## Minim definition for chemmim testing of chembox data

This file contains a checklist to test presence of some key attributes in chembox chemical data extracted from dbpedia. The checklist is not currently a complete assessment of chemmim completeness (@@ref), but has been constructed to illustrate the key testing patterns. It was used as part of some evaluatrion work to compare with results produced by Matthew Gamble using his SPIN-based MIM framework.

Prefixes:	Prefix	URI
	rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#
	rdfs	http://www.w3.org/2000/01/rdf-schema#
	owl	http://www.w3.org/2002/07/owl#
	xsd	http://www.w3.org/2001/XMLSchema#
	xml	http://www.w3.org/XML/1998/namespace
	rdfg	http://www.w3.org/2004/03/trix/rdfg-1/
	ore	http://www.openarchives.org/ore/terms/
	ao	http://purl.org/ao/
	dcterms	http://purl.org/dc/terms/
	ro	http://purl.org/wf4ever/ro#
	minim	http://purl.org/minim/minim#

Purpose

Model

	*	complete	#minim_model	Checklist for sampling of chemmim attributes in chembox data
Model:	#minim_model			Model for chemmim attributes in chembox data
Items:	Level	Rule		
010	MUST	#req_inchi		Exactly one InChI must be present
020	SHOULD	#req_chems	pider	At least one ChemSpider identifier shoulkd be present
030	MAY	#req_synony	/m	Any number of synonyms may be present

Description

## **Define rules to test individual requirements**

Fail:

**Checklists: Target** 

Rule:	#req_inchi		This requirement ensures exactly one chembox:StdInChI value is defined on the target resource, and that its value is a string literal. A SPARQL filter is used to check the type of the defined value.	
	ForEach:	<pre>?targetres chembox:StdInChI ?value . FILTER ( datatype(?value) = xsd:string )</pre>	NOTE: ?targetres is pre-bound to the target resource of the checklist evaluation; i.e. the chemical whose description is being tested. (This checklist can be used with an RO containing multiple chemical	
	Min:	1		
	Max:	1		
	Pass:	A single InChI value is present for <a href="%(targetres)s">%(targetlabel)s</a>		

InChI not present, or multiple InChI values present, for <a href="%(targetres)s">%(targetlabel)s</a>

**Rule:** #reg chemspider

This requirement ensures at least one chembox: ChemSpriderId value is defined on the target resource, and that its value is an integer of a string containing a numeral. A SPARQL filter is used to check the type

**ForEach:** ?targetres chembox:ChemSpiderID ?

value .

**Min:** 1

**Pass:** A ChemSpiderId value is present for <a href="%(targetres)s">%(targetlabel)s</a>

**Fail:** No ChemSpiderId is present for <a href="%(targetres)s">%(targetlabel)s</a>

**Rule:** #req\_synonym

Check for existence of a synonym for the target chemical. This requirement tests for the presence of a chembox:OtherNames value.

**Exists:** ?targetres chembox:OtherNames ?value

**Pass:** A synonym is present for <a href="%(targetres)s">%(targetlabel)s</a> **Fail:** No synonym is present for <a href="%(targetres)s">%(targetlabel)s</a>

End: