# Circular Economy Ontology Network (CEON) - Electronics Module

### Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Electronics Module

**Publisher** 

Onto-DESIDE

Creator

Huanyu Li

Contributor

Eva Blomqvist

**Date Created** 

2023-09-14

**Date Issued** 

2025-06-30

License

https://creativecommons.org/licenses/by/4.0/

Version Iri

http://w3id.org/CEON/demo/electronics/0.2/

**Version Info** 

0.2

**Prior Version** 

0.1

**Preferred Namespace Prefix** 

ceon-demo-electronics

Preferred Namespace Uri

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

**Description** 

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

## Classes

Derived Unit <sup>c</sup>	
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 <sup>ni</sup>

Actinoids Metal C

Sub Class Of MetalMaterial<sup>C</sup>

Adhesive Material <sup>c</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Alkali Metal<sup>c</sup>

Sub Class Of MetalMaterial<sup>C</sup>

Alkaline Earth Metal <sup>c</sup>

Sub Class Of MetalMaterial<sup>C</sup>

Aluminum Dome Tweeter C

Sub Class Of ElectronicsProduct<sup>C</sup>

Bromide Material <sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Catalyst Composition <sup>C</sup>

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

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/MatterComposition

In Domain Of <u>hasCatalystCompositionValue</u> op

Restriction <u>hasCatalystCompositionValue op only CatalystComposition composition on the language of the langua</u>

Catalyst Composition Value <sup>c</sup>

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

alue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of <u>hasCatalystCompositionValue op</u>

Catalyst Material<sup>C</sup>

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

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Chemical Element Composition <sup>c</sup>

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

sition

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/MatterComposition

In Domain Of hasChemicalElementCompositionValue op

Restriction hasChemicalElementCompositionValue op only ChemicalElementComposition on hasChemicalElementComposition on hasChemicalEle

Chemical Element Composition Value <sup>C</sup>

sitionValue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of <a href="hasChemicalElementCompositionValue">hasChemicalElementCompositionValue</a> op

Restriction <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> value

<u>ChemicalElementCompositionValue</u><sup>C</sup>

Conductivity <sup>C</sup>

Sub Class Of http://gudt.org/schema/gudt/Ouantity

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasConductivityValue op

In Range Of hasConductivity op

Restriction <u>hasConductivityValue</u> op only <u>Conductivity</u> only <u>Conductivity</u>

Conductivity Value <sup>C</sup>

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

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

С

In Range Of hasConductivityValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only ConductivityValue<sup>c</sup>

Core Material<sup>C</sup>

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

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Coupling Cone C

Sub Class Of ElectronicsProduct<sup>C</sup>

Damper <sup>C</sup>

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

Named Individuals damper\_xni

Density At25<sup>C</sup>

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

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasDensityAt25Value op

In Range Of hasDensityAt25 op

Restriction hasDensityAt25Value op only DensityAt25 c

Density At25Value <sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

nitp://quat.org/schema/quat/nasonit

In Range Of hasDensityAt25Value op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="DensityAt25Value">DensityAt25Value</a> only <a href="DensityAt25Value

Depth <sup>c</sup>

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

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasDepthValue op

In Range Of hasDepth<sup>op</sup>

Restriction <u>hasDepthValue</u><sup>op</sup> only <u>Depth</u><sup>c</sup>

Depth Value <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit only http://qudt.org/schema/qudt/Unit c

and <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> one

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of hasDepthValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="DepthValue">DepthValue</a> only <a hre

Diameter <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasDiameterValue op

In Range Of hasDiameter op

Restriction <u>hasDiameterValue</u> op only <u>Diameter</u> only <u>Diameter</u>

Diameter Value <sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

Intp://quat.org/scrienta

In Range Of hasDiameterValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="DiameterValue">DiameterValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">DiameterValue</a> only <a href="http://qudt.org/schema/qudt

Double Magnet<sup>C</sup>

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

Super Class Of Frame<sup>c</sup>

Electronics Product<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a>

**Super Class Of** 

<u>AluminumDomeTweeter<sup>C</sup></u>

CouplingCone<sup>c</sup>
Damper<sup>c</sup>
DoubleMagnet<sup>c</sup>
NeodymiumMagnet<sup>c</sup>

<u>Speaker</u><sup>c</sup>

Electronics Product Sourcing Component Relation C

urcingComponentRelation

Sub Class Of <a href="http://w3id.org/CEON/ontology/provenance/Statement">http://w3id.org/CEON/ontology/provenance/Statement</a>

Fastening Method <sup>C</sup>

Named Individuals PressFitOrFriction ni

Fiber Elongation At Break<sup>c</sup>

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

ak

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of <a href="hasFiberElongationAtBreakValue">hasFiberElongationAtBreakValue</a> op

In Range Of hasFiberElongationAtBreak op

Restriction hasFiberElongationAtBreakValue op only FiberElongationAtBreak

Fiber Elongation At Break Value <sup>C</sup>

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

akValue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> ome

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of <u>hasFiberElongationAtBreakValue</u>op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only FiberElongationAtBreakValue<sup>C</sup>

Fiber Volume Content C

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasFiberVolumeContentValue op

In Range Of hasFiberVolumeContent op

Restriction <u>hasFiberVolumeContentValue</u><sup>op</sup> only <u>FiberVolumeContent</u><sup>c</sup>

Fiber Volume Content Value <sup>C</sup>

lue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

 $\frac{http://qudt.org/schema/qudt/hasUnit}{op} some \\ \frac{http://qudt.org/schema/qudt/Unit}{op} only \\ \frac{http://qudt.org/sc$ 

С

In Range Of hasFiberVolumeContentValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:FiberVolumeContentValue">FiberVolumeContentValue</a> only

Fibre Material <sup>c</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Mater

Flame Retardant Material <sup>c</sup>

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

al

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Frame <sup>c</sup>

Sub Class Of DoubleMagnet<sup>C</sup>

Hardener Material<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Hazardous Material Percentage <sup>c</sup>

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

centage

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasHazardousMaterial op

Restriction

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> value <u>HazardousMaterialPercentage</u><sup>c</sup>

http://qudt.org/schema/qudt/numericValue\_only\_HazardousMaterialPercentage\_C

Lca Acidification <sup>C</sup>

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

Sub Class Of LCAValue<sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAAcidification<sup>c</sup>

Lca Climate Change <sup>c</sup>

**Sub Class Of** 

<u>LCAValue</u><sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAClimateChange<sup>c</sup>

Lca Climate Change Biogenic<sup>C</sup>

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

enic

**Sub Class Of** 

LCAValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAClimateChangeBiogenic<sup>C</sup>

Lca Climate Change Fossil<sup>c</sup>

il

Sub Class Of LCAValue<sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAClimateChangeFossil<sup>C</sup>

Lca Ecotoxicity Fresh Water <sup>C</sup>

ater

Sub Class Of

LCAValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue\_only">http://qudt.org/schema/qudt/numericValue\_only</a> LCAEcotoxicityFreshWater<sup>C</sup>

Lca Eutrophication Fresh Water <sup>c</sup>

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

shWater

**Sub Class Of** 

<u>LCAValue</u><sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue-only-LCAEutrophicationFreshWater">http://qudt.org/schema/qudt/numericValue-only-LCAEutrophicationFreshWater</a>

Lca Eutrophication Marine <sup>c</sup>

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

ine

**Sub Class Of** 

LCAValue<sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAEutrophicationMarine<sup>c</sup>

Lca Human Toxicity Cancer<sup>c</sup>

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

er

Sub Class Of

<u>LCAValue</u><sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction http://qudt.org/schema/qudt/numericValue\_only\_LCAHumanToxicityCancer<sup>C</sup>

Lca Lonising Radition Human Health <sup>C</sup>

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

umanHealth

**Sub Class Of** 

<u>LCAValue</u><sup>C</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only

<u>LCALonisingRaditionHumanHealth</u><sup>c</sup>

Lca Mineral Use <sup>C</sup>

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

**Sub Class Of** 

<u>LCAValue</u><sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">LCAMineralUse</a> only

Lca Unit<sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Unit">http://qudt.org/schema/qudt/Unit</a>

Lca Value <sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasLCAValue op

**Super Class Of** 

LCAAcidification <sup>C</sup>

<u>LCAClimateChange</u><sup>C</sup>

LCAClimateChangeBiogenic<sup>C</sup>
LCAClimateChangeFossil<sup>C</sup>
LCAEcotoxicityFreshWater<sup>C</sup>
LCAEutrophicationFreshWater<sup>C</sup>
LCAEutrophicationMarine<sup>C</sup>
LCAHumanToxicityCancer<sup>C</sup>

<u>LCALonisingRaditionHumanHealth</u><sup>c</sup>

<u>LCAMineralUse<sup>C</sup></u> <u>LCAWaterUse<sup>C</sup></u>

Lca Water Use <sup>C</sup>

Sub Class Of

LCAValue<sup>c</sup>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only LCAUnit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some LCAUnit<sup>c</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only LCAWaterUse<sup>C</sup>

Laminate Material<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Length <sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Range Of hasLength<sup>op</sup>

Length Value <sup>c</sup>

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

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnit op some http://qudt.org/schema/qudt/Unit c and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

Restriction http://qudt.org/schema/qudt/numericValue only LengthValue<sup>C</sup>

Life Span Time <sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasLifeSpanTimeValue op

In Range Of hasLifeSpanTime op

Restriction hasLifeSpanTimeValue op only LifeSpanTimeC

Life Span Time Value <sup>c</sup>

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

http://qudt.org/schema/qudt/QuantityValue **Sub Class Of** 

In Range Of hasLifeSpanTimeValue op

Restriction

http://qudt.org/schema/qudt/hasUnit op value LifeSpanTimeValue C http://qudt.org/schema/qudt/numericValue\_only\_LifeSpanTimeValueC

Material Grade <sup>c</sup>

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

Named Individuals N35Hni

Matrix Additive M Aterial C

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

al

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Maximum Energy Product<sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasMaximumEnergyProductValue<sup>op</sup>

In Range Of hasMaximumEnergyProduct<sup>op</sup>

Restriction hasMaximumEnergyProductValue<sup>op</sup> only MaximumEnergyProduct<sup>C</sup>

Maximum Energy Product Value <sup>C</sup>

Value

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unitop

and <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of hasMaximumEnergyProductValue<sup>op</sup>

Restriction <a href="http://gudt.org/schema/qudt/numericValue">http://gudt.org/schema/qudt/numericValue</a> only <a href="mailto:MaximumEnergyProductValue">MaximumEnergyProductValue</a> only

Metal Composition <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/MatterComposition

In Domain Of <a href="hasMetalCompositionValue">hasMetalCompositionValue</a> op

Restriction hasMetalCompositionValue op only MetalComposition on only M

Metal Composition Value <sup>C</sup>

е

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasMetalCompositionValue op

Metal Material <sup>c</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Mater

**Super Class Of** 

ActinoidsMetal<sup>c</sup>
AlkaliMetal<sup>c</sup>
AlkalineEarthMetal<sup>c</sup>
TransitionalMetal<sup>c</sup>

Motor Speed Type C

Named Individuals continuous variable speed ni

Motor Type <sup>C</sup>

Named Individuals Induction ni

Neodymium Magnet<sup>C</sup>

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

Sub Class Of ElectronicsProduct<sup>C</sup>

Named Individuals neodymium\_magnet\_x<sup>ni</sup>

Non Metal Material <sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

**Named Individuals** 

<u>carbon\_material\_a</u><sup>ni</sup> <u>nitrogen\_material\_a</u><sup>ni</sup>

Operating Voltage <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasOperatingVoltageValue op

In Range Of <a href="hasOperatingVoltage">hasOperatingVoltage</a> op

Restriction <u>hasOperatingVoltageValue</u> only <u>OperatingVoltage</u> only <u>OperatingVoltage</u>

Operating Voltage Value <sup>c</sup>

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

е

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit<sup>c</sup>

and <a href="http://qudt.org/schema/qudt/hasUnit">http://qudt.org/schema/qudt/hasUnit</a> ome

http://qudt.org/schema/qudt/Unit<sup>C</sup>

In Range Of hasOperatingVoltageValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">OperatingVoltageValue</a>

Post Consumer Recycled Content<sup>C</sup>

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

Content

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/ProductComposition

In Domain Of hasPostConsumerRecycledContentValue op

Restriction hasPostConsumerRecycledContentValue op only

PostConsumerRecycledContent<sup>C</sup>

Post Consumer Recycled Content Value <sup>c</sup>

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

ContentValue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasPostConsumerRecycledContentValue op

Restriction

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> value PostConsumerRecycledContentValue<sup>c</sup> http://qudt.org/schema/qudt/numericValue\_only

PostConsumerRecycledContentValue<sup>C</sup>

Post Customer Recycled Content<sup>C</sup>

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

Content

Named Individuals content 1<sup>ni</sup>

Pre Consumer Recycled Content<sup>C</sup>

ontent

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/ProductComposition

In Domain Of hasPreConsumerRecycledContentValue op

Restriction hasPreConsumerRecycledContentValue op only PreConsumerRecycledContent

<del>...</del>

## Pre Consumer Recycled Content Value <sup>C</sup>

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

ontentValue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of <u>hasPreConsumerRecycledContentValue</u> op

Restriction

http://qudt.org/schema/qudt/hasUnitop value

<u>PreConsumerRecycledContentValue</u><sup>C</sup>

http://qudt.org/schema/qudt/numericValue\_only

<u>PreConsumerRecycledContentValue</u><sup>C</sup>

#### Prepreg Material<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

### Rare Earth Composition <sup>C</sup>

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

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/product/MatterComposition

In Domain Of hasRareEarthCompositionValue op

Restriction hasRareEarthCompositionValue op only RareEarthComposition c

#### Rare Earth Composition Value C

Value

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasRareEarthCompositionValue op

Rare Earth Material<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Rated Load Amps<sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasRatedLoadAmpsValue op

In Range Of hasRatedLoadAmps op

Restriction hasRatedLoadAmpsValue<sup>op</sup> only RatedLoadAmps<sup>c</sup>

Rated Load Amps Value <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasRatedLoadAmpsValue<sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only RatedLoadAmpsValue

Rated Power Output<sup>c</sup>

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

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

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasRatedPowerOutputValue<sup>op</sup>

In Range Of hasRatedPowerOutput<sup>op</sup>

Restriction <u>hasRatedPowerOutputValue^op</u> only <u>RatedPowerOutputCoutputC</u>

Rated Power Output Value C

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

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unit

In Range Of hasRatedPowerOutputValue op

Restriction http://qudt.org/schema/qudt/numericValue\_only RatedPowerOutputValue<sup>c</sup>

Rated Rpm<sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasRatedRPMValue op

In Range Of hasRatedRPM<sup>op</sup>

Restriction hasRatedRPMValue op only RatedRPMC

Rated Rpm Value C

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

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue

http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit c

and http://qudt.org/schema/qudt/hasUnitop some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of hasRatedRPMValue op

Restriction http://qudt.org/schema/qudt/numericValue\_only\_RatedRPMValue\_c

Recycling Pressure <sup>C</sup>

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

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

Restriction hasRecyclingPressureValue op only RecyclingPressure c Recycling Pressure Value <sup>c</sup>

ue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/Unit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasRecyclingPressureValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue-only-RecyclingPressureValue">http://qudt.org/schema/qudt/numericValue-only-RecyclingPressureValue</a>

Recycling Process Duration <sup>c</sup>

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

tion

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/Unit only http://qudt.org/schema/qudt/Unit

С

In Range Of <u>hasRecyclingProcessDuration</u>op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="http://qudt.org/schema/qudt/numericValue">RecyclingProcessDuration</a> <sup>c</sup>

Recycling Temperature Value <sup>C</sup>

Value

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://gudt.org/schema/qudt/hasUnit<sup>op</sup> only http://gudt.org/schema/qudt/Unit<sup>c</sup>

and http://qudt.org/schema/qudt/hasUnit op some

http://qudt.org/schema/qudt/Unit<sup>c</sup>

In Range Of hasRecyclingProcessTemperature op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only RecyclingTemperatureValue<sup>C</sup>

Refractive Index At25<sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Range Of hasRefractiveIndexAt25<sup>op</sup>

Restriction hasRefractiveIndexAt25<sup>op</sup> only RefractiveIndexAt25<sup>c</sup>

Refractive Index At25Value<sup>C</sup>

IRI http://w3id.org/CEON/demo/electronics/RefractiveIndexAt25V

alue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

Restriction <a href="http://gudt.org/schema/gudt/numericValue-only-RefractiveIndexAt25Value">http://gudt.org/schema/gudt/numericValue-only-RefractiveIndexAt25Value</a>

Remanent Magnetic Flux Density<sup>c</sup>

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

Density

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

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasRemanentMagneticFluxDensityValue op

In Range Of hasRemanentMagneticFluxDensity<sup>op</sup>

Restriction hasRemanentMagneticFluxDensityValue op only RemanentMagneticFluxDensity

С

Remanent Magnetic Flux Density Value <sup>c</sup>

DensityValue

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

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

C

In Range Of hasRemanentMagneticFluxDensityValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only

RemanentMagneticFluxDensityValue<sup>c</sup>

Renewable Content<sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/ProductComposition

In Domain Of hasRenewableContentValue op

Restriction hasRenewableContentValue op only RenewableContentC

Renewable Content Value <sup>c</sup>

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

е

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasRenewableContentValue op

Restriction

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> value RenewableContentValue<sup>C</sup>

http://qudt.org/schema/qudt/numericValue\_only RenewableContentValue\_c

Resin Material<sup>C</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Resistivity <sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasResistivityValue op

Restriction hasResistivityValue<sup>op</sup> only Resistivity<sup>c</sup>

Resistivity Value <sup>C</sup>

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

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasResistivityValue op

Restriction http://qudt.org/schema/qudt/numericValue only ResistivityValue<sup>C</sup>

Shape <sup>c</sup>

Sub Class Of <a href="http://w3id.org/CEON/ontology/resourceODP/ResourceProperty">http://w3id.org/CEON/ontology/resourceODP/ResourceProperty</a>

In Range Of hasShape op

Named Individuals cylinder<sup>ni</sup>

Shear Strength <sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasShearStrengthValue op

In Range Of hasShearStrength<sup>op</sup>

Restriction hasShearStrengthValue op only ShearStrengthc

Shear Strength Value <sup>c</sup>

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

**Sub Class Of** http://gudt.org/schema/gudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnit op some http://qudt.org/schema/qudt/Unit c and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

In Range Of hasShearStrengthValue op

Restriction http://qudt.org/schema/qudt/numericValue only ShearStrengthValue C

Speaker <sup>c</sup>

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

**Sub Class Of** ElectronicsProduct<sup>C</sup>

Named Individuals speaker xni

Stiffness<sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

**In Domain Of** hasStiffnessValue op

In Range Of hasStiffness<sup>op</sup>

Restriction hasStiffnessValue op only Stiffness c Stiffness Value <sup>C</sup>

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

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup>

 $\textit{and} \ \underline{\text{http://qudt.org/schema/qudt/hasUnit}} \\ \text{only} \ \underline{\text{http://qudt.org/schema/qudt/Unit}} \\$ 

С

In Range Of hasStiffnessValue op

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only StiffnessValue<sup>C</sup>

Surface Finish Material C

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

ι

Sub Class Of <a href="http://w3id.org/CEON/ontology/material/Material">http://w3id.org/CEON/ontology/material/Material</a>

Tensile Modulus<sup>C</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasTensileModulusValue op

In Range Of hasTensileModulus op

Restriction <u>hasTensileModulusValue<sup>op</sup> only TensileModulus<sup>c</sup></u>

Tensile Modulus Value <sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnit<sup>op</sup> only http://qudt.org/schema/qudt/Unit

С

In Range Of hasTensileModulusValue<sup>op</sup>

Restriction <a href="http://qudt.org/schema/qudt/numericValue">http://qudt.org/schema/qudt/numericValue</a> only <a href="mailto:TensileModulusValue">TensileModulusValue</a> only

Tensile Strength <sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasTensileStrengthValue op

In Range Of hasTensileStrength<sup>op</sup>

Restriction hasTensileStrengthValue op only TensileStrength c

Tensile Strength Value <sup>C</sup>

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

**Sub Class Of** http://gudt.org/schema/gudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

In Range Of hasTensileStrengthValue op

Restriction http://qudt.org/schema/qudt/numericValue\_only\_TensileStrengthValue\_c

Transition Temperature <sup>C</sup>

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

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Domain Of hasTransitionTemperatureValue op

In Range Of hasTransitionTemperature op

Restriction hasTransitionTemperatureValue<sup>op</sup> only TransitionTemperature<sup>c</sup>

Transition Temperature Value c

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

eValue

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://gudt.org/schema/gudt/hasUnit op only http://gudt.org/schema/gudt/Unit

In Range Of hasTransitionTemperatureValue<sup>op</sup>

Restriction http://qudt.org/schema/qudt/numericValue only TransitionTemperatureValue Control only Transition Control only Transitional Metal C

Sub Class Of MetalMaterial<sup>C</sup>

Unknown Acute Toxicity Percentage <sup>C</sup>

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

Percentage

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of hasUnknownAcuteToxicity<sup>op</sup>

Restriction

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> value <u>UnknownAcuteToxicityPercentage</u><sup>c</sup>

http://qudt.org/schema/qudt/numericValue only

<u>UnknownAcuteToxicityPercentage</u><sup>c</sup>

Virgin Fosil Content<sup>c</sup>

In Domain Of <u>hasVirginFosilContentValue^op</u>

Virgin Fosil Content Value <sup>c</sup>

lue

Sub Class Of <a href="http://qudt.org/schema/qudt/QuantityValue">http://qudt.org/schema/qudt/QuantityValue</a>

In Range Of <u>hasVirginFosilContentValue op</u>

Restriction

http://qudt.org/schema/qudt/hasUnit<sup>op</sup> value VirginFosilContentValue<sup>C</sup>

http://qudt.org/schema/qudt/numericValue\_only\_VirginFosilContentValue\_c

Virgin Fossil Content<sup>c</sup>

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

http://w3id.org/CEON/ontology/product/ProductComposition

Restriction has Virgin Fosil Content Value op only Virgin Fossil Content C

Viscosity At25 <sup>c</sup>

IRI http://w3id.org/CEON/demo/electronics/ViscosityAt25

**Sub Class Of** 

http://qudt.org/schema/qudt/Quantity. http://w3id.org/CEON/ontology/resourceODP/ResourceProperty.

In Domain Of hasViscosityAt25Value<sup>op</sup>

In Range Of hasViscosityAt25op

Restriction hasViscosityAt25Value<sup>op</sup> only ViscosityAt25<sup>c</sup>

Viscosity At25Value c

IRI http://w3id.org/CEON/demo/electronics/ViscosityAt25Value

**Sub Class Of** http://gudt.org/schema/gudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnitop some http://qudt.org/schema/qudt/Unitop and http://qudt.org/schema/qudt/hasUnit op only http://qudt.org/schema/qudt/Unit

In Range Of hasViscosityAt25Value<sup>op</sup>

Restriction http://qudt.org/schema/qudt/numericValue\_only\_ViscosityAt25Value\_c

Width <sup>C</sup>

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

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

http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Range Of hasWidth op

Width Value C

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

**Sub Class Of** http://qudt.org/schema/qudt/QuantityValue

> http://qudt.org/schema/qudt/hasUnit<sup>op</sup> some http://qudt.org/schema/qudt/Unit<sup>c</sup> and http://qudt.org/schema/qudt/hasUnitop only http://qudt.org/schema/qudt/Unit

Restriction http://qudt.org/schema/qudt/numericValue\_only WidthValue<sup>C</sup>

Issuing Resource C

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

Named Individuals ds issue 1<sup>ni</sup>

# Process Participation <sup>C</sup>

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

Named Individuals s63<sup>ni</sup>

# Producing Resource<sup>C</sup>

**Named Individuals** 

<u>ss 1<sup>ni</sup></u> <u>ss 2<sup>ni</sup></u> <u>ss 3<sup>ni</sup></u>

## Supplying Resource<sup>C</sup>

Named Individuals 87<sup>ni</sup>

## Actor <sup>c</sup>

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

**Named Individuals** 

Mni
company\_ani
company\_bni
company\_xni
company\_yni
dismantling\_company\_bni

## Resource Relation<sup>C</sup>

Named Individuals composition\_a<sup>ni</sup>

## Process <sup>C</sup>

Named Individuals dismantling process 1<sup>ni</sup>

Statement <sup>C</sup>

Super Class Of <u>ElectronicsProductSourcingComponentRelation</u><sup>C</sup>

**Named Individuals** 

composition\_ani

<u>q1<sup>ni</sup></u>

# **Object Properties**

defined unit of system op

derived coherent unit of system op

exact match op

has dimension vector op

has unit op

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

compliance with op

has catalyst composition value op

onValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <u>CatalystComposition</u><sup>C</sup>

Range <u>CatalystCompositionValue</u><sup>C</sup>

has chemical element op

Range <a href="http://w3id.org/CEON/ontology/material/ChemicalElement">http://w3id.org/CEON/ontology/material/ChemicalElement</a>

has chemical element composition value op

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

mpositionValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain ChemicalElementComposition<sup>C</sup>

Range ChemicalElementCompositionValue<sup>C</sup>

has conductivity op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** <u>http://w3id.org/CEON/ontology/product/Item</u>

Range <u>Conductivity</u><sup>C</sup>

has conductivity value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

• Conductivity<sup>C</sup>

 http://w3id.org/CEON/ontology/product/Product<sup>c</sup> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range <u>ConductivityValue</u><sup>C</sup>

has density at25 op

IRI http://w3id.org/CEON/demo/electronics/hasDensityAt25

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range <u>DensityAt25</u><sup>c</sup>

has density at25value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

DensityAt25<sup>c</sup>

<a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a> or
 <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a>

Range DensityAt25Value<sup>C</sup>

has depth op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Range Depth<sup>C</sup>

has depth value op

Sub Property Of <a href="http://w3id.org/CEON/ontology/quantity/hasDimension">http://w3id.org/CEON/ontology/quantity/hasDimension</a>

**Domain** 

Depth<sup>c</sup>

 http://w3id.org/CEON/ontology/product/Product<sup>c</sup> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range <u>DepthValue</u><sup>C</sup>

has diameter op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Super Property Of hasOuterDiameter op

Range <u>Diameter</u><sup>C</sup>

has diameter value op

Sub Property Of <a href="http://w3id.org/CEON/ontology/quantity/hasDimension">http://w3id.org/CEON/ontology/quantity/hasDimension</a>

**Domain** 

Diameter<sup>C</sup>

 http://w3id.org/CEON/ontology/product/Product<sup>c</sup> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range <u>DiameterValue</u><sup>C</sup>

has fiber elongation at break op

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

Break

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range <u>FiberElongationAtBreak</u><sup>C</sup>

has fiber elongation at break value op

BreakValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

• <u>FiberElongationAtBreak</u><sup>c</sup>

 <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range <u>FiberElongationAtBreakValue</u><sup>C</sup>

has fiber volume content op

t

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range FiberVolumeContent<sup>C</sup>

has fiber volume content value op

tValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

• FiberVolumeContent<sup>C</sup>

 http://w3id.org/CEON/ontology/product/Item<sup>c</sup> or http://w3id.org/CEON/ontology/product/Product<sup>C</sup>

Range FiberVolumeContentValue<sup>C</sup>

has hazardous material op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a> or

http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range <u>HazardousMaterialPercentage</u><sup>C</sup>

has Ica value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Range <u>LCAValue</u><sup>C</sup>

has length op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Range Length<sup>c</sup>

has life span time op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Range <u>LifeSpanTime</u><sup>C</sup>

has life span time value op

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

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

• LifeSpanTime<sup>c</sup>

 http://w3id.org/CEON/ontology/product/Item<sup>c</sup> or http://w3id.org/CEON/ontology/product/Product<sup>c</sup>

Range <u>LifeSpanTimeValue</u><sup>C</sup>

has maximum energy product op

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

uct

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range <u>MaximumEnergyProduct</u><sup>C</sup>

has maximum energy product value op

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

uctValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

<u>MaximumEnergyProduct</u><sup>c</sup>

<a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a> or
 <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a>

Range <u>MaximumEnergyProductValue</u><sup>C</sup>

has metal composition value op

alue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <u>MetalComposition</u><sup>C</sup>

Range <u>MetalCompositionValue</u><sup>C</sup>

has operating voltage op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range OperatingVoltage<sup>C</sup>

has operating voltage value op

IRI http://w3id.org/CEON/demo/electronics/has0peratingVoltageV

alue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

• OperatingVoltage<sup>C</sup>

 http://w3id.org/CEON/ontology/product/Product<sup>c</sup> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range Operating Voltage Value C

has outer diameter op

Sub Property Of hasDiameter op

has post consumer recycled content value op

ledContentValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

<u>PostConsumerRecycledContent</u><sup>C</sup>

Range PostConsumerRecycledContentValue<sup>C</sup>

has pre consumer recycled content value op

edContentValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <u>PreConsumerRecycledContent</u><sup>c</sup>

Range PreConsumerRecycledContentValue<sup>C</sup>

has rare earth composition value op

ionValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain RareEarthComposition<sup>C</sup>

Range RareEarthCompositionValue<sup>C</sup>

has rated load amps op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range RatedLoadAmps<sup>C</sup>

has rated load amps value op

е

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

RatedLoadAmps<sup>C</sup>

 http://w3id.org/CEON/ontology/product/Product<sup>c</sup> or http://w3id.org/CEON/ontology/product/Item<sup>c</sup>

Range RatedLoadAmpsValue<sup>C</sup>

has rated power output op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range RatedPowerOutput<sup>C</sup>

has rated power output value op

alue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

RatedPowerOutput<sup>C</sup>

<a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a> or
 <a href="http://w3id.org/CEON/ontology/product/Product">http://w3id.org/CEON/ontology/product/Product</a> C

Range RatedPowerOutputValue<sup>C</sup>

has rated rpm op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/ltem">http://w3id.org/CEON/ontology/product/ltem</a>

Range RatedRPM<sup>c</sup>

has rated rpm value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

RatedRPM<sup>c</sup>

http://w3id.org/CEON/ontology/product/Item

Range RatedRPMValue<sup>C</sup>

has recycling pressure value op

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

Value

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Range RecyclingPressureValue<sup>C</sup>

has recycling process duration op

uration

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Range RecyclingProcessDuration<sup>C</sup>

has recycling process temperature op

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

emperature

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Range RecyclingTemperatureValue<sup>C</sup>

has refractive index at25 op

25

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Range RefractiveIndexAt25<sup>c</sup>

has remanent magnetic flux density op

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

luxDensity

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range RemanentMagneticFluxDensity<sup>C</sup>

has remanent magnetic flux density value op

luxDensityValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

RemanentMagneticFluxDensity<sup>c</sup>

http://w3id.org/CEON/ontology/product/Item

Range RemanentMagneticFluxDensityValue<sup>C</sup>

has renewable content value op

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

alue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

RenewableContent<sup>c</sup>

• http://w3id.org/CEON/ontology/product/Item

Range RenewableContentValue<sup>C</sup>

has resistivity value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

Resistivity<sup>C</sup>

http://w3id.org/CEON/ontology/product/Item

Range Resistivity Value C

has shape op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Range Shape<sup>C</sup>

has shear strength op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range ShearStrength<sup>C</sup>

has shear strength value op

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

е

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

ShearStrength<sup>c</sup>

http://w3id.org/CEON/ontology/product/Item

Range <u>ShearStrengthValue</u><sup>C</sup>

has stiffness op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** <u>http://w3id.org/CEON/ontology/product/Item</u>

Range Stiffness<sup>C</sup>

has stiffness value op

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

Stiffness<sup>c</sup>

http://w3id.org/CEON/ontology/product/Item

Range <u>StiffnessValue</u><sup>C</sup>

has tensile modulus op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

**Domain** <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range TensileModulus<sup>C</sup>

has tensile modulus value op

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

**Sub Property Of** http://qudt.org/schema/qudt/quantityValue

**Domain** 

<u>TensileModulus</u><sup>C</sup> <u>http://w3id.org/CEON/ontology/product/Item</u>

Range <u>TensileModulusValue<sup>C</sup></u>

has tensile strength op

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

**Sub Property Of** http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty

http://w3id.org/CEON/ontology/product/Item **Domain** 

Range TensileStrength<sup>C</sup>

has tensile strength value op

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

**Sub Property Of** http://qudt.org/schema/qudt/quantityValue

**Domain** 

<u>TensileStrength</u><sup>C</sup>

http://w3id.org/CEON/ontology/product/Item

Range <u>TensileStrengthValue</u><sup>C</sup>

has transition temperature op

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

**Sub Property Of** http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty

**Domain** http://w3id.org/CEON/ontology/product/Item

Range <u>TransitionTemperature</u><sup>c</sup>

has transition temperature value op

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

**Sub Property Of** http://qudt.org/schema/qudt/quantityValue

**Domain** 

• <u>TransitionTemperature</u><sup>C</sup>

http://w3id.org/CEON/ontology/product/Item

Range <u>TransitionTemperatureValue</u><sup>C</sup> has unknown acute toxicity op

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

ity

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range <u>UnknownAcuteToxicityPercentage</u><sup>C</sup>

has virgin fosil content value op

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

tValue

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

<u>VirginFosilContent<sup>C</sup></u>

http://w3id.org/CEON/ontology/product/Item

Range <u>VirginFosilContentValue</u><sup>C</sup>

has viscosity at25 op

IRI http://w3id.org/CEON/demo/electronics/hasViscosityAt25

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Domain <a href="http://w3id.org/CEON/ontology/product/Item">http://w3id.org/CEON/ontology/product/Item</a>

Range <u>ViscosityAt25</u><sup>C</sup>

has viscosity at25value op

е

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Domain** 

ViscosityAt25<sup>c</sup>

http://w3id.org/CEON/ontology/product/Item

Range <u>ViscosityAt25Value</u><sup>C</sup>

has width op

Sub Property Of <a href="http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty">http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty</a>

Range Width<sup>c</sup>

participant role op

participating actor op

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

participating resource op

ce

participation in op

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

#### **Datatype Properties**

conversion multiplier dp

http://qudt.org/schema/qudt/conversionMultiplier

iec61360code dp

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

numerical value dp

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

si units expression dp

has astm compliance file url dp

eUrl

Sub Property Of hasFileUrl dp

has batch invoice number dp

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

r

Range xsd:string

has batch number dp

Domain <a href="http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects">http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects</a>

Range <u>xsd:integer</u>

has black e coating brand name dp

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

dName

Range xsd:string

has black e coating technical datasheet dp

nicalDatasheet

Sub Property Of hasFileUrl dp

Range xsd:string

has casting certificate dp

е

Sub Property Of hasFileUrl dp

Range xsd:string

has decomissioning date <sup>dp</sup>

е

Range xsd:dateTime

has decommission reason dp

n

has efficiency class dp

has environmental product declaration dp

uctDeclaration

Sub Property Of hasFileUrldp

Range xsd:string

# has file url dp

**Super Property Of** 

• hasASTMComplianceFileUrldp

• <u>hasBlackECoatingTechnicalDatasheet</u>dp

hasCastingCertificate<sup>dp</sup>

hasEnvironmentalProductDeclaration<sup>dp</sup>

• hasFireWorkingConditionComplianceFileUrldp

<u>hasHysteresisCurveTechReport</u><sup>dp</sup>

• hasISOComplianceFileUrldp

• <u>hasLCAReport</u>dp

<u>hasMaterialDatasheet</u><sup>dp</sup>

<u>hasNormativeReferenceFileUrl</u><sup>dp</sup>

• hasPassivationProductTechnicalDatasheet<sup>dp</sup>

• <u>hasREACHComplianceFileUrl</u>dp

hasResponsibleSourcingCertificate<sup>dp</sup>

• <u>hasRoHSComplianceFileUrl dp</u>

hasSafetyDatasheet<sup>dp</sup>

hasSupplyDueDiligencePolicyReport<sup>dp</sup>

hasSustainabilityDeclaration<sup>dp</sup>

Range <u>xsd:string</u>

has fire working condition compliance file url dp

ionComplianceFileUrl

Sub Property Of hasFileUrl<sup>dp</sup>

Range <u>xsd:string</u>

has hysteresis curve tech report dp

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

chReport

Sub Property Of hasFileUrl dp

has iso compliance file url dp

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

Url

Sub Property Of hasFileUrldp

Range xsd:string

has installation date dp

Range <u>xsd:dateTime</u>

has installation instructions dp

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

uctions

Range xsd:string

has intended application dp

on

Range xsd:string

has lca report<sup>dp</sup>

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has lay up sequence dp

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

Range <u>xsd:string</u>

has magnet location dp

has maintenance instructions dp

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

ctions

Range xsd:string

has maintenance measures dp

es

Range <u>xsd:string</u>

has maintenance report dp

Range xsd:string

has maintenance trigger dp

r

Range <u>xsd:string</u>

has manufacturing sequence dp

ence

Range xsd:string

has material datasheet dp

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has normative reference file url dp

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

eFileUrl

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has part number code dp

Range xsd:string

has passivation product technical datasheet dp

tTechnicalDatasheet

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has production date dp

Domain <a href="http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects">http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects</a>

Range <u>xsd:dateTime</u>

has quality test link dp

Range xsd:string

has reach compliance file url dp

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

leUrl

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has recycling process name dp

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

ame

Range <u>xsd:string</u>

has repair instructions dp

S

Range xsd:anyURI

has reported damage dp

Range <u>xsd:string</u>

has reported repairs dp

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

Range <u>xsd:string</u>

has responsible sourcing certificate dp

ngCertificate

Sub Property Of hasFileUrl dp

Range xsd:string

has ro hs compliance file url dp

eUrl

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has safety datasheet dp

Sub Property Of hasFileUrl dp

Range xsd:string

has site name <sup>dp</sup>

Range xsd:string

has size level <sup>dp</sup>

Range xsd:double

has supply due diligence policy report dp

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

ePolicyReport

Sub Property Of hasFileUrl dp

Range xsd:string

has sustainability declaration dp

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

laration

Sub Property Of hasFileUrl dp

Range xsd:string

has use and assembly instructions dp

tructions

Range <u>xsd:string</u>

hasdisassembly instructions dp

ctions

Range <u>xsd:string</u>

is adhesive contained dp

Range xsd:boolean

is bromide contained dp

Range xsd:boolean

is catalyst contained dp

Range xsd:boolean

is cores contained dp

is flame retardant dp

Range xsd:boolean

is high uv resistance dp

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

Range xsd:boolean

is laminate contained dp

Range <u>xsd:boolean</u>

is matrix additive contained dp

ained

Range xsd:boolean

is metal contained <sup>dp</sup>

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

Range xsd:boolean

is nitrogen contained dp

Range <u>xsd:boolean</u>

is oxygen contained dp

Range xsd:boolean

is pre preg contained dp

Range xsd:boolean

is reac hcomplied dp

Range xsd:boolean

is rare earth contained dp

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

Range xsd:boolean

is ro hs complied  $^{\mbox{\scriptsize dp}}$ 

Range xsd:boolean

is surface finish contained <sup>dp</sup>

ined

Range xsd:boolean

number of recycling cycles dp

les

participation time point dp

int

## **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/participatingSubjec t

statement about ap

IRI http://w3id.org/CEON/ontology/statement/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
ap	Annotation Properties