

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

has recycling separability^{op}

| | |
|------------------------|---|
| IRI | http://w3id.org/CE0N/demo/construction/hasRecyclingSeparability |
| Sub Property Of | http://qudt.org/schema/qudt/quantityValue |
| Domain | product:ProductObject^c or product:Product^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:Product^c or product:ProductObject^c |
| Range | xsd:string |

has product description^{dp}

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

has refurbishment method^{dp}

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

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

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

Range [xsd:string](#)

is contaminated^{dp}

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

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

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