

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

[FloorTileCondition^C](#)

Contaminant^C

IRI

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

In Range Of

[hasContaminant^{op}](#)

Dimensional Deviation^C

IRI	http://w3id.org/CE0N/demo/construction/DimensionalDeviation
<u>In Range Of</u>	hasDimensionalDeviation ^{op}

Fire Resistance Rating^C

IRI	http://w3id.org/CE0N/demo/construction/FireResistanceRating
<u>In Range Of</u>	hasFireResistanceRating ^{op}
<u>Named Individuals</u>	F30 ⁿⁱ F60 ⁿⁱ

Fire Resistance Relation^C

IRI	http://w3id.org/CE0N/demo/construction/FireResistanceRelation
<u>Sub Class Of</u>	actorODP:ResourceParticipation

Floor Tile^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTile
<u>Sub Class Of</u>	product:Product

Floor Tile Condition^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTileCondition
<u>Sub Class Of</u>	Condition ^C
<u>Named Individuals</u>	bad_condition ⁿⁱ good_condition ⁿⁱ medium_condition ⁿⁱ

Floor Tile Condition Relation^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTileConditionRelation
<u>Sub Class Of</u>	actorODP:ResourceParticipation

Galvanized Steel Material^C

IRI <http://w3id.org/CE0N/demo/construction/GalvanizedSteelMaterial>

Sub Class Of [material:Material](#)

Policy On Treatment^C

IRI <http://w3id.org/CE0N/demo/construction/PolicyOnTreatment>

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

Named Individuals

- [refurbish](#)ⁿⁱ
- [reprocess](#)ⁿⁱ
- [reuse](#)ⁿⁱ

Product Quality^C

IRI <http://w3id.org/CE0N/demo/construction/ProductQuality>

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

Named Individuals

- [product_quality_high](#)ⁿⁱ
- [product_quality_low](#)ⁿⁱ
- [product_quality_medium](#)ⁿⁱ

Treatment Policy^C

IRI <http://w3id.org/CE0N/demo/construction/TreatmentPolicy>

Named Individuals

- [refurbish](#)ⁿⁱ
- [reprocess](#)ⁿⁱ
- [reuse](#)ⁿⁱ

Object Properties

has condition^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasCondition>

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

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

Range [Condition](#)^C

has contaminant^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasContaminant
Domain	product:Product
Range	Contaminant^c

has dimension^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasDimension
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Super Property Of	<ul style="list-style-type: none">• hasHeight^{op}• hasThickness^{op}• hasWidth^{op}
Domain	product:Product^c or product:ProductObject^c

has dimensional deviation^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasDimensionalDeviation
Sub Property Of	topObjectProperty^{op}
Domain	product:Product
Range	DimensionalDeviation^c

has distance to recycling plant^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasDistanceToRecyclingPlant
Sub Property Of	http://qudt.org/schema/qudt/quantityValue

has fire resistance rating^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasFireResistanceRating
Sub Property Of	topObjectProperty^{op}
Domain	product:Product^c or product:ProductObject^c
Range	FireResistanceRating^c

has height^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasHeight
Sub Property Of	hasDimension^{op}

has market value for new product^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasMarketValueForNewProduct
Sub Property Of	quantity:hasMarketValue
Domain	product:Product

has market value for reused product^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasMarketValueForReusedProduct
Sub Property Of	quantity:hasMarketValue
Domain	product:Product

has product quality^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasProductQuality
Sub Property Of	topObjectProperty^{op}
Domain	product:Product^c or product:ProductObject^c
Range	ProductQuality^c

has recycling potential^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasRecyclingPotential
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/CE0N/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}

IRI	http://w3id.org/CE0N/demo/construction/hasResistanceToEarth
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:Product

has reuse deconstructability^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasReuseDeconstructability
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:Product

has system weight^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasSystemWeight
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Domain	product:Product^c or product:ProductObject^c

has thickness^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasThickness
Sub Property Of	hasDimension^{op}

has use span^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasUseSpan
Sub Property Of	http://qudt.org/schema/qudt/quantityValue
Super Property Of	<ul style="list-style-type: none">hasUseSpanRemaining^{op}hasUseSpanTotal^{op}
Domain	product:ProductObject^c or product:Product^c

has use span remaining^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasUseSpanRemaining
Sub Property Of	hasUseSpan^{op}

has use span total^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasUseSpanTotal
Sub Property Of	hasUseSpan^{op}

has width^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasWidth
Sub Property Of	hasDimension^{op}

policy on treatment^{op}

IRI	http://w3id.org/CE0N/demo/construction/policyOnTreatment
Sub Property Of	topObjectProperty^{op}
Domain	product:Product
Range	PolicyOnTreatment^c

installation location^{op}

IRI	http://w3id.org/CE0N/demo/construction/installationLocation
Sub Property Of	topObjectProperty^{op}

Datatype Properties

has accessories^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasAccessories
Domain	product:ProductObject^c or product:Product^c
Range	xsd:string

has dismantling method^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasDismantlingMethod
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject^c or product:Product^c
Range	xsd:string

has installation date^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasInstallationDate
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject
Range	xsd:date

has packaging recommendations after dismantling^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasPackagingRecommendationsAfterDismantling
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject^c or product:Product^c
Range	xsd:string

has product description^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasProductDescription
Sub Property Of	topDataProperty^{dp}
Domain	product:Product^c or product:ProductObject^c
Range	xsd:string

has product id^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasProductID
Sub Property Of	topDataProperty^{dp}
Domain	product:Product^c or product:ProductObject^c
Range	xsd:int

has production date^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasProductionDate
Sub Property Of	topDataProperty^{dp}
Domain	product:ProductObject
Range	xsd:date

has production site^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasProductionSite
Sub Property Of	topDataProperty^{dp}
Domain	product:Product^c or product:ProductObject^c
Range	xsd:string

has refurbishment method^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasRefurbishmentMethod>

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

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

Range [xsd:string](#)

has take back program from original manufacturer^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasTakeBackProgramFromOriginalManufacturer>

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

Domain [product:Product](#)

Range [xsd:boolean](#)

has take back program other manufacturer^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasTakeBackProgramOtherManufacturer>

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

Domain [product:Product](#)

Range [xsd:boolean](#)

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

IRI <http://w3id.org/CE0N/demo/construction/hasTechnicalRequirementsForTakeBackForRecycling>

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

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

Range [xsd:string](#)

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

IRI <http://w3id.org/CE0N/demo/construction/hasTechnicalRequirementsForTakeBackForReuse>

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

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

Range [xsd:string](#)

is contaminated^{dp}

IRI <http://w3id.org/CE0N/demo/construction/isContaminated>

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

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

Range [xsd:boolean](#)

construction year^{dp}

IRI <http://w3id.org/CE0N/demo/construction/constructionYear>

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

Range [xsd:gYear](#)

has dismantling instruction^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasDismantlingInstruction>

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

Range [xsd:anyURI](#)

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/cannotation-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/cannotationschema.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