Circular Economy Ontology Network (CEON) - Construction Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Construction Module

Publisher

Onto-DESIDE

Creator

Robin Keskisärkkä

Contributor

Eva Blomqvist

Huanyu Li

Mikael Lindecrantz

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Version Iri

http://w3id.org/CEON/demo/construction/0.2/

Version Info

0.2

Prior Version

0.1

Preferred Namespace Prefix

ceon-demo-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 | defineResourceCondition ^{op} 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/DimensionalDeviatio

n

In Range Of hasDimensionalDeviation op

Fire Resistance Rating ^C

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

g

In Range Of hasFireResistanceRating op

Named Individuals

<u>F30ⁿⁱ</u> <u>F60ⁿⁱ</u>

Fire Resistance Relation ^c

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

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

<u>defineResourceQuality</u>^{op} <u>hasProductQuality</u>^{op}

Named Individuals

product quality highⁿⁱ product quality lowⁿⁱ product quality mediumⁿⁱ

Treatment Policy^C

Named Individuals

refurbishⁿⁱ reprocessⁿⁱ reuseⁿⁱ

Object Properties

associated process for Ica op

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

rLCA

define resource condition op

tion

Domain actorODP:Actor

Range Condition^C

define resource quality op

ty

Domain actorODP:Actor

Range ProductQuality^C

has condition op

Sub Property Of topObjectProperty op

Domain product:Item^c or product:Product^c

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

• <u>hasHeight</u>^{op}

hasThickness^{op}
hasWidth^{op}

Domain product:Product^c or product:Item^c

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

ingPlant

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

has fire resistance rating op

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

ting

Sub Property Of topObjectProperty op

Domain product:Item^c or product:Product^c

Range <u>FireResistanceRating</u>^C

has height op

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

Sub Property Of hasDimension op

has market value for new product op

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

wProduct

Sub Property Of quantity:hasMarketValue op

Domain product:Product

has market value for reused product op

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

used Product

Sub Property Of quantity:hasMarketValue op

Domain product:Product

has product quality op

Sub Property Of topObjectProperty op

Domain product:Item^c or product:Product^c

Range <u>ProductQuality</u>^c

has recycling potential op

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

al

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

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

has recycling separability op

ility

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

Domain product:Product^c or product:Item^c

has resistance to earth op

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

h

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

Domain product:Product

has reuse deconstructability op

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

ability

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

Domain product:Product

has system weight op

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

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

Domain product:Product^c or product:Item^c

has thickness op

Sub Property Of hasDimension op

has use span op

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

Super Property Of

hasUseSpanRemaining^{op}
 hasUseSpanTotal^{op}

Domain product:Item^c or product:Product^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

Sub Property Of hasDimension op

installation location op

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

n

Sub Property Of topObjectProperty op

policy on treatment op

Sub Property Of topObjectProperty op

Domain product:Product

Range PolicyOnTreatment^C

has market value op

IRI http://w3id.org/CEON/ontology/quantity#hasMarketValue

Super Property Of

- <u>hasMarketValueForNewProduct</u>^{op}
- hasMarketValueForReusedProductop

Datatype Properties

construction year dp

Sub Property Of topDataProperty dp

Range <u>xsd:gYear</u>

has accessories dp

Domain product:Item^c or product:Product^c

Range <u>xsd:string</u>

has dismantling instruction dp

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

uction

Sub Property Of topDataProperty dp

Range xsd:anyURI

has dismantling method dp

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

d

Sub Property Of topDataProperty dp

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

Range xsd:string

has installation date dp

Sub Property Of topDataProperty dp

Domain product:Item

Range xsd:date

has packaging recommendations after dismantling dp

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

ndationsAfterDismantling

Sub Property Of topDataProperty dp

Domain product:Product^c or product:Item^c

Range <u>xsd:string</u>

has product description dp

on

Sub Property Of topDataProperty dp

Domain product:Product^c or product:Item^c

Range <u>xsd:string</u>

has product id ^{dp}

Sub Property Of topDataProperty dp

Domain product:Item^c or product:Product^c

Range <u>xsd:int</u>

has production date dp

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

Sub Property Of topDataProperty dp

Domain product:Item

Range xsd:date

has production site dp

Sub Property Of topDataProperty dp

Domain product:Item^c or product:Product^c

Range <u>xsd:string</u>

has refurbishment method dp

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

hod

Sub Property Of topDataProperty dp

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

Range xsd:string

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

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

mentsForTakeBackForRecycling

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has technical requirements for take back for reuse dp

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

mentsForTakeBackForReuse

Sub Property Of topDataProperty dp

Domain product:Item^c or product:Product^c

Range <u>xsd:string</u>

is contaminated dp

Sub Property Of topDataProperty dp

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

Range xsd:boolean

Annotation Properties

issued ap

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

publisher ap

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

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/

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 |