Circular Economy Ontology Network (CEON) - Construction Module

Metadata

IRI

http://w3id.org/CEON/demo/construction/

Title

Circular Economy Ontology Network (CEON) - Construction Module

Creator

Robin Keskisärkkä

Contributor

Eva Blomqvist

Huanyu Li

Mikael Lindecrantz

Date Created

2023-09-14

License

https://creativecommons.org/licenses/by/4.0/

Version Iri

http://w3id.org/CEON/demo/construction/0.1/

Version Info

0.1

Preferred Namespace Prefix

construction

Preferred Namespace Uri

http://w3id.org/CEON/demo/construction/

Description

The Product module of CEON (Circular Economy Ontology Network).

Classes

_				٠.			0
С	\cap	n	М	ıt		m	
	u		u	IL	IL.	"	

IRI http://w3id.org/CEON/demo/construction/Condition

In Range Of hasCondition op

Super Class Of FloorTileCondition^C

Contaminant ^C

IRI http://w3id.org/CEON/demo/construction/Contaminant

In Range Of hasContaminant op

Dimensional Deviation ^C

IRI http://w3id.org/CEON/demo/construction/DimensionalDeviation

In Range Of <u>hasDimensionalDeviation</u> op

Fire Resistance Rating^C

IRI http://w3id.org/CEON/demo/construction/FireResistanceRating

In Range Of hasFireResistanceRating op

Named Individuals

F30ⁿⁱ F60ⁿⁱ

Fire Resistance Relation ^c

IRI http://w3id.org/CEON/demo/construction/FireResistanceRelation

Sub Class Of actorODP:ResourceParticipation

Floor Tile C

Sub Class Of product:Product

Floor Tile Condition C

IRI http://w3id.org/CEON/demo/construction/FloorTileCondition

Sub Class Of Condition^C

Named Individuals

bad_conditionⁿⁱ
good_conditionⁿⁱ
medium_conditionⁿⁱ

Floor Tile Condition Relation C

 $\textbf{IRI} \hspace{1cm} \textbf{http://w3id.org/CEON/demo/construction/FloorTileConditionRelation} \\$

Sub Class Of actorODP:ResourceParticipation

Galvanized Steel Material C

IRI http://w3id.org/CEON/demo/construction/GalvanizedSteelMaterial

Sub Class Of material:Material

Policy On Treatment ^C

In Range Of policyOnTreatment op

Named Individuals

refurbishⁿⁱ reprocessⁿⁱ reuseⁿⁱ Product Quality^C

In Range Of hasProductQuality^{op}

Named Individuals

<u>product_quality_high</u>ⁿⁱ <u>product_quality_low</u>ⁿⁱ <u>product_quality_medium</u>ⁿⁱ

Treatment Policy^C

Named Individuals

refurbishⁿⁱ reprocessⁿⁱ reuseⁿⁱ

Object Properties

has condition op

IRI http://w3id.org/CEON/demo/construction/hasCondition

Sub Property Of topObjectProperty Op

<u>Domain</u> <u>product:Product^c or product:ProductObject^c</u>

Range Condition^C

has contaminant op

Domain product:Product

Range Contaminant^C

has dimension op

IRI http://w3id.org/CEON/demo/construction/hasDimension

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Super Property Of

hasHeight^{op}
 hasThickness^{op}
 hasWidth^{op}

Domain <u>product:ProductCobjectCorproductObject</u>

has dimensional deviation op

IRI http://w3id.org/CEON/demo/construction/hasDimensionalDeviation

Sub Property Of topObjectProperty Op

Domain product:Product

Range <u>Dimensional Deviation</u>^C

has distance to recycling plant op

IRI http://w3id.org/CEON/demo/construction/hasDistanceToRecyclingPlant

Sub Property Of http://qudt.org/schema/qudt/quantityValue

has fire resistance rating op

IRI http://w3id.org/CEON/demo/construction/hasFireResistanceRating

Sub Property Of topObjectProperty op

Domain product:Product^c or product:ProductObject^c

Range FireResistanceRating^C

has height^{op}

Sub Property Of hasDimension op

has market value for new product op

Sub Property Of quantity:hasMarketValue

Domain product:Product

has market value for reused product op

IRI http://w3id.org/CEON/demo/construction/hasMarketValueForReusedProduct

Sub Property Of <u>quantity:hasMarketValue</u>

Domain product:Product

has product quality op

Sub Property Of topObjectProperty op

Domain product:Product^c or product:ProductObject^c

Range ProductQuality^C

has recycling potential op

IRI http://w3id.org/CEON/demo/construction/hasRecyclingPotential

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Domain product:Product^c or product:ProductObject^c

has recycling separability op

http://w3id.org/CEON/demo/construction/hasRecyclingSeparability

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Domain product:Product^c or product:ProductObject^c

has resistance to earth op

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Domain product:Product

has reuse deconstructability op

IRI http://w3id.org/CEON/demo/construction/hasReuseDeconstructability

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Domain product:Product

has system weight op

http://w3id.org/CEON/demo/construction/hasSystemWeight

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Domain <u>product:ProductObject^C or product:ProductC</u>

has thickness op

Sub Property Of hasDimension op

has use span op

Sub Property Of http://qudt.org/schema/qudt/quantityValue

Super Property Of

<u>hasUseSpanRemaining</u>^{op}
 <u>hasUseSpanTotal</u>^{op}

<u>Domain</u> <u>product:Product^c or product:ProductObject^c</u>

has use span remaining op

IRI http://w3id.org/CEON/demo/construction/hasUseSpanRemaining

Sub Property Of hasUseSpan op

has use span total op

Sub Property Of hasUseSpan op

has width op

IRI http://w3id.org/CEON/demo/construction/hasWidth

Sub Property Of hasDimension op

policy on treatment op

Sub Property Of topObjectProperty op

Domain product:Product

Range PolicyOnTreatment^C

installation location op

IRI http://w3id.org/CEON/demo/construction/installationLocation

Sub Property Of topObjectProperty Op

Datatype Properties

has accessories dp

IRI http://w3id.org/CEON/demo/construction/hasAccessories

Domain <u>product:ProductC or product:ProductObjectC</u>

Range <u>xsd:string</u>

has dismantling method dp

IRI http://w3id.org/CEON/demo/construction/hasDismantlingMethod

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Product^C or product:ProductObject^C</u>

Range xsd:string

has installation date dp

Sub Property Of topDataProperty dp

Domain <u>product:ProductObject</u>

Range xsd:date

has packaging recommendations after dismantling dp

IRI http://w3id.org/CEON/demo/construction/hasPackagingRecommendationsAft

erDismantling

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:ProductObject^C or product:ProductC</u>

Range xsd:string

has product description dp

IRI http://w3id.org/CEON/demo/construction/hasProductDescription

Sub Property Of topDataProperty dp

Domain <u>product:ProductControlateCon</u>

Range <u>xsd:string</u>

has product id dp

IRI http://w3id.org/CEON/demo/construction/hasProductID

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:ProductObject^c or product:Product^c</u>

Range xsd:int

has production date dp

IRI http://w3id.org/CEON/demo/construction/hasProductionDate

Sub Property Of topDataProperty dp

Domain <u>product:ProductObject</u>

Range <u>xsd:date</u>

has production site dp

Sub Property Of topDataProperty dp

Domain <u>product:ProductC or product:ProductObjectC</u>

Range <u>xsd:string</u>

has refurbishment method dp

IRI http://w3id.org/CEON/demo/construction/hasRefurbishmentMethod

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:ProductObject^c or product:ProductC</u>

Range <u>xsd:string</u>

has take back program from original manufacturer dp

IRI http://w3id.org/CEON/demo/construction/hasTakeBackProgramFromOriginal

Manufacturer

Sub Property Of topDataProperty dp

Domain product:Product

Range xsd:boolean

has take back program other manufacturer dp

IRI http://w3id.org/CEON/demo/construction/hasTakeBackProgramOtherManufac

turer

Sub Property Of topDataProperty dp

Domain product:Product

Range xsd:boolean

has technical requirements for take back for recycling dp

IRI http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTak

eBackForRecycling

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:ProductObject^c or product:Product^c</u>

Range <u>xsd:string</u>

has technical requirements for take back for reuse dp

IRI http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTak

eBackForReuse

Sub Property Of topDataProperty dp

Domain <u>product:ProductC or product:ProductObjectC</u>

Range xsd:string

is contaminated dp

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:ProductObject^c or product:Product^c</u>

Range xsd:boolean

construction year dp

IRI http://w3id.org/CEON/demo/construction/constructionYear

Sub Property Of topDataProperty dp

Range xsd:gYear

has dismantling instruction dp

IRI http://w3id.org/CEON/demo/construction/hasDismantlingInstruction

Sub Property Of topDataProperty dp

Range <u>xsd:anyURI</u>

Annotation Properties

contributor ap					
IRI	http://purl.org/dc/terms/contributor				
created ap					
IRI	http://purl.org/dc/terms/created				
creator ap					
IRI	http://purl.org/dc/terms/creator				
description ap					
IRI	http://purl.org/dc/terms/description				
license ^{ap}					
IRI	http://purl.org/dc/terms/license				
title ^{ap}					
IRI	http://purl.org/dc/terms/title				
preferred namespace prefix ap					
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix				
preferred namespace uri ap					
IRI	http://purl.org/vocab/vann/preferredNamespaceUri				
covers requirements ap					
IRI	http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#coversRequirements				

Namespaces

```
:
    http://w3id.org/CEON/demo/construction/
actor
    http://w3id.org/CEON/ontology/actor/
actorODP
    http://w3id.org/CEON/ontology/actorODP/
datasheet
```

```
http://w3id.org/CEON/ontology/datasheet/
dcterms
    http://purl.org/dc/terms/
material
    http://w3id.org/CEON/ontology/material/
odp
    http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#
owl
    http://www.w3.org/2002/07/owl#
product
    http://w3id.org/CEON/ontology/product/
prov
    http://www.w3.org/ns/prov#
quantity
    http://w3id.org/CEON/ontology/quantity#
rdf
    http://www.w3.org/1999/02/22-rdf-syntax-ns#
rdfs
    http://www.w3.org/2000/01/rdf-schema#
vann
    http://purl.org/vocab/vann/
xsd
    http://www.w3.org/2001/XMLSchema#
```

Legend

С	Classes
ор	Object Properties
dp	Datatype Properties
ap	Annotation Properties