

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 ^C	
IRI	http://w3id.org/CEON/demo/construction/Condition
Description	Condition is used to describe the condition of a specific product object.
In Range Of	has condition ^{OP}
Super Class Of	Floor Tile Condition ^C

Contaminant^c

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

Description

A contaminant is any physical thing that is regarded as a contaminant when present in a product or product object.

In Range Of [has contaminant^{op}](#)

Dimensional Deviation^c

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

In Range Of

[has dimensional deviation^{op}](#)

Fire resistance rating^c

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

Description

Fire resistance rating is expressed as 'F' followed by the minimum number of minutes in which the functionality of the product or product object can withstand fire. For example, F30 would therefore be a fire resistance duration of 30 min.

In Range Of [has fire resistance rating^{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

IRI <http://w3id.org/CEON/demo/construction/FloorTile>

Description

A floor tile is a type of product that used to cover a floor.

Sub Class Of

[product:Product](#)

Floor Tile Condition^c

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

Description Floor Tile Condition is used to describe the condition of a floor tile (good, medium, bad).

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/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

IRI <http://w3id.org/CEON/demo/construction/PolicyOnTreatment>

Description PolicyOnTreatment represents the the policy for treatment (reuse, refurbish or reprocessing)

In Range Of [policy on treatment^{op}](#)

Named Individuals
[refurbishⁿⁱ](#)
[reprocessⁿⁱ](#)
[reuseⁿⁱ](#)

Product quality^c

IRI <http://w3id.org/CEON/demo/construction/ProductQuality>

Description ProductQuality represents the quality of a product or product object.

In Range Of [has product quality^{op}](#)

Named Individuals
[Product quality highⁿⁱ](#)
[Product quality lowⁿⁱ](#)
[Product quality mediumⁿⁱ](#)

treatment policy^c

IRI <http://w3id.org/CEON/demo/construction/TreatmentPolicy>

Description TreatmentPolicy is used to describe the policy for treatment for a given product or product object.

Named Individuals
[refurbishⁿⁱ](#)
[reprocessⁿⁱ](#)
[reuseⁿⁱ](#)

Object Properties

has condition^{op}

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

Description hasCondition is used to describe the condition of a specific product object.

Sub Property Of [topObjectProperty^{op}](#)

Domain [product:ProductObject^c](#) or [product:Product^c](#)

Range [Condition^c](#)

has contaminant^{op}

IRI <http://w3id.org/CEON/demo/construction/hasContaminant>

Description hasContaminant is used to express the presence of contaminants in a product or product object.

Domain [product:Product](#)

Range [Contaminant^c](#)

has dimension^{op}

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

Description hasDimension is used to describe a dimension of a product or product object.

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

Super Property Of

- [has height^{op}](#)
- [has thickness^{op}](#)
- [has width^{op}](#)

Domain [product:Product^c](#) or [product:ProductObject^c](#)

has dimensional deviation^{op}

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

Description hasDimensionalDeviation is used to describe the dimensional deviation class of a product.

Sub Property Of [topObjectProperty^{op}](#)

Domain [product:Product](#)

Range [DimensionalDeviation^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
Description	hasFireResistanceRating is used to represent the fire resistance rating of a product or product object.
Sub Property Of	topObjectProperty^{op}
Domain	product:ProductObject^c or product:Product^c
Range	Fire resistance rating^c

has height^{op}

IRI	http://w3id.org/CEON/demo/construction/hasHeight
Description	hasHeight is used to describe the height of a product or product object.
Sub Property Of	has dimension^{op}

has market value for new product^{op}

IRI	http://w3id.org/CEON/demo/construction/hasMarketValueForNewProduct
Description	hasMarketValueForNewProduct is used to describe the market value of a new product.
Sub Property Of	quantity:hasMarketValue
Domain	product:Product

has market value for reused product^{op}

IRI	http://w3id.org/CEON/demo/construction/hasMarketValueForReusedProduct
Description	hasMarketValueForReusedProduct is used to describe the market value of a used product.
Sub Property Of	quantity:hasMarketValue
Domain	product:Product

has product quality^{op}

IRI	http://w3id.org/CEON/demo/construction/hasProductQuality
Description	hasProductQuality is used to represent the quality of a product or product object.
Sub Property Of	topObjectProperty^{op}
Domain	product:ProductObject^c or product:Product^c
Range	Product quality^c

has recycling potential^{op}

IRI	http://w3id.org/CEON/demo/construction/hasRecyclingPotential
Description	hasRecyclingPotential describes the amount of the product or product object that can potentially be recycled.
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:ProductObject^c or product:Product^c

has recycling separability^{op}

IRI	http://w3id.org/CEON/demo/construction/hasRecyclingSeparability
Description	<ul style="list-style-type: none">• has recycling separability• hasRecyclingSeparability is used to describe the amount of the product or product object that can be separated for recycling.
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:Product^c or product:ProductObject^c

has resistance to earth^{op}

IRI	http://w3id.org/CEON/demo/construction/hasResistanceToEarth
Description	hasResistanceToEarth describes the resistance to earth of a product.
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:Product

has reuse deconstructability^{op}

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

Description hasReuseDeconstructability is used to describe the amount of the product hat can be deconstructed for reuse.

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

Domain [product:Product](#)

has system weight^{op}

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

Description hasSystemWeight is used to express the system weight of a product or product object.

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

Domain [product:Product](#)^c or [product:ProductObject](#)^c

has thickness^{op}

IRI <http://w3id.org/CEON/demo/construction/hasThickness>

Description hasThickness is used to describe the thickness of a product or product object.

Sub Property Of [has dimension](#)^{op}

has use span^{op}

IRI <http://w3id.org/CEON/demo/construction/hasUseSpan>

Description hasUseSpan describes the use span of a product or prodcut object.

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

Super Property Of

- [has use span remaining](#)^{op}
- [has use span total](#)^{op}

Domain [product:Product](#)^c or [product:ProductObject](#)^c

has use span remaining^{op}

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

Description hasUseSpanRemaining describes the remaining use span of a product or product object.

Sub Property Of [has use span^{op}](#)

has use span total^{op}

IRI <http://w3id.org/CEON/demo/construction/hasUseSpanTotal>

Description hasUseSpanTotal describes the total use span of a product or product object.

Sub Property Of [has use span^{op}](#)

has width^{op}

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

Description hasHeight is used to describe the height of a product or product object.

Sub Property Of [has dimension^{op}](#)

policy on treatment^{op}

IRI <http://w3id.org/CEON/demo/construction/policyOnTreatment>

Description policyOnTreatment describes the policy for treatment of used product.

Sub Property Of [topObjectProperty^{op}](#)

Domain [product:Product](#)

Range [PolicyOnTreatment^c](#)

Datatype Properties

has accessories^{dp}

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

Description

hasAccessories is used to provide a text representation of the accessories related to a product or product object.

Domain

[product:ProductObject^c](#) or [product:Product^c](#)

Range

[xsd:string](#)

has certificate^{dp}

IRI <http://w3id.org/CEON/demo/construction/hasCertificate>

Description

hasCertificate is used to link a product or product object to a certificate. The certificate is represented as a string, which could refer to the URL, name, or identifier of a known certificate.

Domain

[product:Product^c](#) or [product:ProductObject^c](#)

Range

[xsd:string](#)

has dismantling method^{dp}

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

Description

hasDismantlingMethod is used to represent a textual description of the dismantling method for a product or product object.

Sub Property Of

[topDataProperty^{dp}](#)

Domain

[product:Product^c](#) or [product:ProductObject^c](#)

Range

[xsd:string](#)

has installation date^{dp}

IRI	http://w3id.org/CEON/demo/construction/hasInstallationDate
Description	hasInstallationDate is used to represent the installation date of a specific product object.
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject
Range	xsd:date

has packaging recommendations after dismantling^{dp}

IRI	http://w3id.org/CEON/demo/construction/hasPackagingRecommendationsAfterDismantling
Description	hasPackagingRecommendationsAfterDismantling is used to represent a textual description of the packaging recommendations after a product or product object has been dismantled.
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject^c or product:Product^c
Range	xsd:string

has product description^{dp}

IRI	http://w3id.org/CEON/demo/construction/hasProductDescription
Description	<ul style="list-style-type: none">• has product description• hasProductDescription is used to represent a textual description of a product or product object.
Sub Property Of	topDataProperty^{dp}
Domain	product:Product^c or product:ProductObject^c
Range	xsd:string

has product id ^{dp}

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

Description

- has product ID
- hasProductID is used to represent the product ID of a product or product object.

Sub Property Of [topDataProperty](#) ^{dp}

Domain [product:ProductObject](#) ^c or [product:Product](#) ^c

Range [xsd:int](#)

has production date ^{dp}

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

Description

hasProductionDate is used to represent the production date of a specific product object.

Sub Property Of [topDataProperty](#) ^{dp}

Domain [product:ProductObject](#)

Range [xsd:date](#)

has production site ^{dp}

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

Description

hasProductionSite is used to represent the site at which a given product or product object has been produced as a string. (This property could potentially be represented as an object property. The site could then potentially be treated as a location.)

Sub Property Of [topDataProperty](#) ^{dp}

Domain [product:ProductObject](#) ^c or [product:Product](#) ^c

Range [xsd:string](#)

has refurbishment method^{dp}

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

Description hasRefurbishmentMethod is used to provide a textual description of the refurbishment process for a product or product object.

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:Product](#)^C or [product:ProductObject](#)^C

Range [xsd:string](#)

has takeback program from original manufacturer^{dp}

IRI <http://w3id.org/CEON/demo/construction/hasTakeBackProgramFromOriginalManufacturer>

Description hasTakeBackProgramFromOriginalManufacturer is used to express whether the original manufacturer of a product has a take back program it (true/false).

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:Product](#)

Range [xsd:boolean](#)

has takeback program from other manufacturer^{dp}

IRI <http://w3id.org/CEON/demo/construction/hasTakeBackProgramOtherManufacturer>

Description hasTakeBackProgramFromOtherManufacturer is used to express whether another manufacturer has a take back program (true/false) for a product.

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:Product](#)

Range [xsd:boolean](#)

has technical requirements for take back and recycling^{dp}

IRI <http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForRecycling>

Description hasTechnicalRequirmentsForTakeBackForRecycling is used to represent a textual description of the technical requirements of a product or product object for take back and recycling.

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:ProductObject](#)^c or [product:Product](#)^c

Range [xsd:string](#)

has technical requirements for take back and reuse^{dp}

IRI <http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForReuse>

Description hasTechnicalRequirmentsForTakeBackForReuse is used to represent a textual description of the technical requirements of a product or product object for take back and reuse.

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:ProductObject](#)^c or [product:Product](#)^c

Range [xsd:string](#)

is contaminated^{dp}

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

Description isContaminated is used to express whether a specific product object contains any contaminants (true/false).

Sub Property Of [topDataProperty](#)^{dp}

Domain [product:Product](#)^c or [product:ProductObject](#)^c

Range [xsd:boolean](#)

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

c

Classes

op

Object Properties

dp

Datatype Properties

ap

Annotation Properties