Circular Economy Ontology Network (CEON) - Electronics Module

Metadata

IRI

http://w3id.org/CEON/demo/electronics/

Title

Circular Economy Ontology Network (CEON) - Electronics Module

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Version Iri

http://w3id.org/CEON/demo/electronics/0.1/

Version Info

0.1

Preferred Namespace Uri

http://w3id.org/CEON/demo/electronics/

Description

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

Classes

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Is Defined By http://qudt.org/2.1/schema/qudt

DescriptionA DerivedUnit is a type specification for units that are derived from other units.

Sub Class Of http://qudt.org/schema/qudt/Unit

Named Individuals pascal second ni

Actinoids Metal C

Sub Class Of MetalMaterial^C

Adhesive Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Alkali Metal ^c

Sub Class Of MetalMaterial^C

Alkaline Earth Metal^C

IRI http://w3id.org/CEON/demo/electronics/AlkalineEarthMetal

Sub Class Of MetalMaterial^C

Aluminum Dome Tweeter C

IRI http://w3id.org/CEON/demo/electronics/AluminumDomeTweeter

Sub Class Of <u>ElectronicsProduct</u>^C

Bromide Material ^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Catalyst Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Core Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Coupling Cone^C

Sub Class Of <u>ElectronicsProduct</u>^C

Damper ^C

IRI http://w3id.org/CEON/demo/electronics/Damper

Sub Class Of ElectronicsProduct^C

Named Individuals damper_xⁿⁱ

Double Magnet^C

Sub Class Of ElectronicsProduct^C

Electronics Product^C

IRI http://w3id.org/CEON/demo/electronics/ElectronicsProduct

Sub Class Of http://w3id.org/CEON/ontology/product/Product

Super Class Of

<u>AluminumDomeTweeter^C</u>

CouplingCone^C
Damper^C
DoubleMagnet^C
Frame^C

- rame

<u>NeodymiumMagnet</u>^C

<u>Speaker^c</u>

Electronics Product Sourcing Component Relation C

IRI http://w3id.org/CEON/demo/electronics/ElectronicsProductSourcingCompo

nentRelation

Sub Class Of http://w3id.org/CEON/ontology/provenance/Statement

Fibre M Aterial ^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Flame Retardant Material ^C

IRI http://w3id.org/CEON/demo/electronics/FlameRetardantMaterial

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Frame ^c

Sub Class Of <u>ElectronicsProduct</u>^C

Hardener Material^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Lca Unit^c

IRI http://w3id.org/CEON/demo/electronics/LCAUnit

Sub Class Of http://qudt.org/schema/qudt/Unit

Laminate Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Matrix Additive M Aterial C

IRI http://w3id.org/CEON/demo/electronics/MatrixAdditiveMAterial

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Metal Material ^c

IRI http://w3id.org/CEON/demo/electronics/MetalMaterial

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Super Class Of

ActinoidsMetal^c
AlkaliMetal^c
AlkalineEarthMetal^c

<u>TransitionalMetal^C</u>

Neodymium Magnet^C

Sub Class Of <u>ElectronicsProduct</u>^C

Named Individuals neodymium magnet xni

Non Metal Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Named Individuals

carbon_material_aⁿⁱ nitrogen_material_aⁿⁱ

Post Consumer Recycled Content^c

IRI http://w3id.org/CEON/demo/electronics/PostConsumerRecycledContent

Sub Class Of http://qudt.org/schema/qudt/Quantity

Pre Consumer Recycled Content^c

IRI http://w3id.org/CEON/demo/electronics/PreConsumerRecycledContent

Sub Class Of http://qudt.org/schema/qudt/Quantity

Prepreg Material C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Rare Earth Material ^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Renewable Content^c

Sub Class Of http://qudt.org/schema/qudt/Quantity

Resin Material ^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Speaker ^C

IRI http://w3id.org/CEON/demo/electronics/Speaker

Sub Class Of ElectronicsProduct^C

Named Individuals speaker_xⁿⁱ

Surface Finish Material^C

Sub Class Of http://w3id.org/CEON/ontology/material/Material

Transitional Metal^C

IRI http://w3id.org/CEON/demo/electronics/TransitionalMetal

Sub Class Of MetalMaterial^C

Virgin Fossil Content^c

Sub Class Of http://qudt.org/schema/qudt/Quantity

Regulation ^c

Named Individuals REACHⁿⁱ

Reach Compliance ^C

Sub Class Of http://w3id.org/CEON/ontology/product/Compliance

Equivalentclass complianceWith value REACH^C

Issuing Resource ^C

Named Individuals ds issue 1ⁿⁱ

Process Participation ^C

IRI http://w3id.org/CEON/ontology/actor/ProcessParticipation

Named Individuals s63ⁿⁱ

Producing Resource^C

Named Individuals

ss_1ⁿⁱ

ss 3ⁿⁱ

Supplying Resource^C

Named Individuals 87ⁿⁱ

Actor ^C

IRI http://w3id.org/CEON/ontology/actorODP/Actor

Named Individuals

Mⁿⁱ

company aⁿⁱ company bⁿⁱ company xⁿⁱ company yⁿⁱ

dismantling_company_bni

Resource Relation ^C

Named Individuals composition ani

Process^C

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

Named Individuals dismantling process 1ⁿⁱ

Object Properties

defined unit of system op

derived coherent unit of system op

exact match op

IRI http://qudt.org/schema/qudt/exactMatch

has dimension vector op

has unit^{op}

IRI http://qudt.org/schema/qudt/hasUnit

participant role op

IRI http://w3id.org/CEON/ontology/actorODP/participantRole

participating actor op

http://w3id.org/CEON/ontology/actorODP/participatingActor

participating resource op

participation in op

Datatype Properties

conversion multiplier dp

iec61360code dp

IRI http://qudt.org/schema/qudt/iec61360Code

numerical value dp

IRI http://qudt.org/schema/qudt/numericalValue

si units expression dp

Lca-Acidification dp

IRI http://w3id.org/CEON/demo/electronics/LCA-Acidification

Range <u>xsd:double</u>

Lca-Climate Change dp

Range xsd:double

Lca-Climate Change Biogenic dp

http://w3id.org/CEON/demo/electronics/LCA-ClimateChangeBiogenic

Range <u>xsd:double</u>

Lca-Climate Change Fossil dp

Range <u>xsd:double</u>

Lca-Ecotoxicity Freshwater dp

Range <u>xsd:double</u>

Lca-Eutrophication Freshwater dp

IRI http://w3id.org/CEON/demo/electronics/LCA-EutrophicationFreshwater

Range xsd:double

Lca-Eutrophication Marine dp

IRI http://w3id.org/CEON/demo/electronics/LCA-EutrophicationMarine

Range <u>xsd:double</u>

Lca-Human Toxicity Cancer dp

Range <u>xsd:double</u>

Lca-Lonising Radition Human Health dp

IRI http://w3id.org/CEON/demo/electronics/LCA-LonisingRaditionHumanHealth

Range <u>xsd:double</u>

Lca-Mineral Use dp

Range xsd:double

Lca-Water Use dp

Range <u>xsd:double</u>

batch number dp

Domain http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects

Range <u>xsd:integer</u>

component diameter dp

Range <u>xsd:double</u>

component length dp

IRI http://w3id.org/CEON/demo/electronics/componentLength

Range <u>xsd:double</u>

date of decomissioning dp

Range xsd:dateTime

date of installation dp

IRI http://w3id.org/CEON/demo/electronics/dateOfInstallation

Range <u>xsd:dateTime</u>

date of production dp

http://w3id.org/CEON/demo/electronics/dateOfProduction

Domain http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects

Range <u>xsd:dateTime</u>

decommission reason dp

IRI http://w3id.org/CEON/demo/electronics/decommissionReason

Range xsd:string

density at25 dp

IRI http://w3id.org/CEON/demo/electronics/densityAt25

Range xsd:double

electrical conductivity dp

Range <u>xsd:double</u>

electrical resistivity dp

Range <u>xsd:double</u>

fatigue resistance dp

IRI http://w3id.org/CEON/demo/electronics/fatigueResistance

fiber elongation at break dp

Range <u>xsd:double</u>

fibre volume content dp

Range <u>xsd:double</u>

flame retardancy dp

Range xsd:boolean

hazardous materials percentage dp

IRI http://w3id.org/CEON/demo/electronics/hazardousMaterialsPercentage

Range xsd:double

high uv resistance dp

IRI http://w3id.org/CEON/demo/electronics/highUVResistance

Range xsd:boolean

instruction of repair dp

Range <u>xsd:string</u>

instruction of use and assembly dp

IRI http://w3id.org/CEON/demo/electronics/instructionOfUseAndAssembly

Range <u>xsd:string</u>

instructionof maintenance dp

IRI http://w3id.org/CEON/demo/electronics/instructionofMaintenance

Range <u>xsd:string</u>

lay up sequence dp

Range <u>xsd:string</u>

location of batch component dp

Range <u>xsd:string</u>

maintenance report dp

http://w3id.org/CEON/demo/electronics/maintenanceReport

Range <u>xsd:string</u>

manufacturing sequence dp

IRI http://w3id.org/CEON/demo/electronics/manufacturingSequence

Range <u>xsd:string</u>

number of recycling cycles dp

product diameter dp

IRI http://w3id.org/CEON/demo/electronics/productDiameter

Range <u>xsd:double</u>

recycling pressure dp

Range <u>xsd:double</u>

recycling process duration dp

IRI http://w3id.org/CEON/demo/electronics/recyclingProcessDuration

Range <u>xsd:double</u>

recycling process name dp

Range <u>xsd:string</u>

recycling temperature dp

http://w3id.org/CEON/demo/electronics/recyclingTemperature

Range xsd:double

refractive index at25 dp

Range <u>xsd:double</u>

reported damage dp

Range xsd:string

reported repairs dp

Range xsd:string

sample length ^{dp}

http://w3id.org/CEON/demo/electronics/sampleLength

Range xsd:double

shear strength $^{\mbox{\scriptsize dp}}$

Range xsd:double

site address ^{dp}				
IRI	http://w3id.org/CEON/demo/electronics/siteAddress			
Range	xsd:string			
site city dp				
IRI	http://w3id.org/CEON/demo/electronics/siteCity			
Range	xsd:string			
site country dp				
IRI	http://w3id.org/CEON/demo/electronics/siteCountry			
Range	xsd:string			
site name dp				
IRI	http://w3id.org/CEON/demo/electronics/siteName			
Range	xsd:string			
site zip code dp				
IRI	http://w3id.org/CEON/demo/electronics/siteZipCode			
Range	xsd:string			
size level ^{dp}				
IRI	http://w3id.org/CEON/demo/electronics/sizeLevel			
Range	xsd:double			
stiffness dp				
IRI	http://w3id.org/CEON/demo/electronics/stiffness			
Range	xsd:double			
tensile modulus ^{dp}				
IRI	http://w3id.org/CEON/demo/electronics/tensileModulus			
Range	<u>xsd:double</u>			

tensile strength dp

IRI http://w3id.org/CEON/demo/electronics/tensileStrength

Range xsd:double

transition temperature dp

IRI http://w3id.org/CEON/demo/electronics/transitionTemperature

xsd:double Range

viscosity at25 dp

IRI http://w3id.org/CEON/demo/electronics/viscosityAt25

xsd:double Range

participation time point dp

IRI http://w3id.org/CEON/ontology/actorODP/participationTimePoint

Annotation Properties

expression ap

IRI http://qudt.org/schema/qudt/expression

participating object ap

IRI http://w3id.org/CEON/ontology/actorODP/participatingObject

participating subject ap

http://w3id.org/CEON/ontology/actorODP/participatingSubject IRI

statement about ^{ap}

IRI http://w3id.org/CEON/ontology/provenance/statementAbout

Namespaces

```
http://w3id.org/CEON/demo/electronics/
dcterms
    http://purl.org/dc/terms/
```

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#
vann
    http://purl.org/vocab/vann/
xsd
    http://www.w3.org/2001/XMLSchema#
```

Legend

С	Classes
ор	Object Properties
dp	Datatype Properties
ар	Annotation Properties