

Circular Economy Ontology Network (CEON) - Product Module

Metadata

IRI

<http://w3id.org/CEON/ontology/product/>

Title

Circular Economy Ontology Network (CEON) - Product Module

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Version Iri

<http://w3id.org/CEON/ontology/product/0.3/>

Version Info

0.3

Preferred Namespace Prefix

product

Preferred Namespace Uri

<http://w3id.org/CEON/ontology/product/>

Description

The Product module of CEON (Circular Economy Ontology Network).

Covers Requirements

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.1: CVN-Resource-2, CVN-ResourceType-4, C11-2, C12-1, C13-3, E2-1, T8-3.

Classes

Actor^c

IRI

<http://w3id.org/CEON/ontology/actorODP/Actor>

Resource Relation^c

IRI <http://w3id.org/CEON/ontology/actorODP/ResourceRelation>

Super Class Of [resourceODP:Composition](#)

Process^c

IRI <http://w3id.org/CEON/ontology/processODP/Process>

Compliance^c

IRI <http://w3id.org/CEON/ontology/product/Compliance>

In Domain Of [complianceWith](#)^{op}
[hasCertificate](#)^{dp}

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

Matter composition^c

IRI <http://w3id.org/CEON/ontology/product/MatterComposition>

Description A product composition is the composed information of a product in terms of a specific component, in which such a component is also a matter.

Sub Class Of [resourceODP:Composition](#)

In Domain Of [associated with matter](#)^{op}

Restriction [associated with matter](#)^{op} *exactly* 1 [Matter composition](#)^c

Product model^c

IRI	http://w3id.org/CEON/ontology/product/Product
Description	Represents the common sense notion of a product, i.e. the abstract notion of a product type or product model, which is a model that is used for manufacturing products.
In Domain Of	has product component ^{op}
In Range Of	associated with product model ^{op} batch of products ^{op} has product component ^{op} modelled by ^{op}
Restriction	hasComposition ^{op} some Product model ^c hasComposition ^{op} some Product model ^c

Product composition^c

IRI	http://w3id.org/CEON/ontology/product/ProductComposition
Description	A product composition is the composed information of a product in terms of a specific component, in which such a component is also a product.
Sub Class Of	resourceODP:Composition
In Domain Of	associated with product model ^{op}
Restriction	associated with product model ^{op} <i>exactly</i> 1 Product composition ^c

Product object^c

IRI	http://w3id.org/CEON/ontology/product/ProductObject
Description	A product object is a physical object put into a market for sale, i.e. corresponding to the notion of an item, which conforms to the abstract idea of a product model. The product can be a thing that grows naturally or produced through some chemical or manufacturing processes.
Sub Class Of	resourceODP:PhysicalObject
In Domain Of	hasProductObjectComponent ^{op} modelled by ^{op}
In Range Of	associatedWithProductObject ^{op} hasProductObjectComponent ^{op}
Restriction	modelled by ^{op} <i>exactly</i> 1 Product object ^c

Product Object Composition^c

IRI	http://w3id.org/CEON/ontology/product/ProductObjectComposition
Sub Class Of	resourceODP:Composition
In Domain Of	associatedWithProductObject ^{op}
Restriction	associatedWithProductObject ^{op} <i>exactly</i> 1 ProductObjectComposition ^c

Object Properties

associated with matter^{op}

IRI	http://w3id.org/CEON/ontology/product/associatedWithMatter
Description	associatedWithMatter intends to represent the matter to which a matter composition information regards to.
Domain	Matter composition ^c
Range	resourceODP:Matter

associated with product model^{op}

IRI	http://w3id.org/CEON/ontology/product/associatedWithProductModel
Description	associatedWithProductModel intends to represent the product model to which a product composition information regards to.
Domain	Product composition ^c
Range	Product model ^c

associated with product object^{op}

IRI	http://w3id.org/CEON/ontology/product/associatedWithProductObject
Sub Property Of	topObjectProperty ^{op}
Domain	ProductObjectComposition ^c
Range	Product object ^c

batch of products^{op}

IRI	http://w3id.org/CEON/ontology/product/batchOfProduct
Description	batchOfProduct intends to represent what is the model product of a batch of objects.
Domain	resourceODP:BatchOfObjects
Range	Product model ^c

compliance with^{op}

IRI	http://w3id.org/CEON/ontology/product/complianceWith
Domain	Compliance ^c

composition of^{op}

IRI	http://w3id.org/CEON/ontology/product/compositionOf
Domain	resourceODP:Composition
Range	Product object ^c or resourceODP:Matter ^c or Product model ^c

has compliance^{op}

IRI	http://w3id.org/CEON/ontology/product/hasCompliance
<u>Domain</u>	Product model ^c <i>or</i> http://w3id.org/CEON/ontology/processODP/Process ^c <i>or</i> Product object ^c <i>or</i> actorODP:Actor ^c
<u>Range</u>	Compliance ^c

has composition^{op}

IRI	http://w3id.org/CEON/ontology/product/hasComposition
<u>Description</u>	hasComposition intends to represent that a product model or physical object can have composition information.
<u>Domain</u>	Product model ^c <i>or</i> resourceODP:PhysicalObject ^c
<u>Range</u>	resourceODP:Composition

has product component^{op}

IRI	http://w3id.org/CEON/ontology/product/hasProductComponent
<u>Description</u>	hasProductComponent intends to represent that a product can have other product components.
<u>Domain</u>	Product model ^c
<u>Range</u>	Product model ^c

has product object component^{op}

IRI	http://w3id.org/CEON/ontology/product/hasProductObjectComponent
<u>Domain</u>	Product object ^c
<u>Range</u>	Product object ^c

modelled by^{op}

IRI	http://w3id.org/CEON/ontology/product/modelledBy
Description	modelledBy intends to represent that product objects follow particular product models.
Domain	Product object ^c
Range	Product model ^c

Datatype Properties

country of assembly^{dp}

IRI	http://w3id.org/CEON/ontology/product/countryOfAssembly
Sub Property Of	locationOfAssembly ^{dp}

country of manufacture^{dp}

IRI	http://w3id.org/CEON/ontology/product/countryOfManufacture
Sub Property Of	locationOfManufacture ^{dp}

country of origin^{dp}

IRI	http://w3id.org/CEON/ontology/product/countryOfOrigin
Sub Property Of	locationOfOrigin ^{dp}

has certificate^{dp}

IRI	http://w3id.org/CEON/ontology/product/hasCertificate
Domain	Compliance ^c

location of assembly^{dp}

IRI	http://w3id.org/CEON/ontology/product/locationOfAssembly
Super Property Of	countryOfAssembly^{dp}
Domain	Product object^c <i>or</i> Product model^c
Range	xsd:string

location of manufacture^{dp}

IRI	http://w3id.org/CEON/ontology/product/locationOfManufacture
Super Property Of	countryOfManufacture^{dp}
Domain	Product object^c <i>or</i> Product model^c
Range	xsd:string

location of origin^{dp}

IRI	http://w3id.org/CEON/ontology/product/locationOfOrigin
Super Property Of	countryOfOrigin^{dp}
Domain	Product model^c <i>or</i> Product object^c
Range	xsd:string

Annotation Properties

contributor^{ap}

IRI	http://purl.org/dc/terms/contributor
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created^{ap}

IRI	http://purl.org/dc/terms/created
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creator^{ap}

IRI	http://purl.org/dc/terms/creator
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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/ontology/product/>

actorODP

<http://w3id.org/CEON/ontology/actorODP/>

dcterms

<http://purl.org/dc/terms/>

odp

<http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#>

owl

<http://www.w3.org/2002/07/owl#>

prov

<http://www.w3.org/ns/prov#>

rdf

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>

rdfs

<http://www.w3.org/2000/01/rdf-schema#>

resourceODP

<http://w3id.org/CEON/ontology/resourceODP/>

vann

<http://purl.org/vocab/vann/>

xsd

<http://www.w3.org/2001/XMLSchema#>

Legend

c

op

dp

ap

Classes

Object Properties

Datatype Properties

Annotation Properties