DIOXIDE

Health Effects Data are Not Required at This Time.

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Chemical Name: SULFURYL FLUORIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TERBACIL

This Active Ingredient is no Longer Registered.

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Chemical Name: TERRAZOLE

This Active Ingredient is no Longer Registered.

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Chemical Name: TETRACHLOROPHENOL

This Active Ingredient is no Longer Registered.

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Chemical Name: TETRACHLORVINPHOS

Study Category	Study Status
Chronic Feeding - Rat.....	Adequate data on file.
Chronic Feeding - Dog.....	Adequate data on file.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Adequate data on file.
Reproduction - Rodent.....	Request for reconsideration under review.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Adequate data on file.

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Chemical Name: TETRAMETHRIN

Study Category	Study Status
Chronic Feeding - Rat.....	Adequate data on file.
Chronic Feeding - Dog.....	Data not adequate, may be upgraded.
Oncogenicity - Rat.....	Adequate data on file.
Oncogenicity - Mouse.....	Data not adequate, may be upgraded.
Reproduction - Rodent.....	Adequate data on file.
Teratology - Rat.....	Adequate data on file.
Teratology - Rabbit.....	Adequate data on file.
Mutagenicity - Gene Mutation.....	Adequate data on file.
Mutagenicity - Chromosome Aberration.....	Adequate data on file.
Mutagenicity - DNA Damage.....	Adequate data on file.
Neurotoxicity - Hen.....	Data not required at this time.

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Chemical Name: THIABENDAZOLE, HYPOPHOSPHITE SALT

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: THIOBENCARB

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: THIOPHANATE-METHYL

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: THIRAM

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TOXAPHENE

This Active Ingredient is no Longer Registered.

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Chemical Name: TRIADIMEFON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: S,S,S-TRIBUTYL PHOSPHOROTRITHIOATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRIBUTYL TIN BENZOATE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRIBUTYL TIN OXIDE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRICHLORO-S-TRIAZINETRIONE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRICHLOROPHON

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRICLOPYR

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRIFLURALIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: TRIFORINE

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: VERNOLATE

This Active Ingredient is no Longer Registered.

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Chemical Name: VINCLOZOLIN

There are No Remaining Data Gaps for This Chemical at This Time.

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Chemical Name: ZIRAM

There are No Remaining Data Gaps for This Chemical at This Time.

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