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

Derived Unit ^{C}

IRI	http://qudt.org/schema/qudt/DerivedUnit
Is Defined By	http://qudt.org/2.1/schema/qudt
Description	A 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}

IRI	http://w3id.org/CEON/demo/electronics/ActinoidsMetal
Sub Class Of	MetalMaterial ^{C}

Adhesive Material ^{C}

IRI	http://w3id.org/CEON/demo/electronics/AdhesiveMaterial
Sub Class Of	http://w3id.org/CEON/ontology/material/Material

Alkali Metal [C]

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

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 ElectronicsProduct [C]

Bromide Material [C]

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

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

Catalyst Material [C]

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

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

Core Material [C]

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

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

Coupling Cone [C]

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

Sub Class Of ElectronicsProduct [C]

Damper [C]

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

Sub Class Of ElectronicsProduct [C]

Named Individuals damper_x [ni]

Double Magnet ^C

IRI	http://w3id.org/CEON/demo/electronics/DoubleMagnet
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	AluminumDomeTweeter ^C CouplingCone ^C Damper ^C DoubleMagnet ^C Frame ^C NeodymiumMagnet ^C Speaker ^C

Electronics Product Sourcing Component Relation ^C

IRI	http://w3id.org/CEON/demo/electronics/ElectronicsProductSourcingComponentRelation
Sub Class Of	http://w3id.org/CEON/ontology/provenance/Statement

Fibre M Aterial ^C

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

IRI	http://w3id.org/CEON/demo/electronics/Frame
Sub Class Of	ElectronicsProduct ^C

Hardener Material ^C

IRI	http://w3id.org/CEON/demo/electronics/HardenerMaterial
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]

IRI `http://w3id.org/CEON/demo/electronics/LaminateMaterial`

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]
TransitionalMetal [C]

Neodymium Magnet [C]

IRI `http://w3id.org/CEON/demo/electronics/NeodymiumMagnet`

Sub Class Of ElectronicsProduct [C]

Named Individuals neodymium_magnet_x [ni]

Non Metal Material [C]

IRI `http://w3id.org/CEON/demo/electronics/NonMetalMaterial`

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

Named Individuals
carbon_material_a [ni]
nitrogen_material_a [ni]

Post Consumer Recycled Content [C]

IRI http://w3id.org/CEON/demo/electronics/PostConsumerRecycled
Content

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

Pre Consumer Recycled Content [C]

IRI http://w3id.org/CEON/demo/electronics/PreConsumerRecycledC
ontent

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

Prepreg Material [C]

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

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

Rare Earth Material [C]

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

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

Renewable Content [C]

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

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

Resin Material [C]

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

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_x [ni]

Surface Finish Material [C]

IRI http://w3id.org/CEON/demo/electronics/SurfaceFinishMateria
l

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]

IRI	`http://w3id.org/CEON/demo/electronics/VirginFossilContent`
Sub Class Of	http://qudt.org/schema/qudt/Quantity

Regulation [C]

IRI	`http://w3id.org/CEON/demo/electronics/Regulation`
Named Individuals	REACH [ni]

Reach Compliance [C]

IRI	`http://w3id.org/CEON/demo/electronics/REACHCompliance`
Sub Class Of	http://w3id.org/CEON/ontology/product/Compliance
Equivalentclass	complianceWith value REACH [C]

Issuing Resource [C]

IRI	`http://w3id.org/CEON/ontology/actor/IssuingResource`
Named Individuals	ds_issue_1 [ni]

Process Participation [C]

IRI	`http://w3id.org/CEON/ontology/actor/ProcessParticipation`
Named Individuals	s63 [ni]

Producing Resource [C]

IRI	`http://w3id.org/CEON/ontology/actor/ProducingResource`
Named Individuals	ss_1 [ni] ss_2 [ni] ss_3 [ni]

Supplying Resource [C]

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

Named Individuals s7 [ni]

Actor [C]

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

Named Individuals

M [ni]
company_a [ni]
company_b [ni]
company_x [ni]
company_y [ni]
dismantling_company_b [ni]

Resource Relation [C]

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

Named Individuals composition_a [ni]

Process [C]

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

Named Individuals dismantling_process_1 [ni]

Object Properties

defined unit of system [op]

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

derived coherent unit of system [op]

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

exact match [op]

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

has dimension vector [op]

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

has unit op	
IRI	http://qudt.org/schema/qudt/hasUnit

participant role op	
IRI	http://w3id.org/CEON/ontology/actorODP/participantRole

participating actor op	
IRI	http://w3id.org/CEON/ontology/actorODP/participatingActor

participating resource op	
IRI	http://w3id.org/CEON/ontology/actorODP/participatingResource

participation in op	
IRI	http://w3id.org/CEON/ontology/actorODP/participationIn

Datatype Properties

conversion multiplier dp	
IRI	http://qudt.org/schema/qudt/conversionMultiplier

iec61360code dp	
IRI	http://qudt.org/schema/qudt/iec61360Code

numerical value dp	
IRI	http://qudt.org/schema/qudt/numericalValue

si units expression dp	
IRI	http://qudt.org/schema/qudt/siUnitsExpression

Lca-Acidification dp	
IRI	http://w3id.org/CEON/demo/electronics/LCA-Acidification
Range	xsd:double

Lca-Climate Change ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/LCA-ClimateChange
Range	xsd:double

Lca-Climate Change Biogenic ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/LCA-ClimateChangeBiogenic
Range	xsd:double

Lca-Climate Change Fossil ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/LCA-ClimateChangeFossil
Range	xsd:double

Lca-Ecotoxicity Freshwater ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/LCA-EcotoxicityFreshwater
Range	xsd:double

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	xsd:double

Lca-Human Toxicity Cancer ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/LCA-HumanToxicityCancer
Range	xsd:double

Lca-Lonising Radition Human Health ^{dp}

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

Range xsd:double

Lca-Mineral Use ^{dp}

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

Range xsd:double

Lca-Water Use ^{dp}

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

Range xsd:double

batch number ^{dp}

IRI `http://w3id.org/CEON/demo/electronics/batchNumber`

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

Range xsd:integer

component diameter ^{dp}

IRI `http://w3id.org/CEON/demo/electronics/componentDiameter`

Range xsd:double

component length ^{dp}

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

Range xsd:double

date of decomissioning ^{dp}

IRI `http://w3id.org/CEON/demo/electronics/dateOfDecomissioning`

Range xsd:dateTime

date of installation ^{dp}

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

Range xsd:dateTime

date of production ^{dp}

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

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

Range xsd:dateTime

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}

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

Range xsd:double

electrical resistivity ^{dp}

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

Range xsd:double

fatigue resistance ^{dp}

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

fiber elongation at break ^{dp}

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

Range xsd:double

fibre volume content ^{dp}

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

Range xsd:double

flame retardancy ^{dp}

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

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}

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

Range   xsd:string

---

instruction of use and assembly ^{dp}

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

Range   xsd:string

---

instructionof maintenance ^{dp}

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

Range   xsd:string

---

lay up sequence ^{dp}

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

Range   xsd:string

---

location of batch component ^{dp}

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

Range   xsd:string

maintenance report ^{dp}

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

Range xsd:string

manufacturing sequence ^{dp}

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

Range xsd:string

number of recycling cycles ^{dp}

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

product diameter ^{dp}

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

Range xsd:double

recycling pressure ^{dp}

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

Range xsd:double

recycling process duration ^{dp}

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

Range xsd:double

recycling process name ^{dp}

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

Range xsd:string

recycling temperature ^{dp}

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

Range xsd:double

refractive index at25 ^{dp}

IRI http://w3id.org/CEON/demo/electronics/refractiveIndexAt25

Range xsd:double

reported damage ^{dp}

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

Range xsd:string

reported repairs ^{dp}

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

Range xsd:string

sample length ^{dp}

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

Range xsd:double

shear strength ^{dp}

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

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	xsd:double

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
Range	xsd:double

viscosity at25 ^{dp}

IRI	http://w3id.org/CEON/demo/electronics/viscosityAt25
Range	xsd:double

<table>
<tr><td colspan="2">participation time point ^{dp}</td></tr>
<tr><td>IRI</td><td>http://w3id.org/CEON/ontology/actorODP/participationTimePoint</td></tr>
</table>

Annotation Properties

<table>
<tr><td colspan="2">expression ^{ap}</td></tr>
<tr><td>IRI</td><td>http://qudt.org/schema/qudt/expression</td></tr>
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<table>
<tr><td colspan="2">participating object ^{ap}</td></tr>
<tr><td>IRI</td><td>http://w3id.org/CEON/ontology/actorODP/participatingObject</td></tr>
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<table>
<tr><td colspan="2">participating subject ^{ap}</td></tr>
<tr><td>IRI</td><td>http://w3id.org/CEON/ontology/actorODP/participatingSubject</td></tr>
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<table>
<tr><td colspan="2">statement about ^{ap}</td></tr>
<tr><td>IRI</td><td>http://w3id.org/CEON/ontology/provenance/statementAbout</td></tr>
</table>

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

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties