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/0.2/

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

DescriptionA 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

DescriptionA product model is a model that is used for manufacturing products.

In Range Of associatedWithProductModel 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

DescriptionA 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 of exactly 1 ProductCom

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

 $\underline{\mathsf{hasProductComponent}^{\mathsf{op}}}$

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 <u>MatterComposition</u>^c

Range <u>resourceODP:Matter</u>

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.

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 <u>resourceODP:Composition</u>

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 <u>resourceODP:Composition</u>

Range xsd:positiveInteger^c or xsd:double^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

preferred namespace prefix ap

IRI http://purl.org/vocab/vann/preferredNamespacePrefix

preferred namespace uriap

IRI http://purl.org/vocab/vann/preferredNamespaceUri

covers requirements ap

IRI http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#covers

Requirements

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

Classes

op Object Properties

dp Datatype Properties

ap Annotation Properties