HUMAN HEALTH SEARCHABLE DATABASE (HHSD)

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OVERVIEW

- Human Health Searchable Database (HHSD)
- Data Pipeline
- Frontend
- Future work

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

MEMORANDUM

Date: February 16, 2017

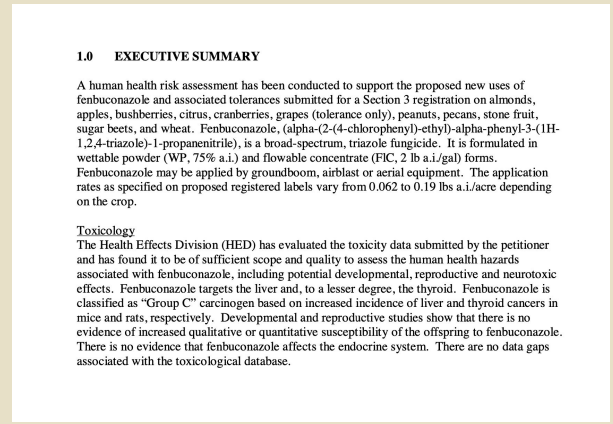
SUBJECT: **Bromuconazole:** Human Health Draft Risk Assessment for Registration Review.

PC Code: 120503
Decision No.: 522615
Petition No.: NA
Risk Assessment Type: Aggregate Risk Assessment
TXR No.: NA
MRID No.: NA

DP Barcode: D436271
Registration No.: 264-548
Regulatory Action: Registration Review
Case No.: 70357
CAS No.: 116255-48-2
40 CFR: NA

FROM: Barry O'Keefe, Senior Biologist
Myron Ottley, Senior Biologist
Risk Assessment Branch III (RAB 3)
Health Effects Division (Health Effects Division) (7509P)

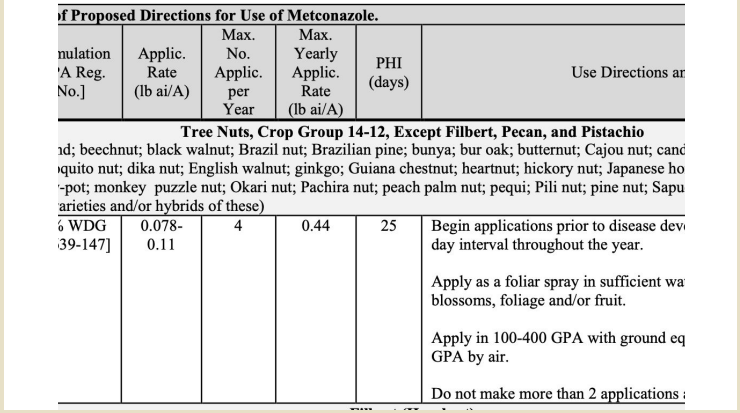
THROUGH: Barbara Madden, Acting Branch Chief



1.0 EXECUTIVE SUMMARY

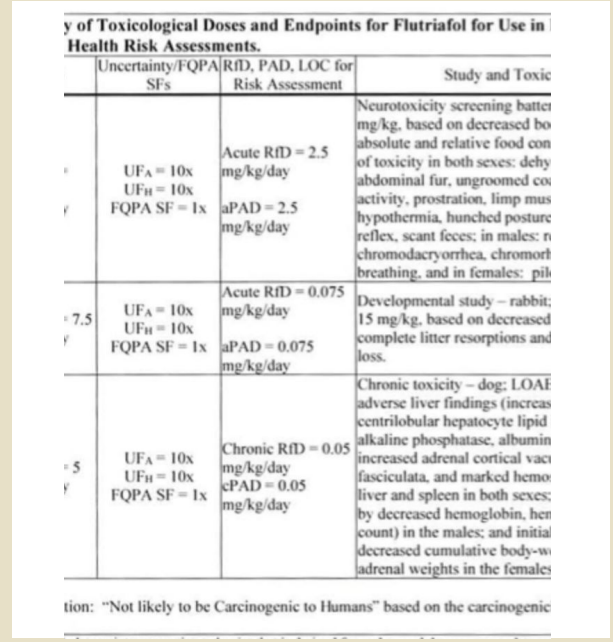
A human health risk assessment has been conducted to support the proposed new uses of fenbuconazole and associated tolerances submitted for a Section 3 registration on almonds, apples, bushberries, citrus, cranberries, grapes (tolerance only), peanuts, pecans, stone fruit, sugar beets, and wheat. Fenbuconazole, (alpha-(2-(4-chlorophenyl)-ethyl)-alpha-phenyl-3-(1H-1,2,4-triazole)-1-propanenitrile), is a broad-spectrum, triazole fungicide. It is formulated in wettable powder (WP, 75% a.i.) and flowable concentrate (FlC, 2 lb a.i./gal) forms. Fenbuconazole may be applied by groundboom, airblast or aerial equipment. The application rates as specified on proposed registered labels vary from 0.062 to 0.19 lbs a.i./acre depending on the crop.

Toxicology
The Health Effects Division (HED) has evaluated the toxicity data submitted by the petitioner and has found it to be of sufficient scope and quality to assess the human health hazards associated with fenbuconazole, including potential developmental, reproductive and neurotoxic effects. Fenbuconazole targets the liver and, to a lesser degree, the thyroid. Fenbuconazole is classified as "Group C" carcinogen based on increased incidence of liver and thyroid cancers in mice and rats, respectively. Developmental and reproductive studies show that there is no evidence of increased qualitative or quantitative susceptibility of the offspring to fenbuconazole. There is no evidence that fenbuconazole affects the endocrine system. There are no data gaps associated with the toxicological database.



of Proposed Directions for Use of Metconazole.

ulation 'A Reg. No.]	Applic. Rate (lb ai/A)	Max. No. Applic. per Year	Max. Yearly Applic. Rate (lb ai/A)	PHI (days)	Use Directions ar
Tree Nuts, Crop Group 14-12, Except Filbert, Pecan, and Pistachio					
id; beechnut; black walnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; canc quito nut; dika nut; English walnut; ginkgo; Guiana chestnut; heartnut; hickory nut; Japanese ho -pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pequi; Pili nut; pine nut; Sapu arieties and/or hybrids of these)					
6 WDG 39-147]	0.078-0.11	4	0.44	25	Begin applications prior to disease dev day interval throughout the year. Apply as a foliar spray in sufficient wa blossoms, foliage and/or fruit. Apply in 100-400 GPA with ground eq GPA by air. Do not make more than 2 applications



y of Toxicological Doses and Endpoints for Flutriafol for Use in Health Risk Assessments.

	Uncertainty/FQPA SFs	RfD, PAD, LOC for Risk Assessment	Study and Toxic
	UF_A = 10x UF_H = 10x FQPA SF = 1x	Acute RfD = 2.5 mg/kg/day aPAD = 2.5 mg/kg/day	Neurotoxicity screening batte mg/kg, based on decreased bo absolute and relative food con of toxicity in both sexes: dehy abdominal fur, ungroomed co activity, prostration, limp mus hypothermia, hunched posture reflex, scant feces; in males: r chromodacryorrhea, chromorh breathing, and in females: pil
7.5	UF_A = 10x UF_H = 10x FQPA SF = 1x	Acute RfD = 0.075 mg/kg/day aPAD = 0.075 mg/kg/day	Developmental study – rabbit; 15 mg/kg, based on decreased complete litter resorptions and loss.
5	UF_A = 10x UF_H = 10x FQPA SF = 1x	Chronic RfD = 0.05 mg/kg/day cPAD = 0.05 mg/kg/day	Chronic toxicity – dog; LOAE adverse liver findings (increas centrilobular hepatocyte lipid alkaline phosphatase, albumin increased adrenal cortical vac fasciculata, and marked hemo liver and spleen in both sexes; by decreased hemoglobin, her count) in the males; and initial decreased cumulative body-w adrenal weights in the females

tion: "Not likely to be Carcinogenic to Humans" based on the carcinogenic

SAMPLE DOCUMENTS

- Documents are from US EPA Pesticide Registration Eligibility Documents (RED)
- To find a specific piece of information by manual browsing without repeating experiments
- To compare information across some similar but different tables
- To serialize information for research

What is HHSD

- The human health searchable database (HHSD) is a data pipeline and web application that contains structured extracted data from PDF documents from EPA government regulation site
- It allows user to type-in search and filter specific data fields upon different kinds of table types. User can trace back to original document, preview, or download returned searched results

Downloading PDF from EPA site via API

Extract data into structured datasets

Searchable database web app

Types of Table

- **Types of tables handled in current pipeline**
  - Endpoint Table
  - Profile Table
  - Nomenclature Table
  - Tolerances and Maximum Residue Limits Table
  - Estimated Drinking Water Concentration Table
  - Occupational Exposure Risk Estimate Table
  - Occupational Post-Application Risk Estimate Table

User

Exported Search Results

React App

Full Text Search

Table/Cell Search

Document View

Elasticsearch

Normalized Structured Data

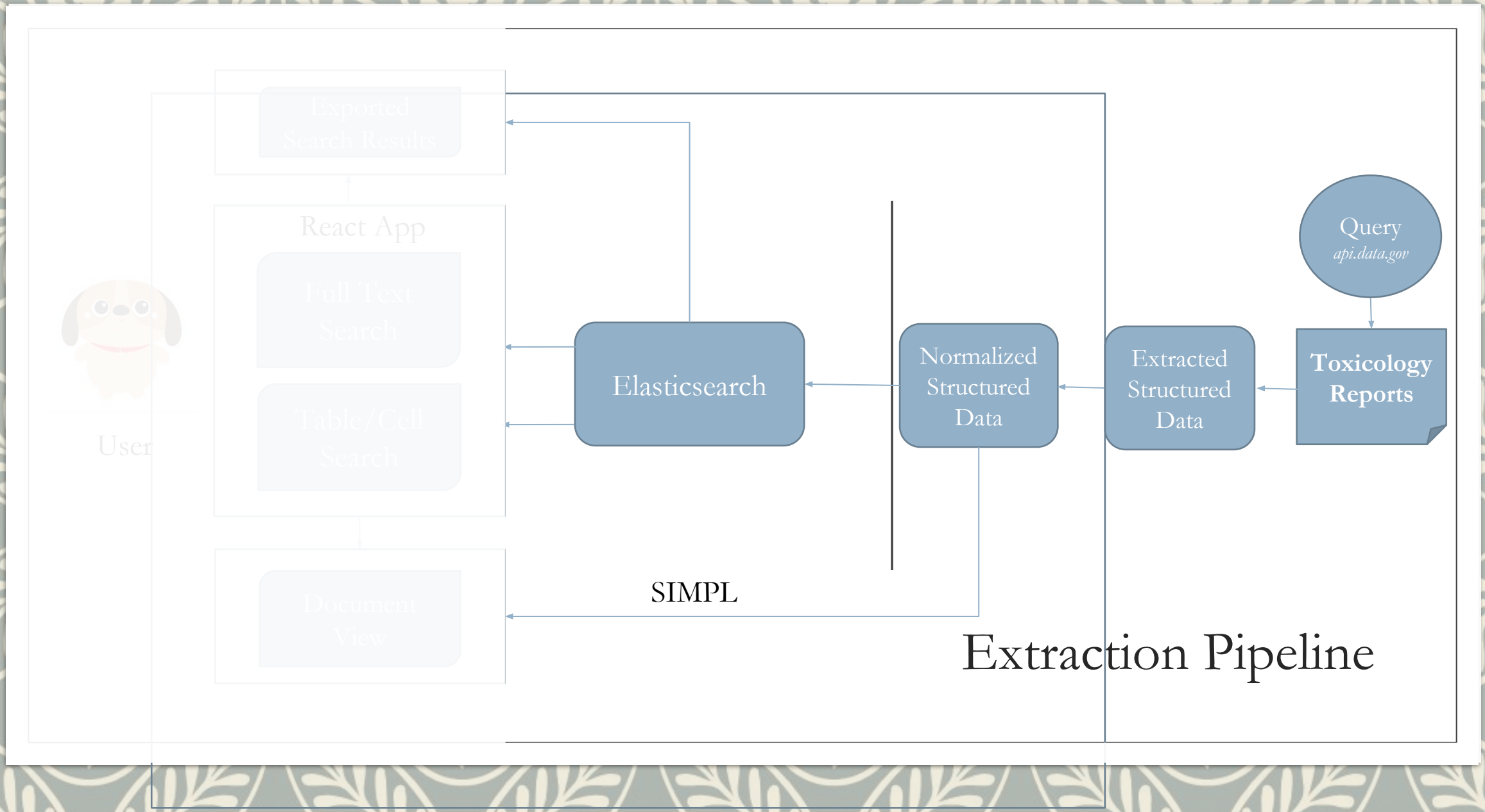
Extracted Structured Data

Query
api.data.gov

Toxicology Reports

SIMPL

Extraction Pipeline



Extraction Pipeline

Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments

Exposure/ Scenario	Point of Departure	Uncertainty Factors	Level of Concern for Risk Assessment	Study and Toxicological Effects
Incidental Oral short-term (1-30 days) and Intermediate-term (1-6 months) Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling).
Adult Oral short-term (1-30 days) Adults including females 13+	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Adults	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.

RAW TABLE TO STRUCTURED DATA


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Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments

Exposure/ Scenario	Point of Departure	Uncertainty Factors	Level of Concern for Risk Assessment	Study and Toxicological Effects
Incidental Oral short-term (1-30 days) and Intermediate-term (1-6 months) Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling).
Adult Oral short-term (1-30 days) Adults including females 13+	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Adults	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.

RUNNING CLOWDER EXTRACTION IN SIMPL PLATFORM

- **payload:**
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  - **Uncertainty/ FQPA Safety Factors:**
  - **Exposure Scenario:** Acute Dietary (All populations including females 13 – 49 years and children)
  - **index:** 2
  - **Study and Toxicological Effects:** Acute neurotoxicity Study (MRID 48996310) LOAEL = 200 mg/kg based on reduced locomotor activity in males and females (↓37-46%, p<0.01), at time of peak effect (approximately 3 hours post-dose). Reduced body weight (p<0.01) and food consumption (↓44%, p<0.01) occurred on day 1.
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Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments

Exposure/ Scenario	Point of Departure	Uncertainty Factors	Level of Concern for Risk Assessment	Study and Toxicological Effects
Incidental Oral short-term (1-30 days) and Intermediate-term (1-6 months) Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling).
Adult Oral short-term (1-30 days) Adults including females 13+	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Adults	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID 40425001 Developmental LOAEL = 90 mg/kg/day based on increased incidence of rudimentary ribs, un-ossified sternebrae, as well as increased incidence of shortened and absent renal papillae and increased cleft palate presumed to occur after single or multiple doses.

RAW TABLE TO STRUCTURED DATA

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Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Children


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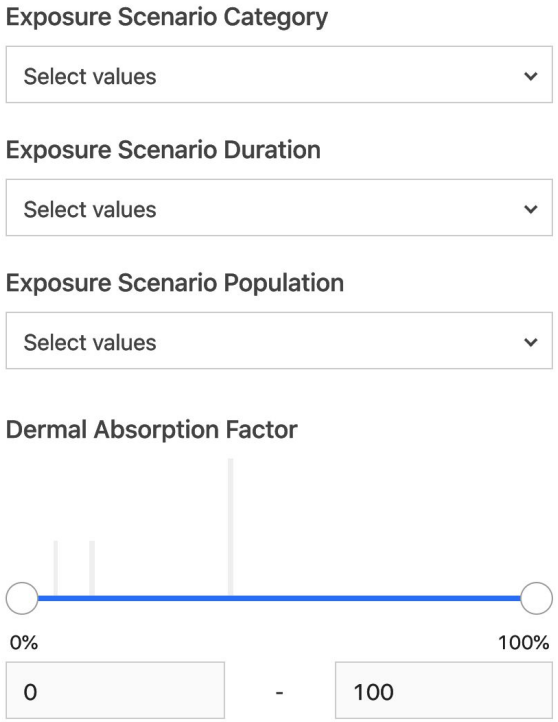


NORMALIZE AND REFINE EXTRACTED DATA

User

Exported Search Results

React App

Full Text Search

Table/Cell Search

Elasticsearch

Document View

SIMPL

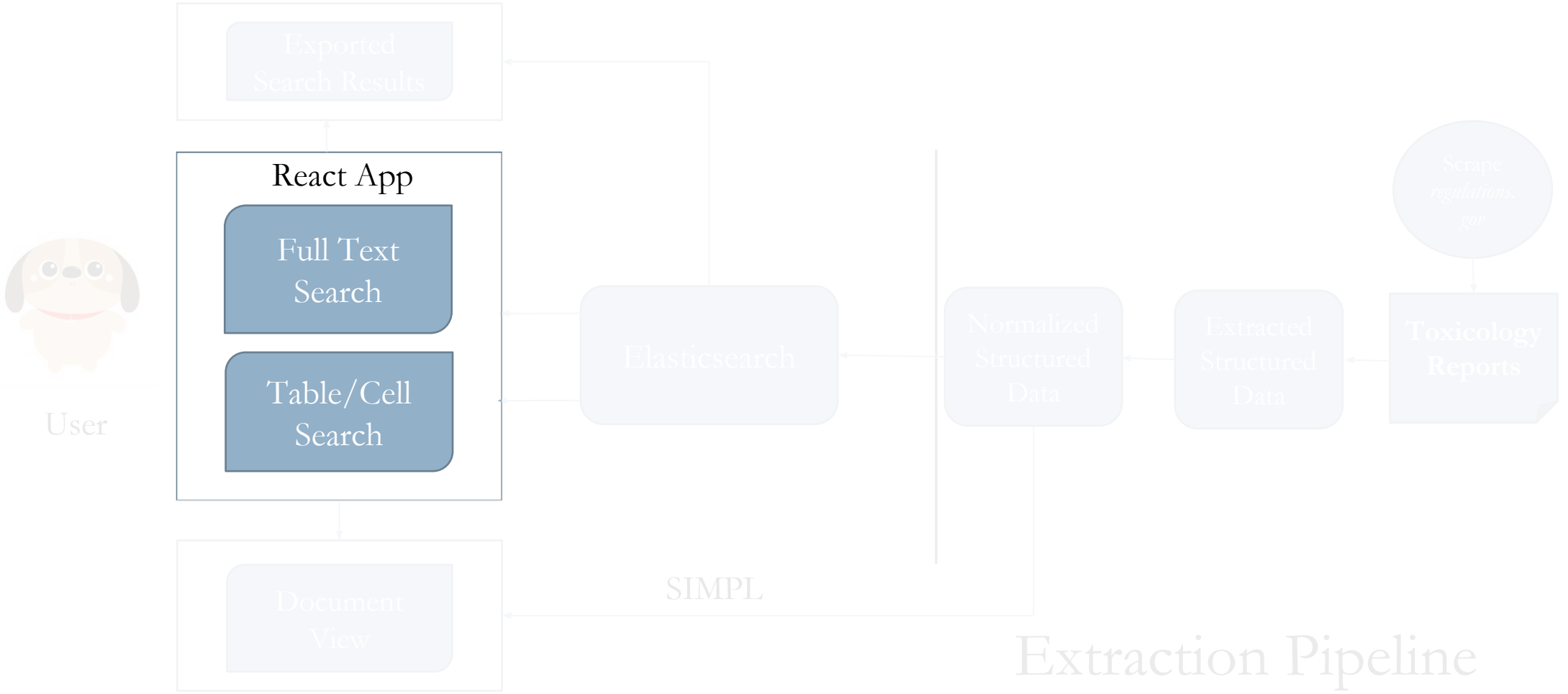
Scrape *regulations.gov*

Toxicology Reports

Extracted Structured Data

Normalized Structured Data

Extraction Pipeline


Exported Search Results
React App
Full Text Search
Table/Cell Search
Document View
User
Elasticsearch
Normalized Structured Data
Extracted Structured Data
Toxicology Reports
Scrape regulations.gov
SIMPL
Extraction Pipeline

Free-formed text search

soybean

search: soybean × Clear All

8 results found in 93ms

scoping Cypro EPA-HQ-OPP-2015-0462-0003 (1).pdf

SUBJECT: Tetraconazole: Human Health Risk Assessment for the Section 3 Registration for Application to add Crop Subgroup 6C; Dried Shelled Pea and Bean (except soybean) Subgroup 6C; Barley; Rapeseed Subgroup 20A; Wheat; and Forage, Fodder, and Straw of Cereal Grains Group 16.

Tetra EPA-HQ-OPP-2016-0573-0005.pdf

Tebuconazole: Human Health Aggregate Risk Assessment for Establishment of a Permanent Tolerance Without U.S. Registration for Residues in/on Ginseng.

"content": "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460 MEMORANDUM Date: 23 March 2016 OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION SUBJECT: Triadimefon and Triadimenol. Human Health Assessment Scoping Document in Support of Registration Review. PC Codes: I 0990 I (triadimefon), 12720 I (triadimenol) Decision No.: 5 11057 Petition No.: NA Risk Assessment Type: Single Chemical, Aggregate TXR No.: NA MRJD No.: NA DP Barcode: 0430121 Registration Nos.: Multiple Regulatory Action: Registration Review Case No.: 2700 CAS No.: 43121-43-3 (triadimefon), 55219-65-3 (triadimenol) 40 CFR: 180.410 (triadimefon), 180.450 (triad imenol) FROM: Michael A. Doherty, Ph.D., Chemist ~~~ Karlyn Middleton, M.S., Toxicologist ,?, Zaida I. Figueroa, DrPH, Industrial Hygienist· ·' Health Effects Division (7509P) +.A µ Nathan Mott! , Biologist -\\-::: ~=--,__,..?-\"\"---. Jonathan Leshin, PhD, Toxicologist Risk Assessment Science Support Bra Antimicrobials Division (AD, 75 lOP) THRU: Jess Rowland, Deputy Director Jeff Dawson, Deputy Director (acti 0 r-; ~ Health Effects Division (7509P) r _ ,,..- -\" --k-- \\'- s w Steven Weiss, Branch Chief 1 - ~~ Timothy Leighton, Senior Scientist I - KJ. -... RAS SB/ AD (75 1 OP) TO: Christina Motilall/Tom Moriarty/Neil Anderson Risk Management and Implementation Branch I Pesticide Re-Evaluation Division (7508P) Rachel Ricciardi , Chemical Review Manager Antimicrobials Division (AD, 751 OP) Page I of34 The Health Effects Division (HED) and Antimicrobials Division (AD) have jointly prepared a human health risk assessment scoping document for triadimefon and triadimenol to support registration review. HED reviewed the conventional uses and AD reviewed the antimicrobial uses of these pesticides. This document summarizes the evaluation of the data available for assessing human health risk from exposure to triadimefon and triadimenol , as well as any data needed to support registration review. Executive Summary Triadirnefon and triadirnenol are triazole-derivative fungicides. Triadimenol is a metabolite of triadimefon and is also a registered active ingredient. Triadimefon is registered for use as a wood preservative. which is considered an antimicrobial use, and as a conventional fungicide for use on pine seeds/seedlings, Christmas trees, ornamental plantings and landscapes (exterior/ interior), and turf in commercial and residential settings. Triadimenol is registered as a fungicide for seed treatment on barley. corn, cotton, oats. rye, sorghum, and wheat. In addition, there is a tolerance without a US registration for

Toxicology Search

Indication

Select values

Chemical Family

Select values

Chemical Names

Select values

Table Type

Select values

- [ ] Nomenclature Table
- [ ] Endpoint Table
- [ ] Profile Table
- [ ] Edwc Table
- [ ] MRL Table
- [ ] Risk Table
- [ ] Resident Exposure Table

Get the results!

Search

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1431 results found in 0ms

Propiconazole - Dermal Short Term (1-30 days) DAF=40.040%

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Term (1-30 days) DAF=40.040%	n/a	NOAEL=30mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;
Toxicological Effects	Acute Neurotoxicity Study-Rats MRID 46604601 LOAEL = 100 mg/kg/day based on clinical signs of toxicity (piloerection in one male, diarrhea in one female, tip toe gait in 3 females).						

Propiconazole - Dermal Intermediate Term (1-6 months)DAF=40.040%

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Intermediate Term (1-6 months)DAF=40.040%	n/a	NOAEL=10mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;
Toxicological Effects	24 Month carcinogenicity Study - Mice MRID 00129918 LOAEL = 50 mg/kg/day based on non-neoplastic liver effects (increased liver weight in males and increase in liver lesions: masses/raised areas/ swellings/nodular areas mainly).						

Propiconazole - Dermal Short Term and Intermediate-term DAF=40%

☐ Nomenclature Table

☑ Endpoint Table

Exposure Scenario Category

Select values

Type here to search...

ALL FIELDS

Adult oral

Cancer

Dermal

Dietary

0% 100%

0 - 100

Target Organ

Select values

Uncertainty/ FQPA Safety Factors

Select values

Uncertainty Factor (UF) value

MIN MAX

0 - 500

Tebuconazole - Dermal Short-Term (1-30 days)

Type	Document Name	Table Title	Exposure Scenario
Endpoint table	Tebu EPA-HQ-OPP-2017-0032-0005.pdf	Table 4.4.1. Summary of Toxicological Doses and Endpoints for Tebuconazole for Use in Dietary and Non-Occupational Human Health Risk Assessments.	Dermal Short-Term (1-30 days)
Toxicological Effects	Developmental Neurotoxicity Study - Rat. LOAEL = 8.8 mg/kg/c measurements and motor activity in offspring.		

Propiconazole - Dermal Short Term (1-30 days) DAF=40%;

Type	Document Name	Table Title	Exposure Scenario
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Term (1-30 days) DAF=40%
Toxicological Effects	Acute Neurotoxicity Study-Rats MRID 46604601 LOAEL = 100 diarrhea in one female, tip toe gait in 3 females).		

Propiconazole - Dermal Intermediate Term (1-6 months)DAF=40

Type	Document Name	Table Title	Exposure Scenario
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Intermediate Ter (1-6 months)DAF=40
Toxicological Effects	24 Month carcinogenicity Study - Mice MRID 00129918 LOAEL weight in males and increase in liver lesions: masses/raised are		

Propiconazole - Dermal Short Term (1-30 days) and Intermediate

Type	Document Name	Table Title	Exposure Scenario
Endpoint table	2019-July-15 - HHRA New Use on Avocado EPA-HQ-OPP-2018-0127-0007.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Ter (1-30 days) and Intermediate-ter (1-6 months) DAF=40%Childre
Toxicological Effects	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 1 increased incidence of hepatic lesions (cellular swelling)		

Toxicology Search

Indication

Select values

Chemical Family

Select values

Chemical Names

Select values

Table Type

Select values

☐ **Nomenclature Table**

☑ **Endpoint Table**

Exposure Scenario Category

Dermal

Exposure Scenario Duration

Short and intermediate term

Exposure Scenario Population

Children

Dermal Absorption Factor

0% 100%

0 - 40

Search

Try search for contents... Search

DAFValue: 0, 40 ✕ ExposureCategory: Dermal ✕ ExposureTime: Short and in... ✕

ExposurePopulation: Children ✕ Clear All

1 results found in 1ms

Propiconazole - Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF=40%Children;

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	2019-July-15 - HHRA New Use on Avocado EPA-HQ-OPP-2018-0127-0007.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF=40%Children;	n/a	NOAEL=42mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;
Toxicological Effects	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)						

Toxicology Search

Indication

Select values

Chemical Family

Select values

Chemical Names

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Table Type

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☐ Nomenclature Table
☑ Endpoint Table

Exposure Scenario Category

Dermal

Exposure Scenario Duration

Short and intermediate term

Exposure Scenario Population

Children

Dermal Absorption Factor

0% 100%

0 - 40

Search

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DAFValue: 0, 40 × ExposureCategory: Dermal × ExposureTime: Short and in... ×
ExposurePopulation: Children × Clear All

1 results found in 1ms

Propiconazole - Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF=40%Children;

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	2019-July-15 - HHRA New Use on Avocado EPA-HQ-OPP-2018-0127-0007.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF=40%Children;	n/a	NOAEL=42mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;

Toxicological Effects 2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)

Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments

Exposure/ Scenario	Point of Departure	Uncertainty Factors	Level of Concern for Risk Assessment	Study and Toxicological Effects
Incidental Oral short-term (1-30 days) and Intermediate-term (1-6 months) Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 0(Offspring LOAEL = 192 mg/kg b decreased offspring survival and b and an increased incidence of hep (cellular swelling).
Adult Oral short-term (1-30 days) Adults including females 13+	NOAEL= 30 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	Developmental Study - Rat MRID Developmental LOAEL = 90 mg/ on increased incidence of rudimen ossified sternebrae, as well as incr incidence of shortened and absent and increased cleft palate presume after single or multiple doses.
Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF = 40% Children	NOAEL= 42 mg/kg/day	UF_A= 10X UF_H=10X	Residential LOC for MOE = 100 Occupational LOC for MOE = 100	2-Gen Repro Study-Rats MRID 0(Offspring LOAEL = 192 mg/kg b decreased offspring survival and b and an increased incidence of hep (cellular swelling)

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Table Type

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- [ ] Endpoint Table
- [ ] Profile Table
- [ ] Edwc Table
- [ ] MRL Table
- [ ] Risk Table
- [ ] Resident Exposure Table

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Propiconazole - Dermal Short Term (1-30 days) DAF=40.040%

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Short Term (1-30 days) DAF=40.040%	n/a	NOAEL=30mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;
Toxicological Effects	Acute Neurotoxicity Study-Rats MRID 46604601 LOAEL = 100 mg/kg/day based on clinical signs of toxicity (piloerection in one male, diarrhea in one female, tip toe gait in 3 females).						

Propiconazole - Dermal Intermediate Term (1-6 months)DAF=40.040%

Type	Document Name	Table Title	Exposure Scenario	Study Type	Point Of Departure	Level of Concern Risk Assesment	Uncertainty Factors
Endpoint table	Difen EPA-HQ-OPP-2015-0685-0005.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and Occupational Human Health Risk Assessments	Dermal Intermediate Term (1-6 months)DAF=40.040%	n/a	NOAEL=10mg/kg/day;	Residential LOC for MOE=100; Occupational LOC for MOE=100;	UFA=10X; UFH=10X;
Toxicological Effects	24 Month carcinogenicity Study - Mice MRID 00129918 LOAEL = 50 mg/kg/day based on non-neoplastic liver effects (increased liver weight in males and increase in liver lesions: masses/raised areas/ swellings/nodular areas mainly).						

Propiconazole - Dermal Short Term and Intermediate-term DAF=40%

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	**Document Name**	**Table Title**	**Exposure Scenario**	**DAF**	**Study T**	**End Point**	**Endpoint**	**Endpoin**	**FQPA SF**	**UF Value**	**UF UOM**	**Level of Concern**	**LCRA Valu**	**LCRA UOM**	**Toxicological Effects**
2	2019-July-15 - HHRA New Use on Avocado EPA-HQ-OPP-2018-0127-0007.pdf	Table 4.5.4.2. Summary of Toxicological Doses and Endpoints for Propiconazole for Use in Residential and	Dermal Short Term (1-30 days) and Intermediate-term (1-6 months) DAF=40%Children;	40%	na	NOAEL	42	mg/kg/day	UFH	10	X	Occupational LOC for MOE	100	na	2-Gen Repro Study-Rats MRID 00151514 Offspring LOAEL = 192 mg/kg based on decreased offspring survival and body weights and an increased incidence of hepatic lesions (cellular swelling)
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EXTRACT SOME MORE TABLE TYPES

LEVERAGE NLP & ML TO SUPPORT DATA INTEGRITY

ASSESSMENT ON HOW THIS PROJECT CAN SCALE AND ITS LIMITATIONS

FUTURE WORK

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