

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 evaluation 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#

Checklists:	Target	Purpose	Model	Description
	*	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_chemspider		At least one ChemSpider identifier should be present
030	MAY	#req_synonym		Any number of synonyms may be present

Define rules to test individual requirements

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:	?targetres chembox:StdInChI ?value ; FILTER (datatype(?value) = xsd:string)	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 % (targetlabel)s	
Fail:	InChI not present, or multiple InChI values present, for % (targetlabel)s	

Rule: #req_chemspider

This requirement ensures at least one chembox:ChemSpiderId 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 %(targetlabel)s

Fail: No ChemSpiderId is present for %(targetlabel)s

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 %(targetlabel)s

Fail: No synonym is present for %(targetlabel)s

End: