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

Condition ^C	
IRI	http://w3id.org/CEON/demo/construction/Condition
In Range Of	hasCondition ^{op}
Super Class Of	<u>FloorTileCondition</u> ^C

Contaminant ^C

In Range Of hasContaminant op

Dimensional Deviation ^C

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

n

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

Fire Resistance Rating^C

g

In Range Of hasFireResistanceRating op

Named Individuals

<u>F30</u>ⁿⁱ <u>F60</u>ⁿⁱ

Fire Resistance Relation^C

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

ion

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

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

elation

Sub Class Of actorODP:ResourceParticipation

Galvanized Steel Material ^c

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

rial

Sub Class Of <u>material:Material</u>

Policy On Treatment^C

In Range Of policyOnTreatment op

Named Individuals

refurbishⁿⁱ reprocessⁿⁱ reuseⁿⁱ

Product Quality^C

In Range Of hasProductQuality^{op}

Named Individuals

product_quality_highⁿⁱ product_quality_lowⁿⁱ product_quality_mediumⁿⁱ

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

Range Condition C

has contaminant op

Domain product:Product

Range Contaminant^C

has dimension op

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

Super Property Of

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

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

has dimensional deviation op

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

tion

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/hasDistanceToRecycl

ingPlant

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

has fire resistance rating op

ting

Sub Property Of topObjectProperty op

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

Range <u>FireResistanceRating</u>^C

has height^{op}

Sub Property Of hasDimension op

has market value for new product op

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

wProduct

Sub Property Of quantity:hasMarketValue

Domain <u>product:Product</u>

has market value for reused product op

usedProduct

Sub Property Of quantity:hasMarketValue

Domain product:Product

has product quality op

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

Sub Property Of topObjectProperty op

Domain <u>product:ProductControlleror product:ProductObjectControlleror prod</u>

Range <u>ProductQuality</u>^c

has recycling potential op

al

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

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

has recycling separability op

ility

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

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

has resistance to earth op

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

h

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

Domain <u>product:Product</u>

has reuse deconstructability op

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

ability

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

Domain <u>product:Product</u>

has system weight op

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

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

Domain <u>product:ProductControlateCon</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}

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

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/installationLocatio

n

Sub Property Of topObjectProperty op

Datatype Properties

has accessories dp

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

Range xsd:string

has dismantling method dp

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

d

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has installation date ^{dp}

Sub Property Of topDataProperty dp

Domain <u>product:ProductObject</u>

Range xsd:date

has packaging recommendations after dismantling dp

ndationsAfterDismantling

Sub Property Of topDataProperty dp

Domain product:Product^C or product:ProductObject^C

Range <u>xsd:string</u>

has product description dp

on

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has product id dp

Sub Property Of topDataProperty dp

Domain product:Product or product:ProductObject or

Range <u>xsd:int</u>

has production date ^{dp}

Sub Property Of topDataProperty dp

Domain <u>product:ProductObject</u>

Range <u>xsd:date</u>

has production site dp

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

Sub Property Of topDataProperty dp

Domain <u>product:ProductControlleror product:ProductObjectControlleror prod</u>

Range xsd:string

has refurbishment method dp

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

hod

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has take back program from original manufacturer dp

romOriginalManufacturer

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/hasTakeBackProgram0

therManufacturer

Sub Property Of topDataProperty dp

Domain product:Product

Range xsd:boolean

has technical requirements for take back for recycling dp

mentsForTakeBackForRecycling

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has technical requirements for take back for reuse dp

mentsForTakeBackForReuse

Sub Property Of topDataProperty dp

<u>Domain</u> <u>product:Product or product:ProductObject or product:ProductOb</u>

Range xsd:string

is contaminated dp

Sub Property Of topDataProperty dp

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

Range xsd:boolean

construction year dp

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

Sub Property Of topDataProperty dp

Range <u>xsd:gYear</u>

has dismantling instruction dp

uction

Sub Property Of topDataProperty dp

Range xsd:anyURI

Annotation Properties

contributor ap

created ap

IRI http://purl.org/dc/terms/created

creator ^{ap}

http://purl.org/dc/terms/creator

description ap

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/cpannotation
                 schema.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/
    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