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 electronics product [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	electronics product [c]

Damper [c]

IRI	http://w3id.org/CEON/demo/electronics/Damper
Sub Class Of	electronics product [c]
Named Individuals	damper_x [ni]

Double Magnet [c]

IRI	http://w3id.org/CEON/demo/electronics/DoubleMagnet
Sub Class Of	electronics product [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	electronics product [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
Description	Units for LCA (Life Cycle Assessment) environmental impact indexes
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	electronics product [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 Customer Recycled Content [C]

IRI	http://w3id.org/CEON/demo/electronics/PostCustomerRecycledContent
Sub Class Of	http://qudt.org/schema/qudt/Quantity
Named Individuals	content_1 [ni]

Pre Customer Recycled Content [C]

IRI	http://w3id.org/CEON/demo/electronics/PreCustomerRecycledContent
Description	The recycled content during the process of manufacturing or delivering products before delivering to a customer.
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
Description	The content of product/material that can be renewed.
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	electronics product [c]
Named Individuals	speaker_x [ni]

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

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
Description	batchNumber represents the identical information of a batch of objects.
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
Description	dateOfDecomissioning represents the date of decomissioning of a batch of products.
Range	xsd:dateTime

Date of installation dp

IRI	http://w3id.org/CEON/demo/electronics/dateOfInstallation
Description	dateOfInstallation represents the date of installation of a batch of products.
Range	xsd:dateTime

Date of production dp

IRI	http://w3id.org/CEON/demo/electronics/dateOfProduction
Description	dateOfProduction represents the date of production of a batch of products.
Domain	http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects
Range	xsd:dateTime

decommission reason dp

IRI	http://w3id.org/CEON/demo/electronics/decommissionReason
Description	The reason for a decommission operation.
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
Description	Flame Retardancy property is used to represent whether a product or content resist or delay the ignition and spread of fire. This property has 'True' of 'False' values.
Range	xsd:boolean

hazardous materials percentage dp

IRI	http://w3id.org/CEON/demo/electronics/hazardousMaterialsPercentage
Description	The percentage of hazardous materials.
Range	xsd:double

high uv resistance dp

IRI	http://w3id.org/CEON/demo/electronics/highUVResistance
Description	High UV Resistance property is used to represent whether a product or content withstand the damaging effects of ultraviolet (UV) radiation. It has values 'True' or 'False'.
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. The property may be replaced by a location module in the future.locationOfBatchComponent represents the location information of a component object within a batch. 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
Description	To represent the pressure condition in a recycling process.
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
Description	To represent the temperature condition in a recycling process.
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
Description	reportedDamage is used to represent damage information.
Range	xsd:string

reported repairs dp

IRI	http://w3id.org/CEON/demo/electronics/reportedRepairs
Description	reportedRepairs is used to represent repairing information.
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
Description	The address of the site. This property may be replaced by a location module in the future.
Range	xsd:string

site city dp

IRI	http://w3id.org/CEON/demo/electronics/siteCity
Description	The city of the site. This property may be replaced by a location module in the future.
Range	xsd:string

site country dp

IRI	http://w3id.org/CEON/demo/electronics/siteCountry
Description	The country of the site. This property may be replaced by a location module in the future.
Range	xsd:string

site name dp

IRI	http://w3id.org/CEON/demo/electronics/siteName
Description	The name of the site where the batch of products is located. This property may be replaced by a location module in the future.
Range	xsd:string

site zip code dp

IRI	http://w3id.org/CEON/demo/electronics/siteZipCode
Description	The Zip Code of the site. This property may be replaced by a location module in the future.
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
Description	Tensile Strength is a used to represent the ability of a product or some content to resist breaking when it is pulled apart. It is the maximum stress that a product can withstand before breaking.
Range	xsd:double

transition temperature dp

IRI	http://w3id.org/CEON/demo/electronics/transitionTemperature
Description	Tg
Range	xsd:double

viscosity at25 dp

IRI	http://w3id.org/CEON/demo/electronics/viscosityAt25
Range	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	Datatype Properties

Annotation Properties