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/0.2/

Version Info

0.2

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

MatterComposition ^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	associatedWithMatter ^{op}
Restriction	associatedWithMatter ^{op} *exactly* 1 MatterComposition ^C

Product Model ^C

IRI	http://w3id.org/CEON/ontology/product/Product
Description	A product model is a model that is used for manufacturing products.
In Range Of	associatedWithProductModel ^{op} batchOfProduct ^{op} modelledBy ^{op}
Restriction	has composition ^{op} some Product Model ^C has composition ^{op} some Product Model ^C

ProductComposition ^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	associatedWithProductModel ^{op}
Restriction	associatedWithProductModel ^{op} *exactly* 1 ProductComposition ^C

ProductObject [c]

IRI	http://w3id.org/CEON/ontology/product/ProductObject
Description	A product object is a physical object put into a market for sale. 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	hasProductComponent [op] modelledBy [op]
In Range Of	hasProductComponent [op]
Restriction	modelledBy [op] *exactly* 1 ProductObject [c]

Object Properties

associatedWithMatter [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	MatterComposition [c]
Range	resourceODP:Matter

associatedWithProductModel [op]

IRI	http://w3id.org/CEON/ontology/product/associatedWithProductModel
Description	associatedWithProductModel intends to represent the matter to which a product compopsition information regards to.
Domain	ProductComposition [c]
Range	Product Model [c]

batchOfProduct ^{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

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	Product Model ^c *or* resourceODP:PhysicalObject ^c
Range	resourceODP:Composition

hasProductComponent ^{op}

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

modelledBy ^{op}

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

Datatype Properties

compositionQuantity ^{dp}

IRI	http://w3id.org/CEON/ontology/product/compositionQuantity
Description	compositionQuantity intends to represent the quantity value of composed elements of a composition. The quantity value can be the number of a element or the percentage of a element.
Domain	resourceODP:Composition
Range	xsd:double ^c *or* xsd:positiveInteger ^c

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

<table>
<tr><td colspan="2">preferred namespace prefix^{ap}</td></tr>
<tr><td>IRI</td><td>http://purl.org/vocab/vann/preferredNamespacePrefix</td></tr>
</table>

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/

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