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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Date Created

2023-03-16

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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-ResrouceType-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] *exactly* 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} *exactly* 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} *exactly* 1 ProductObjectComposition ^c

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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 compopsition 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 compopsition information regards to.

Domain   Product composition ^c

Range   Product model ^c

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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

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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

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compliance with ^{op}

IRI   http://w3id.org/CEON/ontology/product/complianceWith

Domain   Compliance ^c

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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
Domain	Product model ^c *or* http://w3id.org/CEON/ontology/processODP/Process ^c *or* actorODP:Actor ^c *or* Product object ^c
Range	Compliance ^c

has composition ^{op}

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

has product component ^{op}

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

has product object component ^{op}

IRI	http://w3id.org/CEON/ontology/product/hasProductObjectComponent
Domain	Product object ^c
Range	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 *or* 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 *or* 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 object ^c *or* Product model ^c
Range	xsd:string

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

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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	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties