

## **Reaxys Quick Reference Guide**





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Last revision: 2009-10-26





# The basics Where to find what?

To start Reaxys, go to www.reaxys.com

To find **more user tips**, go to **www.info.reaxys.com**. Here you can find:

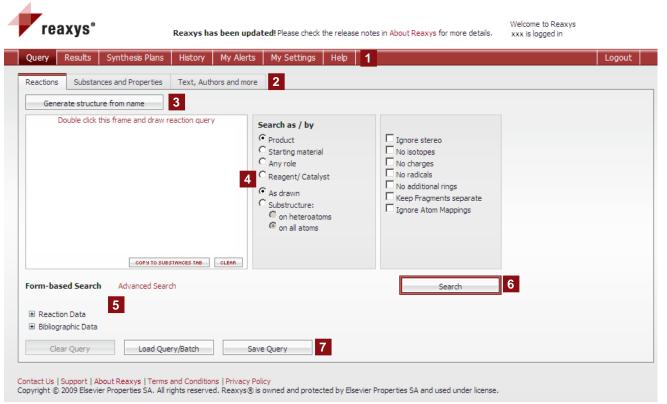
- Information on the coverage, usability and technical requirements of Reaxys
- Registration form for the Reaxys newsletter
- Training & Support information, with
  - o Training Center giving access to various instructional materials (demos, videos, manuals)
  - o Webinar schedule offering regular training sessions and registration form
  - Frequently Asked Questions
  - o Downloads of software (plug-ins, structure editors) and of documentation (training materials)
  - Customer Care Contact details:

<b>Europe, Middle East, Asia and Africa</b>	+49 69 5050 4268	nlinfo@reaxys.com
Americas	+1 888 615 4500	usinfo@reaxys.com
	+1 212 462 1978 if calling outside USA & Canada	
Japan	+81 3 5561 5034	ipinfo@reaxys.com





### Homepage



How to find the preparation of a compound?

- 1. Ensure the reaction tab is selected and double click the drawing pane
- 2. Draw the desired compound structure in your preferred editor and return to Reaxys by closing the editor
- Click the search button and browse the result.

Note: the default settings are such that Reaxys immediately searches for compound preparations.

#### 1 Main Navigation:

The following screens are available

- Query
- Results
- Synthesis plans
- History
- My Alerts
- My settings
- Help & Logout

#### 2 Query tabs

- Reactions
- Substances and properties
- Text, authors and more

#### 3 Generate structure from name

A chemical name will be translated into a structure.

#### **△** Structure/reaction window

Window to add a structure or reaction with additional search possibilities.

#### 5 Add Reaction/Bibliographic data

The Form-based Search and Advanced Search links allow entering further reaction or bibliographic data constraints.

#### 6 Search button

Launch a search.

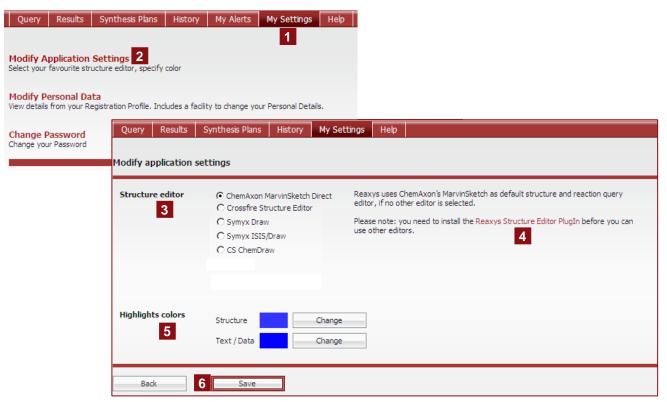
#### **7** Command buttons

Clear, load or save a query. The Load feature also supports batch querying.





### My settings



Note: click the **Save** button and a confirmation that your settings have been updated is displayed. The new settings will be effective from the next time you login.

#### 1 My settings

Select this tab to

- Modify application settings
- Modify personal data
- Change password

### 2 Modify application settings

Select this item to specify your preferred structure editor and Highlights colors.

#### Structure Editor

Choose your preferred editor.

#### **△** Information

3

Find information on the default settings used, and download the plugin required for its installation.

#### 5 Highlights colors

Select preferred colors to highlight the searched-for structure and/or the text/data.

#### Back & Save buttons

Confirm new settings with **Save** or use **Back** to return to the item list.





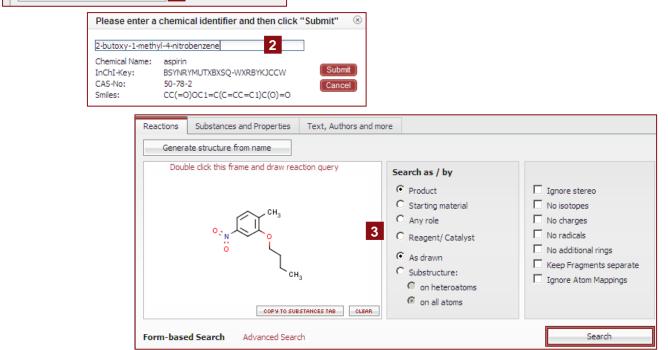
Substances and Properties

Generate structure from name

Reactions

Text, Authors and more

### Generate a structure from name



Available on the Reactions and Substances & Properties query tabs.

### 1 Generate structure from name button

Click this button to open an input field.

#### 2 Input field

Enter a chemical name as systematic name or trivial name, an InChI key, a CAS Registry number or a SMILES string. Click **submit** to launch structure generation.

#### 3 Structure/reaction window

The generated structure is displayed in the structure/reaction window, you can now:

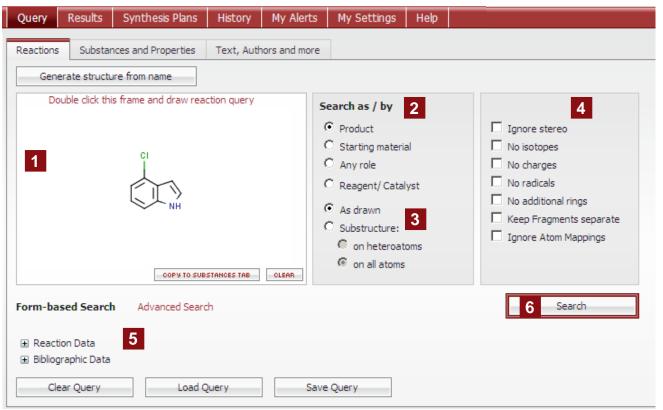
- a) Start the search immediately.
- Edit the structure by double clicking the box (or by doing a right-click); modify it in the Structure editor.
- c) Define the search type, add further search conditions or/and select additional query options.

Note: this option only works if the corresponding compounds are available in the Reaxys database.





### Reactions query tab



How to load a saved query?

- 1. Ensure you are on the query tab and click the load query button
- 2. Browse to locate your saved XML file and click open

File C:\Documents and Settings\rypensc\Desktop\Reaxys\Cycle.xml Browse... Open

1 Structure/reaction box

This window contains the requested structure or reaction, with additional query features. It is also possible to copy the structure to the Substances and Properties query tab.

Search as/by

If needed, define the role of the substance.

3 Select the search type

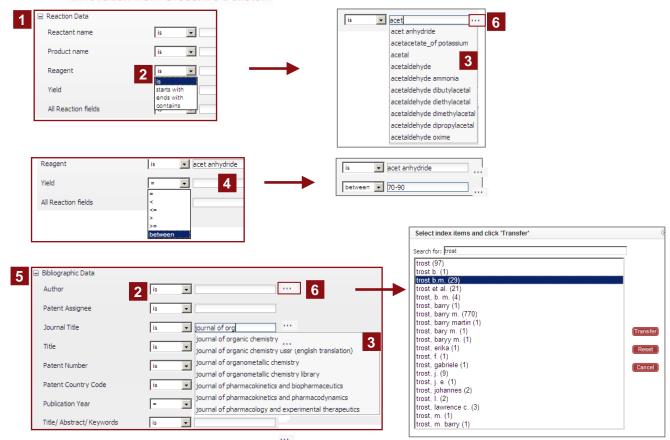
Select "How" the structure should be searched: as drawn (including possible query features added in your structure) or as substructure search. (In a substructure search the results include additional substituents).

- **Additional query options**Select additional options to refine your search.
- Add further search conditions
  Click the Form-based Search or the
  Advanced Search links to refine your
  search by adding further reaction or
  bibliographic data constraints (e.g. a
  yield or/and author constraint).
- 6 Search

Click this button to launch the search. A search progression box appears allowing you to cancel your research or to view your hits retrieved.







Note: the Form-based Search link opens up forms containing commonly used fields for the given search form; they are grouped as either Reaction Data (such as yield or reagent name) or Bibliographic Data (such as journal title or patent assignee). The "All Reaction fields" and "Title/Abstract/Keywords" fields are text fields; use Boolean operators to search these fields.

# Reactions query tab Form-based Search

#### 1 Reaction data

Specify Reactant name, Product name, Reagent, Yield and/or All Reaction fields.

Various selected fields are combined with the Boolean operator AND.

#### Operators

Select the appropriate operator from the drop-down menu.

#### Selection list

Selection appears when typing entry.

#### Numeric Field

For a numeric field select the operator followed by entering the number or range in the text box.

### 5 Bibliographic data

Specify Authors, Patent Assignee, Journal Title, Title, Patent Number, Patent Country Code, Publication Year and/or Title/Abstract/Keywords. Various selected fields are combined with the Boolean operator AND.

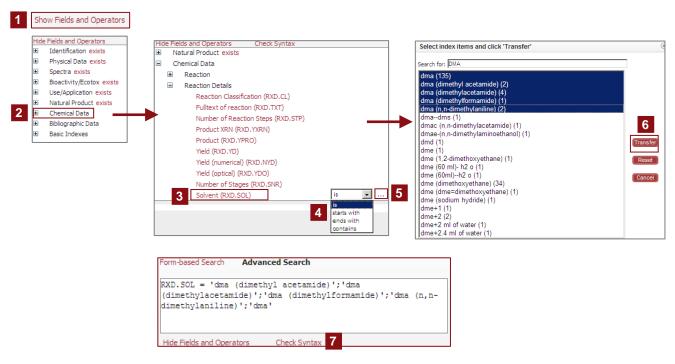
## 6 Expand Index feature (for all search fields)

The box allows convenient index browsing and multiple entry selections. Click the **Transfer** button to add the selected data to the query.





# Reactions query tab Advanced Search



Note: the Advanced Search allows entry of complex and sophisticated property queries in combination with the structure or reaction queries following two ways:

- 1. Type the query directly into the query box, with single quotes around the field data,
- 2. If the necessary field code is unknown, locate it using the Show fields and Operators hyperlink.

1 Show Fields and Operators
Select the necessary field code form
a hierarchical list (field list navigator)
available with the Show fields and
operators hyperlink.

- 2 Fields Category
  Click the + sign to expand the needed fields list.
- 3 Needed field Click the needed field

selections.

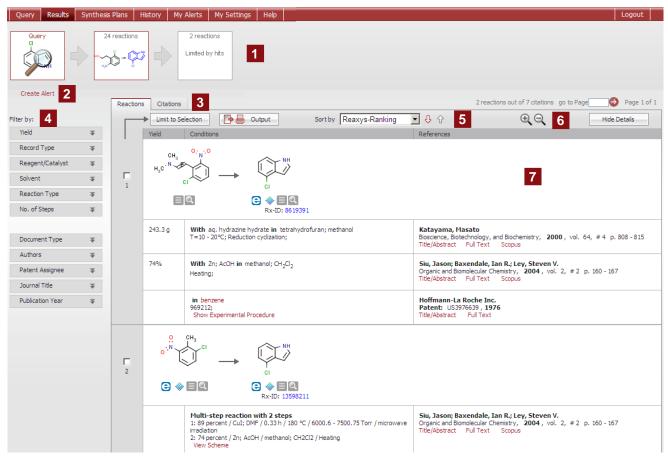
- 4 Operators
  Select the appropriate operation from the drop-down menu.
- 5 Expand Index feature (for all search fields)

  The box allows convenient index browsing and multiple entry
- 6 Transfer the field data
  Select the needed data entry(ies).
  Click the Transfer button to add the
  data to the guery
- Check Syntax
  In case of manual entry of the query into the Advanced Search box, verify your query by clicking the Check Syntax hyperlink.





### Reactions results General overview



Have a look at the breadcrumbs at the top of the screen; it shows the actions done on your initial hitset. Click one of the red-framed boxes to quickly jump to a previous set of data or the query.

#### 1 Breadcrumbs

Graphical navigation helps keep track of your result analysis.

#### Create Alert

Click this link to create an alert.

#### Reactions/citations tab

Reactions tab is displayed by default, but you can switch to the citations tab.

#### **△** Filtered by

Refine results by applying filters linked to the reaction (Yield, Record Type, Reagent/Catalyst, Solvent, Reaction Type, No. of Steps) or linked to bibliographic data (Document Type, Authors, Patent Assignee, Journal Title and Publication Year).

#### 5 Tool bar

Access Limit to Selection, Output, and Sort by features.

#### 6 Maximizer/minimizer tool

Increase or decrease the size of your displayed structures.

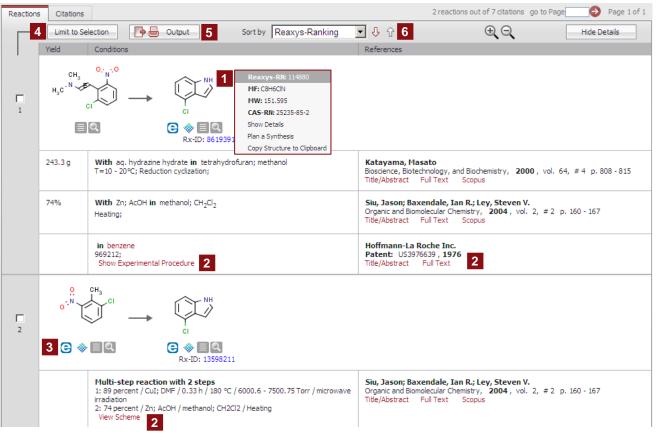
#### **7** Reaction results

Gives a quick overview of the results displayed with key data in a table. Display the title and the abstract, the original article or patent (full text) and access related information in Scopus.





# Reactions results Reactions tab



Note: information on the citations tab of the reactions results window can be found on page 21.

- Click or a structure to get a pop-up menu with information or sub items.

  Display further options & Data

  Reaxys RN (Reaxys registry number), MF (molecular formula),

  CAS-RN (CAS registry number), show details (display information as physical-, spectral- data etc), plan a synthesis (create a retrosynthesis),
- Access bibliographic details
  Display the title/abstract, the full text
  of your reference and access Scopus.
  Show experimental procedure
  excerpted from patents. View scheme
  of multi-steps sequence as a
  synthesis plan.

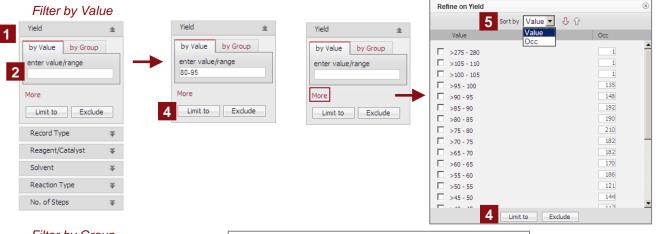
copy structure to clipboard

- 3 Commercial availability
  Access the commercial availability of
  a substance and lead to appropriate
  companys (eMolecules/Symyx ACD).
- 4 Limit to selection
  Select the important hits and click this button to restrict your hitset.
- 5 Output Export data in the desired format.
  - Sort results ascending ↑ or descending ↓ by Reaxys-RxID, reactant & product availability, Nb of references, yield, MW of product or Reaxys ranking (default).



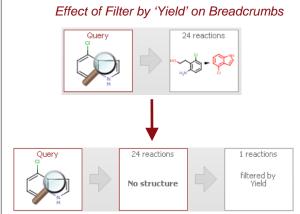


# Reactions results tab Filter by



#### Filter by Group





Note: filter by feature allows for rapid and easy refinement of your results. Click the double arrows to expand the selection list. Two filter options are available for each reaction specification:

- 1. To retrieve a predefined selection list, use the by Group tab.
- 2. To specify a filter value or range (flexible filter), select the by Value tab.

#### 1 Filter by

Select filter(s) linked to reaction specifications:

- Yield.
- Record Type
- Reagent/Catalyst
- Solvent
- Reaction Type
- No. of Steps

#### 2 By Value tab: flexible filter

Enter a specific value or a range to refine result sets with more options.

#### By Group tab: predefined list

Check boxes to limit or exclude entries of the predefined selection.

#### 4 Limit to/exclude buttons

Click the appropriate button.

#### 5 Refine on Filter field

Click the **More** button to expand the scope of the selection, and to refine further the filter by feature. Sort the chosen data by Value or by Occurrence.

#### 6 Filter by

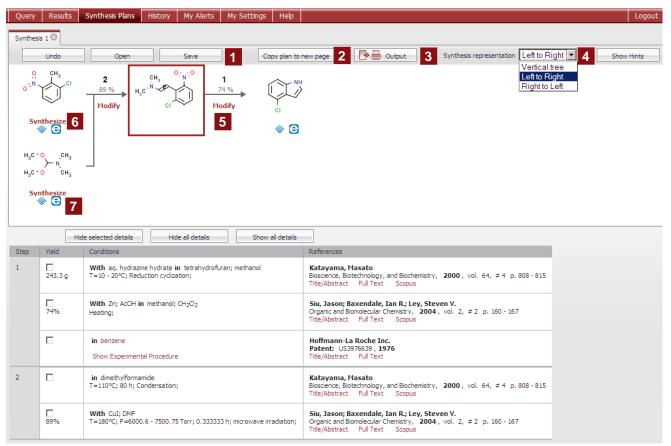
Specify filter(s) linked to bibliographic data:

- Document Type
- Authors
- Patent Assignee
- Journal Title
- Publication Year





### Synthesis plans



Note: the overall scheme of multi-step reactions can be displayed in the synthesis plans page. A click on the View Scheme hyperlink opens the multi-step sequence as a new synthesis plan for a better overview.

- Click or a structure in any of the results tab, choose "Plan Synthesis" to get the Synthesis Plans page.
- 1 Undo, open and save buttons
  To undo last action, open or save
  synthesis plans. Click on the X of the
  tab to delete an uncessary plan.
- 2 Copy plan to new page
  Opens a new tab of your current synthesis plan, where you can develop another retrosynthesis.
- 3 Output Export Synthesis plan
- 4 Synthesis plans representation
  Choose horizontal tree or vertical tree
  for the display of your plan.
- Modify
  Modify discards the already defined synthetic step and proposes other preparations for the compound.
- 6 Synthesize
  Click the synthesize link to display various preparations for a compound.
  Click the add button of the selected step to incorporate it in your plan.
- 7 Commercial availability
  Access the commercial availability of
  a substance and lead to appropriate
  companys (eMolecules/ACD).





### **Output**

Output Read	tion Results				
Output 1 to 2	Reactions Table C Reaction PDF/Print C XML C Microsof C Microsof				
☐ Include the following headline ☐ 3					
Output range 4	All Hits C Selected hits	e.g. 1, 2-5, 10			
Output contains	include Structures  include Experimental Procedure  All available data  C Identification data only	Output © Reactions Table © Reactions Citation Table  Output contains  include Structures  include Abstracts			
ОК	Cancel 6	Output C Substance Grid Substance Details Table Substance Citations Table  Output contains  include Structures All available data C Identification data only C Select data			
		Description   Description			

Note: output function is available on each of the results screens; it allows the export of any type of hitset (reactions, substances and bibliographic data) in any desired format. In the substance details table, click select data to choose the type of property you want to export.

#### Output

Choose the type of results to export:

#### 2

Define the format of exported file: PDF/Print, XML, Microsoft Word or Excel, TXT for Literature Management Systems, or RD File.

#### Include the following headline

Check the box and enter a headline that will be shown on each page of the document.

#### **Output range**

Define the hits to export: all hits, selected hits (select it before clicking the output button), or a range (enter it in the box).

#### **Output contains**

Define the type of data to export: reactions output: include structures and/or experimental procedure, all available data or identification data only.

Substances output: include structures and all available data or identification data only or select data.

Citations output: include structures and/or abstracts

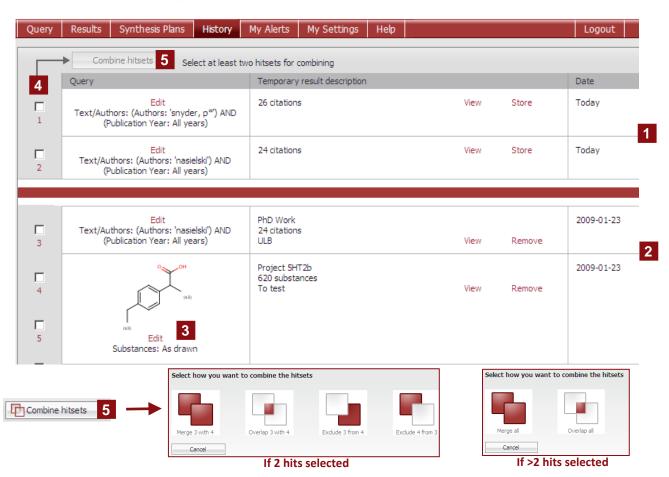
#### OK button

Click the OK button to launch your export. Click cancel to stop this action.





### **History**



Note: the history table displays all current-session hitsets resulting from queries or from any analysis of your results; the most recent hitsets are shown at the top of the list. Here you can also graphically combine hitsets.

#### 1 Temporary lists

The upper part of the table shows all hitsets from the current session. Click View to display a list as active hitsets in the results page. Click Store (enter a filename and comment) to save a list.

#### Saved lists

The lower part of the table shows the hitsets stored by the user. All saved hitsets are displayed if the user is logged in to Reaxys.

Click remove to delete a saved list.

#### 3 Query column

Click Edit to display the query associated with the hitset in the query page
Note that hitsets resulting from filtering will not display the query in this column

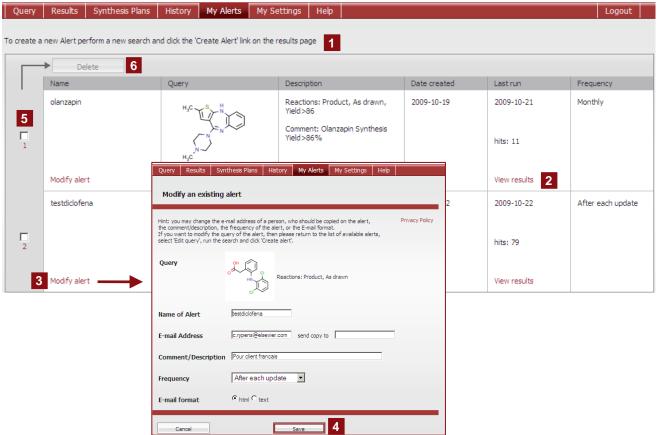
#### Combine hitsets

Select two or more lists by checking the box closed to the query column; the combine hitsets button becomes available and will provide graphical tools to combine the selected hitsets in various ways.





### My Alerts



Note: alerts are user-defined search query stored on the Reaxys server, so that they can be accessed and retrieved any time you log-in to Reaxys. You can choose to run it either monthly or each time the database is updated. You will receive an alert email notification with a link into Reaxys allowing you to access the Alert results.

My Alerts menu displays the list of available alerts together with the given result sets.

- 1 How to create an alert?
  Create and run a query. On the results menu, click the Create Alert link located just below the Query breadcrumb. Fill in the Alert form and
- Wiew results button
  Click this link to jump to the Results menu and access the hits linked to your alert.
- Modify alert

  Modify the options of your alert

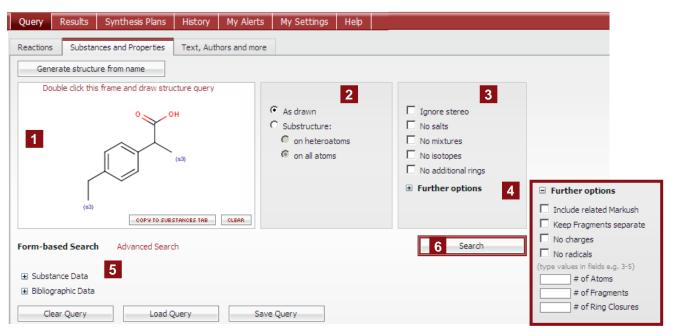
click the Save button.

- 4 (Name of Alert, Copy to, Comment/Description, Frequency and Email format). Click the Save button.
- 5 Delete Check the box closed to the alert
- 6 name column; the delete button becomes available and will discard the concerned alert.





# Substances and properties Query tab



How to find information on specific compounds?

- 1. Ensure the substances & properties tab is selected and double click the drawing pane
- 2. Draw the desired compound structure in your preferred editor and return to Reaxys by closing the editor
- 3. Click the search button and browse the result.

Note: Reaxys remembers the last query form used, and will reopen it in the next session; the substances and properties query tab can then become an entry form.

#### 1 Structure/reaction box

This window contains the needed structure, with additional query features. Two buttons allow to copy the structure to the Reactions query tab, and also to delete it.

#### Search as

Define the type of structure search: as drawn (including possible query features added on your structure), or Substructure search.

#### Additional query options

Select additional options to refine the search.

#### ▲ Further options

If needed, add further options, such as Include related Markush or Number of Ring Closures ...

#### Add further search conditions

Click the *Form-based Search* or the *Advanced Search* links to enter further substance or bibliographic data constraints.

#### Search

Click this button to start searching

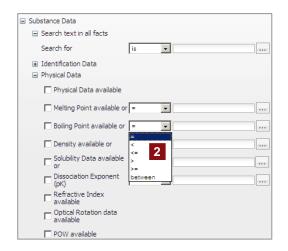


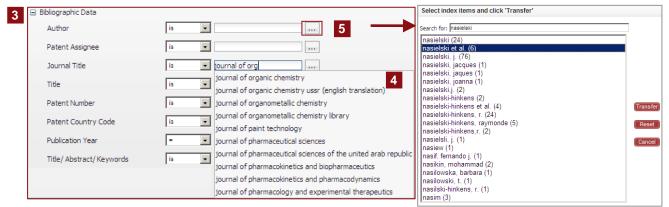


# Substances query tab Form-based Search









Note: the Form-based Search link opens up forms containing commonly used fields for the given search form; they are grouped as either Substance Data (such as spectra or solubility data) or Bibliographic Data (such as journal title or patent assignee). The "Search text in all facts" and "Title/Abstract/Keywords" fields are text fields; use Boolean operators to search these fields.

#### 1 Substance data

Specify Search text in all facts/search for (to add several terms in this text box, separate them with a ";"; they will be combined with the Boolean operator OR), Identification Data, Physical Data, Spectroscopic Data, Bioactivity Data and/or Ecotoxicological Data.

Various selected fields are combined with the Boolean operator AND.

#### Operators

Select the appropriate operation from the drop-down menu; for a numeric field enter the number or range in the text box.

#### 3 Bibliographic data

Specify Authors, Patent Assignee, Journal Title, Title, Patent Number, Patent Country Code, Publication Year and/ or Title/Abstract/Keywords Various selected fields are combined with the Boolean operator AND.

#### Selection list

Selection appears when typing entry.

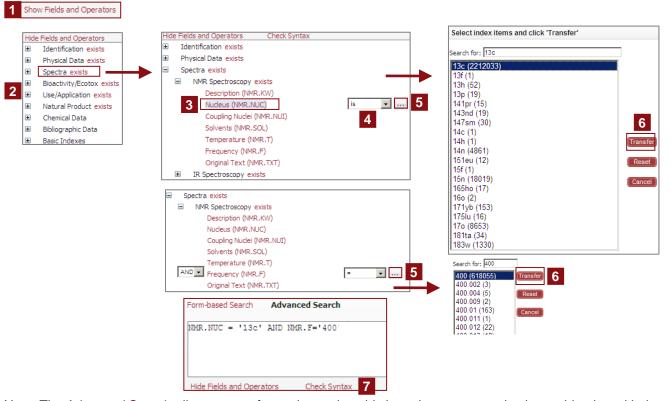
#### 5 Expand Index feature

The box allows convenient index browsing and multiple entry selections. Click the **Transfer** button to add the selected data to the query.





# **Substances query tab Advanced Search**



Note: The Advanced Search allows entry of complex and sophisticated property queries in combination with the structure queries following two ways:

- 1. Type the query directly into the query box, with single quotes around the field data,
- 2. If the necessary field code is unknown, locate it using the Show fields and Operators hyperlink.

Show Fields and Operators

Select the necessary field code from a hierarchical list (field list navigator) available trough the Show fields and Operators hyperlink.

2 Fields Category

Click the + sign to expand the needed fields list.

Needed field

Click the needed field.

4 Operators

Select the appropriate operation from the drop-down menu.

Expand Index feature (for all fields)

The <u>w</u> box allows convenient index browsing and multiple entry selections.

Transfer the field data

Select the needed data entry(ies). Click the Transfer button to add the data to the query.

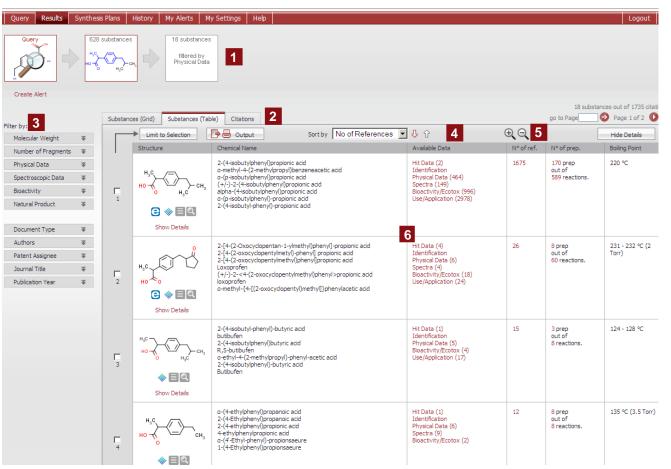
Check Syntax

In case of manual entry of the query into the Advanced search box, check the used syntax by using the Check Syntax hyperlink.





# **Substances and properties Results overview**



Note: information on the citations tab of the substances results window can be found on page 21.

#### Breadcrumbs

Graphical navigation helps keeping track of your result analysis.

## 2 Substances (grid)/substances (table)/citations tab

The substances (table) tab is displayed by default, but you can switch to the substances (grid) or citations tab.

#### Filtered by

Refine results by applying filters linked to the substance (molecular weight, number of fragments, physical data, spectroscopic data, bioactivity and natural product) or linked to bibliographic data (document type, authors, patent assignee, journal title and publication year).

#### Tool bar

Access limit to selection, output, sort by features.

#### 5 Maximizer/minimizer tool

Increase or decrease the size of displayed structures.

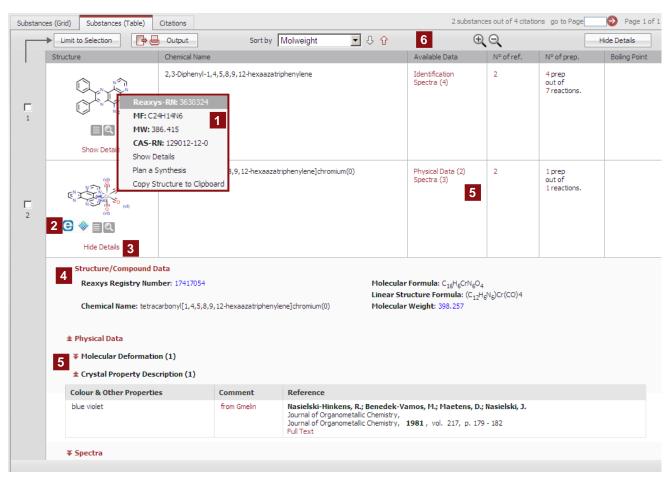
#### Substances and properties results

Gives an overview of the results displayed with key data in a table. Show details & data hyperlinks allow displaying properties for each hit.





# **Substances and properties Substances (table) tab**



Click Show Details to expand the list of all the types of data available for a compound. Click a specific link in the available data column to only expand the needed data.

Click or a structure to get a pop-up menu with information or sub items.

Additional information / sub items
Reaxys –RN (Reaxys registry
number), MF (molecular formula), MW
(molecular weight), CAS-RN (CAS
registry number), Show details (display
information as Structure/compound
data), Plan a synthesis (create your
retrosynthesis), Copy structure to
clipboard

2 Commercial availability Access the commercial availability of a substance and lead to appropriate company's (eMolecules/ACD).

3 Show/hide details button

4 Structure/compound data Find details about structure/compound.

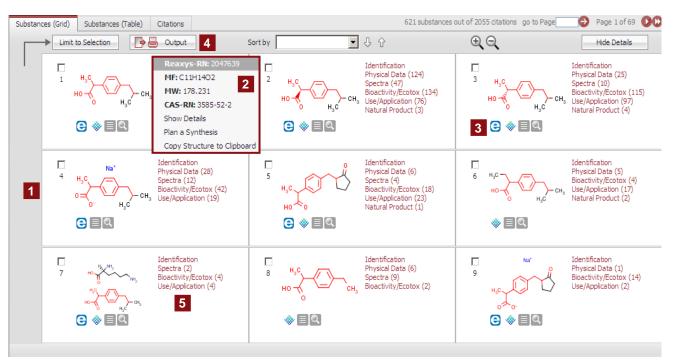
Available data
Links to all available data (from organic, inorganic & organometallic sources). Data excerpted from Gmelin has a from Gmelin flag.

Sort by
Sort results ascending ↑ or
descending ↓ by Reaxys-RN, Comm
Availability, Molec Formula, Nb
Fragments, Publication Year, Mol
Weight and Nb of References (default).





# Substances and properties Substances (grid) tab



I Grid view

For a quick overview results are displayed in a grid.

Additional Information/sub items

Click a structure to get a pop-up menu leading to additional information or sub items.

Reaxys -RN: Reaxys registry number

MF: molecular formula MW: molecular weight

CAS-RN: CAS registry number

Show Details: display information as

Structure/compound data
Plan a synthesis: develop your

retrosynthesis

Copy structure to clipboard

Commercial availability

Access the commercial availability of a substance and lead to appropriate company's (eMolecules/ACD).

4 Output

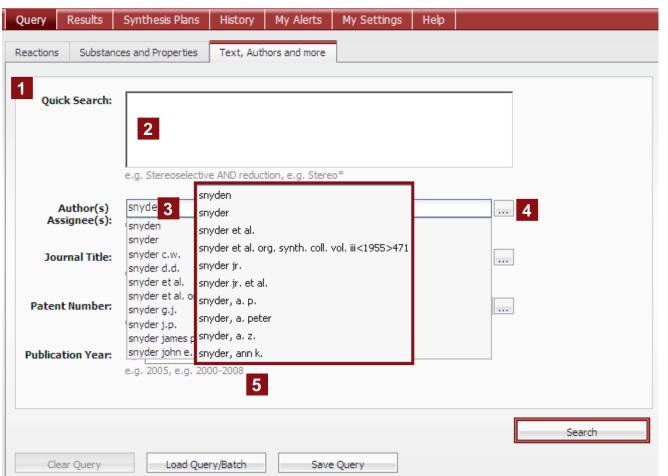
Export results in the desired format.

5 Available data for this substance Various red hyperlinks display the information available by substance.





# Text, authors and more Query tab



Note: in the Quick Search box you can use and enter the following Boolean operators: AND, OR, PROXIMITY, NEAR and NEXT.

#### 1 Search page

Enter Quick Search, Author(s)/Assignee(s), Journal Title, Patent Number, Patent Country, and/or Publication Year.

Different specified fields are combined with the Boolean operator AND.

#### Quick Search

Enter free text and combine it with the Boolean operators of your choice. If needed use truncations.

Truncation:

"\*" = any number of characters
"?" = one character

### 3 Text field/selection list

Selection appears when typing entry.

#### 4 Expand Index feature

The box allows convenient index browsing and multiple entry selections.

If several terms are chosen in one field, they are combined with the Boolean operator OR (;).

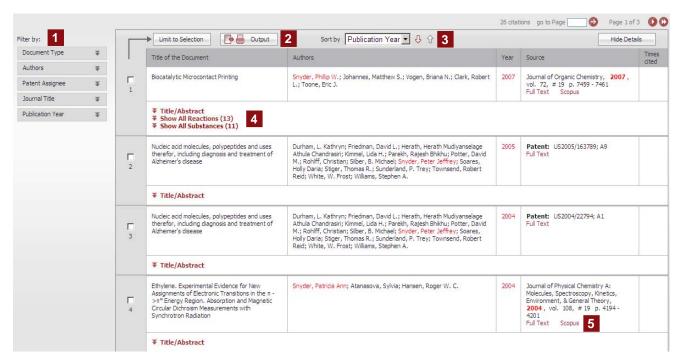
#### 5 Entry example

Hints how to enter your search term are displayed below each of the field data boxes.





# Text, authors and more Citations tab



Reactions - and Substances & Properties - citations tabs have almost the same layout and content as the bibliographic citations tab. The only differences are the presence of one additional link on each of those tabs and additional filters:

- Reactions results/citations tab: presence of Hit Reactions in this article (# out of total #) link
- Substances & properties results/citations tab: presence of Hit Substances in this article (# out of total #) link

#### 1 Filter by

Refine search results by applying filters (document type, authors, patent assignee, journal title and publication year).

#### 2 Output

Export results in an appropriate format.

#### 3 Sort by

Sort results ascending ↑or descending ↓ by Document Type, Authors, Journal Title or Publication Year (default).

#### ▲ Abstract/Reactions/Substances

Display the abstract, and show all reactions or show all substances which are related to the article.

#### 5 Source

Find here the literature reference. Display the original text with the full text link and access related information in Scopus.

