

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
<u>Is Defined By</u>	http://qudt.org/2.1/schema/qudt
<u>Description</u>	A DerivedUnit is a type specification for units that are derived from other units.
<u>Sub Class Of</u>	http://qudt.org/schema/qudt/Unit
<u>Named Individuals</u>	pascal second ⁿⁱ

Actinoids Metal^C

IRI	http://w3id.org/CEON/demo/electronics/ActinoidsMetal
<u>Sub Class Of</u>	MetalMaterial ^C

Adhesive Material^C

IRI	http://w3id.org/CEON/demo/electronics/AdhesiveMaterial
<u>Sub Class Of</u>	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_xⁿⁱ](#)

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 Material^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_xⁿⁱ](#)

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_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

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_xⁿⁱ](#)

Surface Finish Material^C

IRI <http://w3id.org/CEON/demo/electronics/SurfaceFinishMaterial>

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 [REACHⁿⁱ](#)

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/actor0DP/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/actor0DP/ResourceRelation>

Named Individuals [composition_a](#)ⁿⁱ

Process^C

IRI <http://w3id.org/CEON/ontology/process0DP/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/actor0DP/participantRole
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participating actor^{op}

IRI	http://w3id.org/CEON/ontology/actor0DP/participatingActor
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participating resource^{op}

IRI	http://w3id.org/CEON/ontology/actor0DP/participatingResource
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participation in^{op}

IRI	http://w3id.org/CEON/ontology/actor0DP/participationIn
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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
<u>Range</u>	xsd:double

date of decomissioning ^{dp}	
IRI	http://w3id.org/CEON/demo/electronics/dateOfDecomissioning
<u>Range</u>	xsd:dateTime

date of installation ^{dp}	
IRI	http://w3id.org/CEON/demo/electronics/dateOfInstallation
<u>Range</u>	xsd:dateTime

date of production ^{dp}	
IRI	http://w3id.org/CEON/demo/electronics/dateOfProduction
<u>Domain</u>	http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects
<u>Range</u>	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
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fiber elongation at break^{dp}

IRI	http://w3id.org/CEON/demo/electronics/fiberElongationAtBreak
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<u>Range</u>	xsd:double
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fibre volume content^{dp}

IRI	http://w3id.org/CEON/demo/electronics/fibreVolumeContent
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<u>Range</u>	xsd:double
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flame retardancy^{dp}

IRI	http://w3id.org/CEON/demo/electronics/flameRetardancy
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<u>Range</u>	xsd:boolean
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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
<u>Range</u>	xsd:double

transition temperature ^{dp}	
IRI	http://w3id.org/CEON/demo/electronics/transitionTemperature
<u>Range</u>	xsd:double

viscosity at25 ^{dp}	
IRI	http://w3id.org/CEON/demo/electronics/viscosityAt25
<u>Range</u>	xsd:double

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}

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

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

c	Classes
op	Object Properties
dp	Data type Properties
ap	Annotation Properties