

DBPedia: lookup and autocomplete of chemistry

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Abstract

On the DBPedia discussion mailing list there was a post on a nice web page which allows you to look up things, and which features a autocomplete edit field.

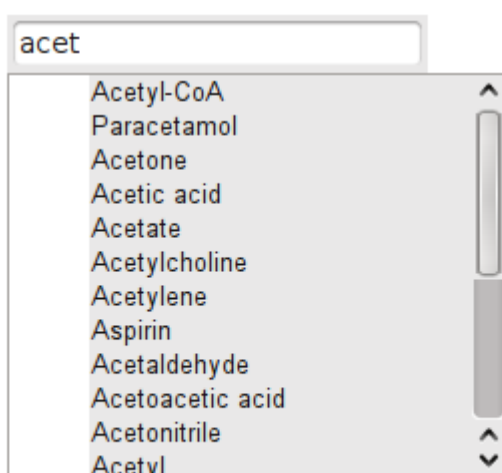
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On the [DBPedia discussion mailing list](#) there was a post on a nice web page which allows you to look up things, and which features an autocomplete edit field. The below screenshot shows lookup of molecular structures:



URI Lookup Autocomplete Test



If you are not aware of this, adding content to DBPedia is as easy as adding something to [Wikipedia](#). Literally: DBPedia is the [RDF](#) flavour of Wikipedia. It extracts the information from the info boxes, as I discussed before (see [Molecules in Wikipedia](#)).

BTW, one can take advantage of DBPedia to see what Wikipedia has to offer in terms of chemistry. For example, to list all molecules which have a SMILES, one can use this simple SPARQL query:

Or, to list those which have an InChI:

And this is actually quite useful, e.g. it can be used in quality control. Running the above queries will show up several broken SMILES and InChIs. I have not had time to fix those yet, so please go ahead and beat me to those fixes, and get some Wikipedia Fame :) Alternatively, invert the queries and add missing InChIs, PubChem CID or SMILES. When I have a bit more free time again, after the new stable CDK and Bioclipse releases, I'll run these analyses again, and summarize them in a web page.