

General Guidance on How to Navigate / Search / Explore Site:

- The "Search" function is designed to query data when exact search parameters are known. Moreover, data can be restricted or refined by selecting additional search parameters. It is recommended to conduct searches initially by including as many parameters as possible, and then filter or refine if the data set is too large.
- Using your browser's Back button will result in the loss of all search entries made in any of the forms in the ECOTOX Knowledgebase (hereinafter referred to as ECOTOX).
- The search logic includes two basic strategies, combination/union, and intersection. Within parameters, the selections are combined. Between parameters, the search will intersect.
- The "Explore" function allows you to search ECOTOX if the exact parameters you want to search are not known or if you would like a
 visual representation of the data. This is a great starting point for filtering the data prior to running a search.
- o Context-specific help is available by clicking on the 🕐 located within the Chemical, Effects, Species, and Publication search parameters.
- The Help function contains a complete User Guide (which provides details on the database functionality), Data Field Definitions, and the Terms Appendix with ECOTOX-controlled vocabularies and definitions. You can also read more in: <u>Olker et al. 2022 doi:10.1002/etc.5324</u>
- All users employing ECOTOX data should consult the original scientific paper to ensure an understanding of the context of the data retrieved.

About Search

The "Search" function is located within a single web page. Click on the plus sign next to each "Search" parameter to select or enter specific fields.

Search parameters (you must select at least one parameter):

- All Chemicals: Names, CAS Registry numbers or predefined groups.
- All Effects: Search specific measurements or select effect groups from a predefined list.
- **All Endpoints**: Select all or any endpoints, or statistics but no endpoint or endpoint is not reported (NR).
- All Species: Taxonomic Kingdom, Scientific or common names, or predefined groups.
- All Test Conditions: Any or all lab and field studies, water and soil exposure, various control types, chemical analysis conducted, and specific durations.
- All Publication Options: Search by year, author, datasets or specific ECOTOX data updates.

Any selections made using multiple parameter search boxes within the search page will narrow the search result.

Perform a search (Update Search): Once all parameters are selected or entered, click the "Update Search" button to apply the selection parameters and perform the search. Aquatic and Terrestrial reports are run separately. The search will run on the habitat that is selected (Aquatic or Terrestrial) at the time the "Update Search" button is clicked. Clicking to select the other habitat will automatically run that search provided no other changes were made to search parameters.

<u>Customize Output Fields</u>: To change the extracted fields displayed and exported, click the "Customize Output Fields" button and then click "Select All" or click boxes next to fields to include in the report.

<u>Reports</u>: All results initially display in HTML format. You can choose to export the report after the results are retrieved by selecting the "Export as..." button. Excel and delimited reports are available for selection.

<u>Reset All</u>: Clears all search parameters.

View All Applied: A list of the parameters selected is provided which can be exported to retain a record of the search.

< Chem	Icals					
Q Name(s)	or CAS number(s)		0			
O Contain	s 🔿 Exact	Match				
		aistrv number on separate	lines.			
< Effect	Measureme	nts				
Q Effect(s)	'eg. food, vitellogenin, a	cetylcholine)	0			
 Contain 	Contains Cate Match					
inter each effect measurement on separate lines.						
Exclude P	ost-exposure Measurem	ients Ø				
Behavio	ct Group Ilation Group or Group roidance	Crowth Group	tal			
🛱 Update Search						
	Aquatic	Terrestrial				
	Customize	Output Fields				
	🛛 Expo	ort as 🗸				
	× Re	set All				
	View Al	l Applied				

For more information on the ECOTOX Knowledgebase: Telephone: 218 529 5225 Email: ecotox.support@epa.gov



ECOTOX Knowledgebase Quick Guide www.epa.gov/ecotox EPA/600/S-24/207

About Explore

"Explore" is a great tool for searching ECOTOX if you do not know the exact parameters you want to search or would like a visual representation of general and specific data patterns. "Explore" provides an interactive way to initiate queries by Chemicals, Species or Effects, apply filters, and plot the results. From "Explore", click the "Send Query Filters to Search" button to further refine parameters and export results from "Search".

Queries in "Explore" are predominately driven by selecting predefined groups within each of the Chemicals, Species, and Effects pages. Users are also able to customize queries by clicking the 'Create Custom Group' button and browsing or entering information for Chemicals, Species, or Effects.

Querying and Filtering Data:

To query the data, start by selecting the parameter of interest (Chemicals, Species or Effects). Select from the predefined lists, then click "Explore Data".

From the tables displayed for the Group Summary or Records, you can further refine the data by applying Query Filters or selecting to include/exclude Aquatic or Terrestrial habitats. Major query filters available in "Explore" are listed here:

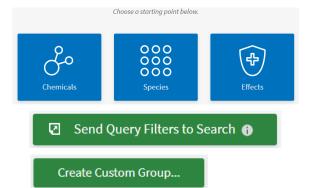
- Chemicals: Within the Chemicals filter, you may select one or more chemical names using control/click to highlight chemical(s) of interest.
- Species Group: Within the Species Group filter, you may select one or more species groups using control/click to highlight group(s) of interest.
- **Family**: Within the Family filter, you may select one or more families using control/click to highlight those of interest.
- Genus: Within the Genus filter, you may select one or more genus using control/click to highlight those of interest.
- **Species**: Within the Species filter, you may select one or more species using control/click to highlight those of interest.
- Effect Groups: Within this filter, you may select one or more effect groups using control/click to highlight group(s) of interest.
- Effect Measurements: Within the Effect Measurements filter, you
 may select one or more effects using control/click to highlight
 measurement(s) of interest.
- Endpoints: Within the Endpoints filter, you may select one or more endpoints using control/click to highlight endpoint(s) of interest.
- **Duration**: Within the Duration filter, you may specify a value or range for the Observed Duration (in days).
- **Publication Years**: Here, you may specify a range of publication years.

Interactive Data Display:

Once a query has been run, the data can be displayed in the interactive plot options with results continued to be refined using the Query Filters mentioned above. After the query is run, you can toggle between various features (Group Summary, Records, and Plot View).

The predefined plot options have Chemical Concentration (in a unit ratio equivalent to ppm) on the y-axis and either Effect Group or Duration (in days) on the x-axis. The Custom button allows other plot options with either Chemical Concentration or Duration on the y-axis and any of the categorical filters on the x-axis and Legend Category.

- Data records are only plotted if they can be converted to the standardized concentration units (ppm).
- In the simplified Results Table below the plot, data displayed can be limited using text boxes above each column.
- Both table and plot can be exported. "Send Query Filters to Search" is recommended to allow the export of results with all available fields.



Explore Data >

Chemicals	(173)	Special Interest Groups	(3)
All	~	All	~
Species Group	(14)	Effect Groups	(21)
All	~	All	~
Class	(47)	Effect Measurements	(1979)
All	~	All	~
Order	(147)	Endpoints	(75)
All	~	All	~
Family	(278)	Duration (Observed) - Days	(477)
All	~	All	~
Genus	(506)	Duration (Observed) Range - D	ays
All	~	to	
Species	(704)	Publication Years	
All	~	1915 to 2022	



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