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 frire resistance rating ^{op}

Named Individuals F30 ⁿⁱ
F60 ⁿⁱ

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 condition [ni]
good condition [ni]
medium condition [ni]

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
refurbish [ni]
reprocess [ni]
reuse [ni]

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 high [ni] Product quality low [ni] Product quality medium [ni]

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	refurbish [ni] reprocess [ni] reuse [ni]

Object Properties

has condition [op]

IRI	http://w3id.org/CEON/demo/construction/hasCondition
Description	hasCondition is used to describe the condiction 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:ProductObject ^c or product:Product ^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 frire 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:Product ^c *or* product:ProductObject ^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:Product ^c *or* product:ProductObject ^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 potenitally be recycled.
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/CEON/demo/construction/hasRecyclingSeparability
Description	• 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:ProductObject ^c or product:Product ^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:ProductObject ^c or product:Product ^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 prodcut 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 prodcut 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

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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, whcih could refer to the URL, name, or identifier of a known certificate.

Domain   product:ProductObject ^c *or* product:Product ^c

Range   xsd:string

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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

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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:Product ^c *or* product:ProductObject ^c

Range   xsd:string

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has product description ^{dp}

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

Description

- 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:ProductObject ^c *or* product:Product ^c

Range   xsd:string

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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

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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:Product ^c *or* product:ProductObject ^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