Quick Guide to TOXNET

TOXNET, short for TOXicology Data NETwork, is an online resource for searching databases on toxicology, chemicals and drugs, environmental health, and occupational safety and health. It is part of the National Library of Medicine (NLM) and provides links to PubMed, the NLM's free web interface to biomedical literature, and to other sources of toxicological information.

U.S. National Library of Medici	ne TOXNET TOXICOLOGY DATA NETWORK Mobile Help FAQs TOXNET Fact Sheet Training Manual & Schedule
	Welcome to TOXNET Your resource for searching databases on toxicology, hazardous chemicals, environmental health, and toxic releases
SEARCH TOXNET Sear e.g. benzene, endocrine d	ch all or select specific databases BROWSE ADVANCED SEARCH Environmental Health & Toxicology Resources on environmental health and toxicology (Resources on environmental health and toxicology)
TOXNET Databa MOST VISITED BY TOXNET USERS	HSDB Hazardous Substances Data Bank. Peer-reviewed toxicology data for over 5,000 hazardous chemicals
	TOXLINE 4 million references to literature on biochemical, pharmacological, physiological, and toxicological effects of drugs and other chemicals Which Resource Should I Use can help you pick the right resource for your search. ChemIDplus Dictionary of over 400,000 chemicals (names, synonyms, and structures) More FAQs

Figure 1. TOXNET's homepage.

There is a helpful FAQs section and a guide to help you choose which environmental and toxicology resource is right for you (shown in Figure 1).

TOXNET databases are listed underneath the search box on the homepage and are aligned against subject headings to help you select which database(s) are the most appropriate for your search. Clicking on the title will take you to another page where you can search just using that database.

There is also links at the top of webpage to help and training information on how to use the TOXNET databases.

Browsing and Searching

TOXNET can be accessed via this URL: <u>http://toxnet.nlm.nih.gov/</u> and offers a great basic search, advanced search and browsing options.

Browsing

SEARCH TOXNET	BROWSE Browse for words or terms to search ADVANCED SEA
rowse for terms as: 🖲 Sin	gle Words 🔍 CAS Registry Numbers 🔍 Chemical Names
tart typing then select one	or more items from the list. For example: acetabulae 🗙 acetabular 🗙
ac	ALL DATABASES 🔻 Search
ac (157473)	A
ac% (1)	
acā (1)	
acĕ (1)	
acı (23)	
acń (1)	-eviewed toxicology data for over 5,000
acţ (104)	
ac, (3)	
ac- (2)	emical, pharmacological, physiological,
асз (1)	ner chemicals
ac4 (1)	
acs (1)	
ac= (1)	anes, synonyms, and structures)
acá (17)	

Figure 2. TOXNET's browsing functionality.

To browse the TOXNET collection, click on the 'Browse' tab above the search box on the homepage. You will see that you are able to browse for terms from a pre-defined list, which also provides the number of items that keyword is associated with in brackets.

You can also adjust the search options in a couple of different ways, as shown in Figure 3. Above the search box, you can choose to search by single words or chemical names. You can also choose a particular database to search by clicking on the 'ALL DATABASES' dropdown menu to the right of the search box.

SEARCH TOXNET BROWSE Browse for words or terms to se	arch ADVANCED SEARCH
Browse for terms as: Single Words CAS Registry Numbers Cher	mical Names
Start typing then select one or more items from the list. For example: acet	abulae 🗙 acetabular 🗙
AL	L DATABASES V Search

Figure 3. Adjusting search options.

Searching

Basic Search

The homepage provides a simple search box in the middle. Similar to the browsing search box, you can choose to search a particular database rather than all of them.

SEARCH TOXNET Search all or select specific databases	1	BROWSE	ADV	ANCED SEARCH	
e.g. benzene, endocrine disruptor	[ALL DATABASI	ES 🔻	Search	

Figure 4. Basic search.

Top tip: if you are unsure of what all the databases are, TOXNET provides a very handy fact sheet detailing what each database acronym stands for and what is contained in that database: https://www.nlm.nih.gov/pubs/factsheets/toxnetfs.html There is also a 'What Resource Should I Use" guide, shown in Figure 1, which can also help you decide which databases you might want to focus on.

Advanced Search

Above the basic search box there is an 'ADVANCED SEARCH' tab. This will help to narrow your search results.

	BROWSE	ADVANCED SEARCH Advanced options for specific databases
e.g. benzene, endocrine	disruptor	TOXLINE Search
TOXLINE ADVANCED S	EARCH	
Search Term singular/plur	al v Records with	all of the words v Search Fields all fields v
Add chemical synony Include PubMed recor Maximum records returned Year of Publication 1900 Only search documents ad	ds Only PubMed C 50000 through 2016	Central
only search documents au	ded in the last	months

Figure 5. Advanced search.

As you can see in Figure 5, you can choose the year range, language and include/exclude options. One of the handy features here is in the 'Search Term' field where you can choose to search for singular/plural words **OR** word variants (e.g. organisation/organization, behaviour/behavior) **OR** exact words.

Viewing content

Once you have conducted a search, results will often be displayed like in Figure 6. Click on the item title found on the left hand side of the results list.

bleach Search Search Term singular/plural Records with all of the words	✓ Include Synonyms and CAS Numbers in Search
124 items found for 'bleach '.	Download Records Search Details History My List
Sort By Relevance Items Per Page 10 NAME	Page 1 of 13 « Prev Next » ADD TO MY LIST
The following 124 records contain all of the query terms in the same section.	
1. CHLORINE 7782-50-5	Select Record
2. Trichloroisocyanuric acid 87-90-1	Select Record
3. NITROGEN MUSTARD N-OXIDE HYDROCHLORIDE 302-70-5	Select Record
4. LEWISITE 541-25-3	Select Record

Figure 6. Search results.

You can also select this record (as shown in Figure 6 on the right hand side) to add to your own personalised list to later download records via the 'My List' menu button on the right hand side.

Search Details History	« Previous Record Next Record
HSDB: CHLORINE CASRN: 77	82-50-5 This record appears in multiple databases.
View record in another database: HSDB	▼ Download this Record 🖨 Print 🖙 Select Record 📑 My List & Permalink
TABLE OF CONTENTS Expand all Collapse all Show Selected Items Clear Expand all Collapse all Closest Match to Search Terms Fuil Record Human Health Effects Emergency Medical Treatment Animal Toxicity Studies Metabolism/Pharmacokinetics Headbolism/Pharmacokinetics Pharmacology	CHLORINE CASRN: 7782-50-5 CICI
Environmental Fate & Exposure	FULL RECORD DISPLAY
Environmental Standards & Regulations	Displays all fields in the record. For other data, click on the Table of Contents
Chemical/Physical Properties Chemical Safety & Handling Occupational Exposure Standards Manufacturing/Use Information Laboratory Methods	Human Health Effects:
Special References Synonyms and Identifiers Administrative Information	Toxicity Summary:
	IDENTIFICATION: Chlorine is a greenish yellow gas. It is very soluble in dimethylformamide, benzene, chloroform,

Figure 7. Viewing content.

As you can see from Figure 7 on the right hand side, you can download, print, select record, or find a permalink (stable URL web address) for this item. On the left hand side, there is a table of contents allowing you to see what in included in the document and also jump to the relevant sections by clicking on the titles.

Further Help

If you need help using this or any other information resources, please contact the **Online Library** by:

Telephone at: +44 (0)20 7862 8478 (between 09.00 and 17.00 GMT),

By email at: OnlineLibrary@shl.lon.ac.uk

By the Enquiries Form at: http://onlinelibrary.london.ac.uk/about/contact-us