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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Contributor

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Version Iri

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

Version Info

0.2

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	<u>pascal second</u> ⁿⁱ

Actinoids Metal ^C

Sub Class Of MetalMaterial^C

Adhesive Material ^c

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 <u>ElectronicsProduct</u>^C

Bromide Material^C

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

Catalyst Composition ^c

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

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

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

Restriction <u>hasCatalystCompositionValue</u> op only <u>CatalystComposition</u> only <u>CatalystComposition</u>

Catalyst Composition Value ^C

alue

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

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

Catalyst Material^C

Chemical Element Composition c

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

sition

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

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

In Domain Of hasChemicalElementCompositionValue op

Restriction hasChemicalElementCompositionValue op only ChemicalElementCompositionC

Chemical Element Composition Value^C

sitionValue

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

In Range Of hasChemicalElementCompositionValue op

Restriction http://qudt.org/schema/qudt/hasUnit value

<u>ChemicalElementCompositionValue</u>^C

Conductivity ^C

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 <u>hasConductivityValue op</u>

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

Restriction <u>hasConductivityValue</u>^{op} only <u>Conductivity</u>^c

Conductivity Value ^C

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

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/Unit^{op} only http://qudt.org/schema/qudt/Unit

С

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

Restriction http://qudt.org/schema/qudt/numericValue only ConductivityValue^C

Core Material C

Coupling Cone^C

Sub Class Of ElectronicsProduct^C

Damper ^C

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

Sub Class Of ElectronicsProduct^C

Named Individuals damper_xni

Density At25^c

IRI http://w3id.org/CEON/demo/electronics/DensityAt25

Sub Class Of 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^C

IRI http://w3id.org/CEON/demo/electronics/DensityAt25Value

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

0

In Range Of hasDensityAt25Value op

Restriction http://qudt.org/schema/qudt/numericValue_only DensityAt25Value <a href=

Depth ^C

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

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

In Domain Of hasDepthValue op

In Range Of hasDepth op

Restriction <u>hasDepthValue</u>^{op} only <u>Depth</u>^c

Depth Value ^C

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^c

In Range Of hasDepthValue op

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

Diameter ^C

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

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

In Domain Of hasDiameterValue op

In Range Of hasDiameter op

Restriction hasDiameterValue op only Diameter op only Dia

Diameter Value ^C

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

С

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

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

Double Magnet^C

Sub Class Of ElectronicsProduct^C

Super Class Of Frame^c

Electronics Product^C

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

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

Super Class Of

<u>AluminumDomeTweeter^C</u>

CouplingCone^C
Damper^C
DoubleMagnet^C
NeodymiumMagnet^C

Speaker^C

Electronics Product Sourcing Component Relation C

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

urcingComponentRelation

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

Fastening Method^C

Named Individuals PressFitOrFrictionⁿⁱ

Fiber Elongation At Break^c

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

ak

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 hasFiberElongationAtBreakValue op

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

Restriction hasFiberElongationAtBreakValue^{op} only FiberElongationAtBreak^c

Fiber Elongation At Break Value ^C

akValue

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

С

In Range Of hasFiberElongationAtBreakValue op

Restriction http://qudt.org/schema/qudt/numericValue_only_FiberElongationAtBreakValue_only_FiberElo

Fiber Volume Content^C

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

Sub Class Of

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

In Domain Of hasFiberVolumeContentValue^{op}

In Range Of hasFiberVolumeContent^{op}

Restriction hasFiberVolumeContentValue op only FiberVolumeContent C

Fiber Volume Content Value C

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

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^c

In Range Of hasFiberVolumeContentValue op

Restriction http://qudt.org/schema/qudt/numericValue_only_FiberVolumeContentValue_C

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/FlameRetardantMateri

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

Frame ^c

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

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

Hardener Material^C

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

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

Hazardous Material Percentage ^c

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

centage

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

In Range Of hasHazardousMaterial op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value <u>HazardousMaterialPercentage</u>^c

http://qudt.org/schema/qudt/numericValue_only HazardousMaterialPercentage C

Lca Acidification ^C

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

Sub Class Of

LCAValue^c

http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAAcidification^C

Lca Climate Change ^C

Sub Class Of

<u>LCAValue</u>^c

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAClimateChange^C

Lca Climate Change Biogenic C

enic

Sub Class Of

LCAValue^C

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAClimateChangeBiogenic^C

Lca Climate Change Fossil^c

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

il

Sub Class Of

<u>LCAValue^c</u>

http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue-only-LCAClimateChangeFossil

Lca Ecotoxicity Fresh Water ^c

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

ater

Sub Class Of

LCAValue^C

http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAEcotoxicityFreshWater ^c

Lca Eutrophication Fresh Water ^c

shWater

Sub Class Of

<u>LCAValue</u>^C

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAEutrophicationFreshWater^C

Lca Eutrophication Marine ^C

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

ine

Sub Class Of

LCAValue^C

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAEutrophicationMarine^C

Lca Human Toxicity Cancer^c

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

er

Sub Class Of

<u>LCAValue^c</u>

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAHumanToxicityCancer^c

Lca Lonising Radition Human Health ^c

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

umanHealth

Sub Class Of

LCAValue^C

http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c

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

<u>LCALonisingRaditionHumanHealth</u>^C

Lca Mineral Use C

Sub Class Of

LCAValue^C

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue only LCAMineralUse ^c

Lca Unit^C

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

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

Lca Value ^c

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

In Range Of hasLCAValue op

Super Class Of

<u>LCAAcidification</u>^C

LCAClimateChange ^C

LCAClimateChangeBiogenic^C
LCAClimateChangeFossil^C
LCAEcotoxicityFreshWater^C
LCAEutrophicationFreshWater^C
LCAEutrophicationMarine^C
LCAHumanToxicityCancer^C

 $\underline{\mathsf{LCALonisingRaditionHumanHealth}^{\mathsf{c}}}$

LCAMineralUse^c
LCAWaterUse^c

Lca Water Use ^c

Sub Class Of

<u>LCAValue</u>^c

http://qudt.org/schema/qudt/hasUnit^{op} some LCAUnit^c and http://qudt.org/schema/qudt/hasUnit^{op} only LCAUnit^c

Restriction http://qudt.org/schema/qudt/numericValue-only-LCAWaterUse

Laminate Material^C

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

Length ^C

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 hasLengthValue op

In Range Of hasLength op

Restriction <u>hasLengthValue</u>^{op} only <u>Length</u>^c

Length Value ^C

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^C

In Range Of hasLengthValue op

Restriction http://qudt.org/schema/qudt/numericValue only LengthValue^C

Life Span Time ^C

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 <u>hasLifeSpanTimeValue</u> op only <u>LifeSpanTime</u> only <u>LifeSpanTime</u>

Life Span Time Value ^c

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

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

In Range Of hasLifeSpanTimeValue op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value LifeSpanTimeValue^c http://qudt.org/schema/qudt/numericValue only LifeSpanTimeValue^c

Material Grade ^C

Named Individuals N35Hni

Matrix Additive M Aterial C

al

Maximum Energy Product^C

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

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

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

In Domain Of hasMaximumEnergyProductValue op

In Range Of hasMaximumEnergyProduct^{op}

Restriction hasMaximumEnergyProductValue^{op} only MaximumEnergyProduct^C

Maximum Energy Product Value ^C

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

Value

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

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

and http://qudt.org/schema/qudt/hasUnit one

http://qudt.org/schema/qudt/Unit^c

In Range Of hasMaximumEnergyProductValue op

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

Metal Composition ^C

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 hasMetalCompositionValue op

Restriction hasMetalCompositionValue op only MetalComposition only MetalComposition hasMetalComposition only MetalComposition on the MetalComposit

Metal Composition Value ^C

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

e

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

In Range Of hasMetalCompositionValue op

Metal Material^C

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

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

Super Class Of

ActinoidsMetal^c
AlkaliMetal^c
AlkalineEarthMetal^c
TransitionalMetal^c

Motor Speed Type C

Named Individuals continuous variable speed ni

Motor Type ^C

Named Individuals Induction ni

Neodymium Magnet^C

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

Named Individuals neodymium_magnet_xⁿⁱ

Non Metal Material^C

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

Named Individuals

carbon_material_aⁿⁱ nitrogen_material_aⁿⁱ

Operating Voltage ^C

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

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

In Domain Of hasOperatingVoltageValue op

In Range Of hasOperatingVoltage op

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

Operating Voltage Value ^c

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

e

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

С

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

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

Post Consumer Recycled Content^C

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

Content

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

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

In Domain Of hasPostConsumerRecycledContentValue op

Restriction <u>hasPostConsumerRecycledContentValue</u> op only

PostConsumerRecycledContent ^C

Post Consumer Recycled Content Value C

 ${\tt ContentValue}$

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

In Range Of hasPostConsumerRecycledContentValue op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value PostConsumerRecycledContentValue^c http://qudt.org/schema/qudt/numericValue_only

PostConsumerRecycledContentValue^C

Post Customer Recycled Content^C

Content

Named Individuals content 1ⁿⁱ

Pre Consumer Recycled Content^c

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

ontent

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

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

In Domain Of hasPreConsumerRecycledContentValue op

Restriction hasPreConsumerRecycledContentValue^{op} only PreConsumerRecycledContent

C.

Pre Consumer Recycled Content Value ^c

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

ontentValue

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

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

Restriction

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

<u>PreConsumerRecycledContentValue</u>^C

http://qudt.org/schema/qudt/numericValue_only

<u>PreConsumerRecycledContentValue</u>^C

Prepreg Material^C

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

Rare Earth Composition ^C

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 http://qudt.org/schema/qudt/QuantityValue

In Range Of hasRareEarthCompositionValue op

Rare Earth Material C

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

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

Rated Load Amps C

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

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

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

In Domain Of hasRatedLoadAmpsValue^{op}

In Range Of hasRatedLoadAmps op

Restriction hasRatedLoadAmpsValue^{op} only RatedLoadAmps^c

Rated Load Amps Value C

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

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^c

In Range Of hasRatedLoadAmpsValue^{op}

Restriction http://gudt.org/schema/gudt/numericValue_only_RatedLoadAmpsValue_0

Rated Power Output^C

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

Sub Class Of

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

In Domain Of hasRatedPowerOutputValue op

In Range Of hasRatedPowerOutput^{op}

Restriction hasRatedPowerOutputValue^{op} only RatedPowerOutput^C 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/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 hasRatedPowerOutputValue^{op}

Restriction http://qudt.org/schema/qudt/numericValue_only_RatedPowerOutputValue_c

Rated Rpm^c

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^{op}

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/hasUnit one

http://qudt.org/schema/qudt/Unit^C

In Range Of hasRatedRPMValue op

Restriction http://qudt.org/schema/qudt/numericValue only RatedRPMValue c

Recycling Pressure^C

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

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

Restriction hasRecyclingPressureValue op only RecyclingPressure c Recycling Pressure Value ^c

ue

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

С

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

Restriction http://qudt.org/schema/qudt/numericValue only RecyclingPressureValue^C

Recycling Process Duration ^C

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

tion

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^C

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

Restriction http://qudt.org/schema/qudt/numericValue only RecyclingProcessDuration http://qudt.org/schema/qudt/numericValue only RecyclingProcessDuration RecyclingProcessDurat

Recycling Temperature Value ^C

Value

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

http://gudt.org/schema/qudt/hasUnit^{op} only http://gudt.org/schema/qudt/Unit^c

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

http://qudt.org/schema/qudt/Unit^c

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

Restriction http://qudt.org/schema/qudt/numericValue only RecyclingTemperatureValue^C

Refractive Index At25^c

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

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

In Range Of hasRefractiveIndexAt25^{op}

Restriction hasRefractiveIndexAt25^{op} only RefractiveIndexAt25^c

Refractive Index At25Value C

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

alue

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

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

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

http://qudt.org/schema/qudt/Unit^C

Restriction http://gudt.org/schema/gudt/numericValue only RefractiveIndexAt25Value^C

Remanent Magnetic Flux Density^c

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 op

Restriction hasRemanentMagneticFluxDensityValue^{op} only RemanentMagneticFluxDensity

С

Remanent Magnetic Flux Density Value C

DensityValue

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

C

In Range Of hasRemanentMagneticFluxDensityValue op

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

<u>RemanentMagneticFluxDensityValue^C</u>

Renewable Content^c

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

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

In Domain Of hasRenewableContentValue^{op}

Restriction hasRenewableContentValue op only RenewableContentC

Renewable Content Value ^C

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

е

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

In Range Of hasRenewableContentValue op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value RenewableContentValue^c http://qudt.org/schema/qudt/numericValue only RenewableContentValue^c

Resin Material ^C

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

Resistivity ^C

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 hasResistivityValue op

Restriction <u>hasResistivityValue</u> op only <u>Resistivity</u> only <u>Resistivity</u>

Resistivity Value^C

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

In Range Of hasResistivityValue op

Restriction http://qudt.org/schema/qudt/numericValue only ResistivityValue^C

Shape ^C

Sub Class Of http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

In Range Of hasShape op

Named Individuals cylinderⁿⁱ

Shear Strength ^C

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 op

Restriction hasShearStrengthValue op only ShearStrengthC

Shear Strength Value ^C

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

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/hasUnit op some

http://qudt.org/schema/qudt/Unit^c

In Range Of hasShearStrengthValue op

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

Speaker ^c

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

Sub Class Of ElectronicsProduct^C

Named Individuals speaker xni

Stiffness ^C

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^{op}

Restriction hasStiffnessValue op only Stiffness c Stiffness Value C

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

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^c

In Range Of hasStiffnessValue op

Restriction http://qudt.org/schema/qudt/numericValue only StiffnessValue^C

Surface Finish Material C

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

1

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

Tensile Modulus^C

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

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

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

In Domain Of hasTensileModulusValue op

In Range Of hasTensileModulus op

Restriction <u>hasTensileModulusValue^{op} only TensileModulus^c</u>

Tensile Modulus Value^c

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^c

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

Restriction http://qudt.org/schema/qudt/numericValue only TensileModulusValue on TensileModulus

Tensile Strength ^C

Sub Class Of http://gudt.org/gebome/gudt

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

In Domain Of hasTensileStrengthValue op

In Range Of hasTensileStrengthop

Restriction hasTensileStrengthValue^{op} only TensileStrength^c

Tensile Strength Value ^c

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

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/hasUnit ome

http://qudt.org/schema/qudt/Unit^c

In Range Of hasTensileStrengthValue op

Restriction http://qudt.org/schema/qudt/numericValue only TensileStrengthValue^C

Transition Temperature ^C

e

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

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

In Domain Of hasTransitionTemperatureValue op

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

Restriction hasTransitionTemperatureValue^{op} only TransitionTemperature^c

Transition Temperature Value ^C

eValue

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

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

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

http://qudt.org/schema/qudt/Unit^c

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

Restriction http://qudt.org/schema/qudt/numericValue only TransitionTemperatureValue on the first of the first of the first of the first only TransitionTemperatureValue on the first of the first of the first of the first only TransitionTemperatureValue on the first of the first of the first only TransitionTemperatureValue on the first of the first of the first only TransitionTemperatureValue on the first of the fir

Transitional Metal^C

Sub Class Of MetalMaterial^C

Unknown Acute Toxicity Percentage ^c

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

Percentage

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

In Range Of hasUnknownAcuteToxicity op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value <u>UnknownAcuteToxicityPercentage</u>^c

http://qudt.org/schema/qudt/numericValue_only

<u>UnknownAcuteToxicityPercentage^C</u>

Virgin Fosil Content^c

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

Virgin Fosil Content Value ^c

Lue

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

In Range Of hasVirginFosilContentValue op

Restriction

http://qudt.org/schema/qudt/hasUnit^{op} value VirginFosilContentValue^C

http://qudt.org/schema/qudt/numericValue_only_VirginFosilContentValue_C

Virgin Fossil Content^C

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

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

Restriction hasVirginFosilContentValue op only VirginFossilContent c

Viscosity At25^c

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 op

In Range Of hasViscosityAt25op

Restriction hasViscosityAt25Value^{op} only ViscosityAt25^c

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

and http://qudt.org/schema/qudt/hasUnit ome

http://gudt.org/schema/gudt/Unit^C

In Range Of hasViscosityAt25Value op

Restriction http://qudt.org/schema/qudt/numericValue_only_ViscosityAt25Value_c

Width ^C

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 Domain Of hasWidthValue op

In Range Of hasWidth op

Restriction hasWidthValue op only Widthc

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/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 <u>hasWidthValue</u>op

Restriction http://gudt.org/schema/gudt/numericValue_only_WidthValue_c Issuing Resource ^C

Named Individuals ds issue 1ⁿⁱ

Process Participation ^C

Named Individuals s63ⁿⁱ

Producing Resource^C

Named Individuals

ss_1''' ss_2ⁿⁱ ss_3ⁿⁱ

Supplying Resource^C

Named Individuals 87ⁿⁱ

Actor ^c

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

Named Individuals

company aⁿⁱ
company bⁿⁱ
company xⁿⁱ
company yⁿⁱ

dismantling company bni

Resource Relation^C

Named Individuals composition ani

Process ^C

Named Individuals dismantling process 1ⁿⁱ

Statement ^c

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

Named Individuals

composition_ani

q1ⁿⁱ

Object Properties

defined unit of system op

derived coherent unit of system op

exact match op

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

has dimension vector op

has unit^{op}

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

compliance with op

has catalyst composition value op

onValue

Sub Property Of http://qudt.org/schema/qudt/quantity/value

Domain CatalystComposition^C

Range <u>CatalystCompositionValue</u>^C

has chemical element op

Range http://w3id.org/CEON/ontology/material/ChemicalElement

has chemical element composition value op

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

mpositionValue

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

Domain Chemical Element Composition C

Range ChemicalElementCompositionValue^C

has conductivity op

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

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

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

Range Conductivity^C

has conductivity value op

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

Domain

• Conductivity^C

 http://w3id.org/CEON/ontology/product/Item^c or http://w3id.org/CEON/ontology/product/Product^c

Range Conductivity Value C

has density at25 op

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

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

Range <u>DensityAt25</u>^C

has density at25value op

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

Domain

DensityAt25^c

 http://w3id.org/CEON/ontology/product/Product or http://w3id.org/CEON/ontology/product/Item^C

Range <u>DensityAt25Value</u>^C

has depth op

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

Range Depth^c

has depth value op

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

Domain

Depth^c

 http://w3id.org/CEON/ontology/product/Product^c or http://w3id.org/CEON/ontology/product/Item^c

Range <u>DepthValue</u>^C

has diameter op

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

Super Property Of hasOuterDiameter op

Range <u>Diameter</u>^C

has diameter value op

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

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

Domain

Diameter^C

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

Range <u>DiameterValue</u>^C

has fiber elongation at break op

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

Break

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

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

Range FiberElongationAtBreak^C

has fiber elongation at break value op

BreakValue

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

Domain

FiberElongationAtBreak^C

 http://w3id.org/CEON/ontology/product/Product^C or http://w3id.org/CEON/ontology/product/Item^C

Range FiberElongationAtBreakValue^C

has fiber volume content op

t

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

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

Range <u>FiberVolumeContent</u>^C

has fiber volume content value op

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

tValue

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

Domain

• FiberVolumeContent^C

 http://w3id.org/CEON/ontology/product/Item^c or http://w3id.org/CEON/ontology/product/Product^c

Range FiberVolumeContentValue^C

has hazardous material op

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

Domain http://w3id.org/CEON/ontology/product/Product or

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

Range <u>HazardousMaterialPercentage</u>^C

has Ica value op

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

Range LCAValue^C

has length op

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

Range Length^c

has length value op

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

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

Domain

• Length^c

http://w3id.org/CEON/ontology/product/Item or
 http://w3id.org/CEON/ontology/product/Product C

Range <u>LengthValue</u>^C

has life span time op

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

Range <u>LifeSpanTime</u>^C

has life span time value op

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

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

Domain

<u>LifeSpanTime^C</u>

 http://w3id.org/CEON/ontology/product/Product or http://w3id.org/CEON/ontology/product/Item^C

Range <u>LifeSpanTimeValue</u>^C

has maximum energy product op

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

uct

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

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

Range <u>MaximumEnergyProduct</u>^C

has maximum energy product value op

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

uctValue

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

Domain

MaximumEnergyProduct^C

 http://w3id.org/CEON/ontology/product/Product^c or http://w3id.org/CEON/ontology/product/Item^c

Range <u>MaximumEnergyProductValue</u>^C

has metal composition value op

alue

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

Domain <u>MetalComposition</u>^C

Range MetalCompositionValue^C

has operating voltage op

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

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

Range <u>OperatingVoltage</u>^C

has operating voltage value op

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

alue

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

Domain

OperatingVoltage^C

http://w3id.org/CEON/ontology/product/Item or
 http://w3id.org/CEON/ontology/product/Product C

Range Operating Voltage Value C

has outer diameter op

Sub Property Of hasDiameter op

has post consumer recycled content value op

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

ledContentValue

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

<u>PostConsumerRecycledContent</u>^C

Range PostConsumerRecycledContentValue^C

has pre consumer recycled content value op

edContentValue

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

Domain <u>PreConsumerRecycledContent</u>^C

Range PreConsumerRecycledContentValue^C

has rare earth composition value op

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

ionValue

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

Domain RareEarthComposition^C

Range RareEarthCompositionValue^C

has rated load amps op

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

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

Range RatedLoadAmps^C

has rated load amps value op

е

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

Domain

RatedLoadAmps^C

 http://w3id.org/CEON/ontology/product/Product^c or http://w3id.org/CEON/ontology/product/Item^c

Range RatedLoadAmpsValue^C

has rated power output op

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

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

Range RatedPowerOutput^C

has rated power output value op

alue

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

Domain

RatedPowerOutput^C

 http://w3id.org/CEON/ontology/product/Item^c or http://w3id.org/CEON/ontology/product/Product^c

Range RatedPowerOutputValue^C

has rated rpm op

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

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

Range RatedRPM^C

has rated rpm value op

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

Domain

RatedRPM^c

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

Range RatedRPMValue^C

has recycling pressure value op

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

Value

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

Range RecyclingPressureValue^C

has recycling process duration op

uration

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

Range RecyclingProcessDuration^C

has recycling process temperature op

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

emperature

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

Range RecyclingTemperatureValue^C

has refractive index at25 op

25

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

Range RefractiveIndexAt25^C

has remanent magnetic flux density op

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

luxDensity

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

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

Range RemanentMagneticFluxDensity^C

has remanent magnetic flux density value op

luxDensityValue

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

Domain

RemanentMagneticFluxDensity^C

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

Range RemanentMagneticFluxDensityValue^C

has renewable content value op

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

alue

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

Domain

RenewableContent^c

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

Range RenewableContentValue^C

has resistivity value op

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

Domain

Resistivity^C

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

Range ResistivityValue^C

has shape op

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

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

Range Shape^C

has shear strength op

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

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

Range ShearStrength^c

has shear strength value op

е

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

Domain

ShearStrength^C

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

Range <u>ShearStrengthValue</u>^C

has stiffness op

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

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

Range Stiffness^C

has stiffness value op

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

Domain

Stiffness^c

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

Range StiffnessValue^C

has tensile modulus op

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

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

Range <u>TensileModulus</u>^C

has tensile modulus value op

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

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

Domain

TensileModulus^C http://w3id.org/CEON/ontology/product/Item

Range TensileModulusValue^C

has tensile strength op

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

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

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

Range TensileStrength^C

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>^C

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

Range TensileStrengthValue^C

has transition temperature op

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

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

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

Range <u>TransitionTemperature</u>^C

has transition temperature value op

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

tureValue

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

Domain

• <u>TransitionTemperature</u>^C

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

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

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

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

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

Range <u>UnknownAcuteToxicityPercentage^c</u>

has virgin fosil content value op

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

tValue

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

Domain

VirginFosilContent^C
 http://w3id.org/CEON/ontology/product/Item

Range <u>VirginFosilContentValue^C</u>

has viscosity at 25 op

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

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

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

Range ViscosityAt25^C

has viscosity at25value op

IRI http://w3id.org/CEON/demo/electronics/hasViscosityAt25Valu

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

Domain

ViscosityAt25^c

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

Range ViscosityAt25Value^C

has width op

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

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

Range Width^C has width value op

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

Domain Width^c

Range WidthValue^C

participant role op

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

participating actor op

participating resource op

ce

participation in op

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

Datatype Properties

conversion multiplier dp

iec61360code dp

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

numerical value dp

si units expression dp

 has astm compliance file url dp

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

eUrl

Sub Property Of hasFileUrl dp

Range xsd:string

has batch invoice number dp

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

r

Range xsd:string

has batch number dp

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

Range <u>xsd:integer</u>

has black e coating brand name dp

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

dName

Range xsd:string

has black e coating technical datasheet dp

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

nicalDatasheet

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has casting certificate dp

е

Sub Property Of hasFileUrl dp

has decomissioning date ^{dp}

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

Range xsd:dateTime

has decommission reason dp

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

Range xsd:string

has efficiency class dp

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

has environmental product declaration dp

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

uctDeclaration

Sub Property Of hasFileUrl^{dp}

xsd:string Range

has file url dp

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

Super Property Of

• hasASTMComplianceFileUrl^{dp}

- <u>hasBlackECoatingTechnicalDatasheet^{dp}</u>
- <u>hasCastingCertificate</u>^{dp}
- <u>hasEnvironmentalProductDeclaration</u> dp
- hasFireWorkingConditionComplianceFileUrl^{dp}
- <u>hasHysteresisCurveTechReport</u>^{dp}
- <u>hasISOComplianceFileUrl</u>^{dp}
- hasLCAReport^{dp}
- <u>hasMaterialDatasheet</u>^{dp}
- hasNormativeReferenceFileUrldp
- hasPassivationProductTechnicalDatasheet^{dp}
- hasREACHComplianceFileUrldp
- <u>hasResponsibleSourcingCertificate</u> dp
- hasRoHSComplianceFileUrl^{dp}
- <u>hasSafetyDatasheet</u>^{dp}
- <u>hasSupplyDueDiligencePolicyReport</u>dp
- hasSustainabilityDeclaration^{dp}

has fire working condition compliance file url dp

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

ionComplianceFileUrl

Sub Property Of hasFileUrl dp

Range xsd:string

has hysteresis curve tech report dp

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

chReport

Sub Property Of hasFileUrl dp

Range xsd:string

has iso compliance file url dp

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

Url

Sub Property Of hasFileUrl dp

Range xsd:string

has installation date dp

Range <u>xsd:dateTime</u>

has installation instructions dp

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

uctions

Range <u>xsd:string</u>

has intended application dp

on

Range xsd:string

has lca report dp

Sub Property Of hasFileUrl dp

has lay up sequence dp

Range <u>xsd:string</u>

has magnet location dp

Range <u>xsd:string</u>

has maintenance instructions dp

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

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

Range xsd:string

has maintenance trigger dp

r

Range xsd:string

has manufacturing sequence dp

ence

has material datasheet dp

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

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has normative reference file url dp

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 xsd:string

has production date dp

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

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

Range xsd:dateTime

has quality test link dp

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

Range <u>xsd:string</u>

has reach compliance file url dp

leUrl

Sub Property Of hasFileUrl dp

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 <u>xsd:string</u>

has reported damage dp

Range xsd:string

has reported repairs dp

Range <u>xsd:string</u>

has responsible sourcing certificate dp

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

ngCertificate

Sub Property Of hasFileUrl dp

Range xsd:string

has ro hs compliance file url dp

eUri

Sub Property Of hasFileUrl dp

Range xsd:string

has safety datasheet dp

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

has site name ^{dp}

Range xsd:string

has size level dp

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

Range <u>xsd:double</u>

has supply due diligence policy report dp

ePolicyReport

Sub Property Of hasFileUrl dp

Range xsd:string

has sustainability declaration dp

laration

Sub Property Of hasFileUrl dp

Range <u>xsd:string</u>

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 flame retardancy dp

Range xsd:boolean

is high uv resistance dp

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

Range <u>xsd:boolean</u>

is laminate contained dp

Range xsd:boolean

is matrix additive contained dp

ained

Range xsd:boolean

is metal contained ^{dp}

Range xsd:boolean

is nitrogen contained ^{dp}

Range xsd:boolean

is oxygen contained dp

Range xsd:boolean

is pre preg contained dp

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

Range xsd:boolean

is reac hcomplied dp

Range xsd:boolean

is rare earth contained dp

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

Range <u>xsd:boolean</u>

is ro hs complied dp

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

Range xsd:boolean

is surface finish contained ^{dp}

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

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