# Circular Economy Ontology Network (CEON) - Construction Module

#### Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Construction Module

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**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 <sup>c</sup>	

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

In Range Of hasCondition op

Super Class Of FloorTileCondition<sup>C</sup>

Contaminant<sup>c</sup>

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

In Range Of hasContaminant op

Dimensional Deviation <sup>C</sup>

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

n

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

Fire Resistance Rating <sup>c</sup>

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

g

In Range Of hasFireResistanceRating op

Named Individuals

F30<sup>ni</sup> F60<sup>ni</sup>

Fire Resistance Relation <sup>C</sup>

ion

Sub Class Of actorODP:ResourceParticipation

Floor Tile<sup>C</sup>

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\_condition<sup>ni</sup>
good\_condition<sup>ni</sup>
medium\_condition<sup>ni</sup>

Floor Tile Condition Relation <sup>C</sup>

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

elation

Sub Class Of actorODP:ResourceParticipation

Galvanized Steel Material C

rial

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

Policy On Treatment<sup>C</sup>

In Range Of policyOnTreatment op

**Named Individuals** 

refurbish<sup>ni</sup> reprocess<sup>ni</sup> reuse<sup>ni</sup>

Product Quality<sup>C</sup>

In Range Of hasProductQuality<sup>op</sup>

**Named Individuals** 

product quality high<sup>ni</sup>
product quality low<sup>ni</sup>
product quality medium<sup>ni</sup>

Treatment Policy<sup>C</sup>

Named Individuals

refurbish<sup>ni</sup> reprocess<sup>ni</sup> reuse<sup>ni</sup>

#### **Object Properties**

has condition op

Sub Property Of topObjectProperty op

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

Range Condition<sup>C</sup>

has contaminant op

**Domain** product:Product

Range Contaminant<sup>C</sup>

has dimension op

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

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Super Property Of** 

hasHeight<sup>op</sup>
hasThickness<sup>op</sup>
hasWidth<sup>op</sup>

Domain product:ProductObject<sup>c</sup> or product:Product<sup>c</sup>

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><sup>C</sup>

has distance to recycling plant op

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

ingPlant

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has fire resistance rating op

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

ting

Sub Property Of <u>topObjectProperty</u> op

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

Range <u>FireResistanceRating</u><sup>C</sup>

has height<sup>op</sup>

Sub Property Of hasDimension op

has market value for new product op

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

wProduct

Sub Property Of <a href="quantity:hasMarketValue">quantity:hasMarketValue</a>

**Domain** <u>product:Product</u>

has market value for reused product op

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

usedProduct

Sub Property Of quantity:hasMarketValue

**Domain** product:Product

has product quality op

Sub Property Of topObjectProperty op

Domain product:Product<sup>c</sup> or product:ProductObject<sup>c</sup>

Range <u>ProductQuality</u><sup>c</sup>

has recycling potential op

al

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

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

has recycling separability op

ility

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

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

has resistance to earth op

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

h

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <u>product:Product</u>

has reuse deconstructability op

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

ability

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** product:Product

has system weight op

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

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

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

has thickness op

Sub Property Of hasDimension op

has use span op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Super Property Of** 

<u>hasUseSpanRemaining</u> op

• <u>hasUseSpanTotal</u>op

**Domain** product:ProductObject<sup>c</sup> or product:Product<sup>c</sup>

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 <u>PolicyOnTreatment</u><sup>C</sup>

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<sup>c</sup> or product:ProductC</u>

Range xsd:string

has dismantling method dp

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

d

Sub Property Of topDataProperty dp

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

Range <u>xsd:string</u>

has installation date <sup>dp</sup>

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

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<sup>c</sup> or product:ProductObject<sup>c</sup>

Range <u>xsd:string</u>

has product description dp

on

Sub Property Of topDataProperty dp

Domain product:ProductObject<sup>c</sup> or product:Product<sup>C</sup>

Range <u>xsd:string</u>

has product id dp

Sub Property Of topDataProperty dp

Domain product:Product or product:ProductObject or

Range xsd:int

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 product:ProductObject<sup>c</sup> or product:Product<sup>c</sup>

Range xsd:string

has refurbishment method dp

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

hod

Sub Property Of topDataProperty dp

Domain product:ProductObject<sup>c</sup> or product:Product<sup>c</sup>

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

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

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

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

Range <u>xsd:string</u>

is contaminated dp

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

Sub Property Of topDataProperty dp

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

Range xsd:boolean

construction year dp

Sub Property Of topDataProperty dp

Range <u>xsd:gYear</u>

has dismantling instruction <sup>dp</sup>

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

uction

Sub Property Of topDataProperty dp

Range xsd:anyURI

### **Annotation Properties**

contributor ap

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

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