Circular Economy Ontology Network (CEON) - Material Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Material Module

Publisher

Onto-DESIDE

Creator

Huanyu Li

Contributor

Eva Blomqvist

Mikael Lindecrantz

Robin Keskisärkkä

Date Created

2025-03-20

Date Issued

2025-06-30

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Version Iri

http://w3id.org/CEON/ontology/material/0.4/

Version Info

0.4

Prior Version

0.3

Preferred Namespace Prefix

ceon-material

Preferred Namespace Uri

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

Description

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

Covers Requirements

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.1: CVN-Resource-2, CVN-ResourceType-4, C3-3, E1-3, E2-4, E5-2, T1-1, T10-2.

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.2: CE5-2, C3-3, E1-1, E1-3, E1-11, E1-13, E2-4, E3-2, E3-5, E5-2, E5-4, E5-5, T1-1, T9-2, T10-2, T10-4, T22-2.

Classes

Aluminum ^C

IRI http://w3id.org/CEON/ontology/material/Aluminum

Sub Class Of ChemicalElement ^C

Boron ^C

IRI http://w3id.org/CEON/ontology/material/Boron

Sub Class Of ChemicalElement ^C

Cellulose ^C

IRI http://w3id.org/CEON/ontology/material/Cellulose

Sub Class Of Material ^C

Cerium ^C

IRI http://w3id.org/CEON/ontology/material/Cerium

Sub Class Of RareEarthElement ^C

Chemical Element ^C

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

Sub Class Of ChemicalSubstance ^C

Super Class Of

Aluminum ^C
Boron ^C
Chromium ^C
Copper ^C
Iron ^C
Magnesium ^C
Manganese ^C
Nickel ^C
Niobium ^C
RareEarthElement ^C
Silicon ^C
Titanium ^C
Zinc ^C

Chemical Entity [C]

IRI	http://w3id.org/CEON/ontology/material/ChemicalEntity
Sub Class Of	resourceODP:Matter [C]
In Range Of	hasChemicalEntity [op]
Super Class Of	ChemicalSubstance [C] MolecularEntity [C]

Chemical Substance [C]

IRI	http://w3id.org/CEON/ontology/material/ChemicalSubstance
Sub Class Of	ChemicalEntity [C]
Super Class Of	ChemicalElement [C]

Chromium [C]

IRI	http://w3id.org/CEON/ontology/material/Chromium
Sub Class Of	ChemicalElement [C]

Copper [C]

IRI	http://w3id.org/CEON/ontology/material/Copper
Sub Class Of	ChemicalElement [C]

Dysprosium [C]

IRI	http://w3id.org/CEON/ontology/material/Dysprosium
Sub Class Of	RareEarthElement [C]

Erbium [C]

IRI	http://w3id.org/CEON/ontology/material/Erbium
Sub Class Of	RareEarthElement [C]

Europium [C]

IRI	http://w3id.org/CEON/ontology/material/Europium
Sub Class Of	RareEarthElement [C]

Gadolinium [C]

IRI	http://w3id.org/CEON/ontology/material/Gadolinium
Sub Class Of	RareEarthElement [C]

Holmium [C]

IRI	http://w3id.org/CEON/ontology/material/Holmium
Sub Class Of	RareEarthElement [C]

Iron [C]

IRI	http://w3id.org/CEON/ontology/material/Iron
Sub Class Of	ChemicalElement [C]

Lanthanum [C]

IRI	http://w3id.org/CEON/ontology/material/Lanthanum
Sub Class Of	RareEarthElement [C]

Lutetium [C]

IRI	http://w3id.org/CEON/ontology/material/Lutetium
Sub Class Of	RareEarthElement [C]

Magnesium [C]

IRI	http://w3id.org/CEON/ontology/material/Magnesium
Sub Class Of	ChemicalElement [C]

Manganese [C]

IRI	http://w3id.org/CEON/ontology/material/Manganese
Sub Class Of	ChemicalElement [C]

Material ^C

IRI	http://w3id.org/CEON/ontology/material/Material
Sub Class Of	resourceODP:Matter ^C
In Domain Of	hasChemicalEntity ^{op} hasMaterialComponent ^{op}
Restriction	hasChemicalEntity ^{op} some Material ^C
Super Class Of	Cellulose ^C

Material Component ^C

IRI	http://w3id.org/CEON/ontology/material/MaterialComponent
Sub Class Of	resourceODP:Constituent ^C
In Range Of	hasMaterialComponent ^{op}

Molecular Entity ^C

IRI	http://w3id.org/CEON/ontology/material/MolecularEntity
Sub Class Of	ChemicalEntity ^C

Neodymium ^C

IRI	http://w3id.org/CEON/ontology/material/Neodymium
Sub Class Of	RareEarthElement ^C

Nickel ^C

IRI	http://w3id.org/CEON/ontology/material/Nickel
Sub Class Of	ChemicalElement ^C

Niobium ^C

IRI	http://w3id.org/CEON/ontology/material/Niobium
Sub Class Of	ChemicalElement ^C

Praseodymium ^C

IRI	http://w3id.org/CEON/ontology/material/Praseodymium
Sub Class Of	RareEarthElement ^C

Promethium ^C

IRI   http://w3id.org/CEON/ontology/material/Promethium

Sub Class Of   RareEarthElement ^C

Rare Earth Element ^C

IRI   http://w3id.org/CEON/ontology/material/RareEarthElement

Sub Class Of   ChemicalElement ^C

Super Class Of

Cerium ^C
Dysprosium ^C
Erbium ^C
Europium ^C
Gadolinium ^C
Holmium ^C
Lanthanum ^C
Lutetium ^C
Neodymium ^C
Praseodymium ^C
Promethium ^C
Samarium ^C
Scandium ^C
Tantalum ^C
Terbium ^C
Thulium ^C
Ytterbium ^C
Yttrium ^C

Samarium ^C

IRI   http://w3id.org/CEON/ontology/material/Samarium

Sub Class Of   RareEarthElement ^C

Scandium ^C

IRI   http://w3id.org/CEON/ontology/material/Scandium

Sub Class Of   RareEarthElement ^C

Silicon ^C

IRI   http://w3id.org/CEON/ontology/material/Silicon

Sub Class Of   ChemicalElement ^C

Tantalum ^C

IRI http://w3id.org/CEON/ontology/material/Tantalum

Sub Class Of RareEarthElement ^C

Terbium ^C

IRI http://w3id.org/CEON/ontology/material/Terbium

Sub Class Of RareEarthElement ^C

Thulium ^C

IRI http://w3id.org/CEON/ontology/material/Thulium

Sub Class Of RareEarthElement ^C

Titanium ^C

IRI http://w3id.org/CEON/ontology/material/Titanium

Sub Class Of ChemicalElement ^C

Ytterbium ^C

IRI http://w3id.org/CEON/ontology/material/Ytterbium

Sub Class Of RareEarthElement ^C

Yttrium ^C

IRI http://w3id.org/CEON/ontology/material/Yttrium

Sub Class Of RareEarthElement ^C

Zinc ^C

IRI http://w3id.org/CEON/ontology/material/Zinc

Sub Class Of ChemicalElement ^C

Constituent ^C

IRI http://w3id.org/CEON/ontology/resourceODP/Constituent

Super Class Of MaterialComponent ^C

Matter ^c

IRI	http://w3id.org/CEON/ontology/resourceODP/Matter
Super Class Of	ChemicalEntity ^c Material ^c

Object Properties

has chemical entity ^{op}

IRI	http://w3id.org/CEON/ontology/material/hasChemicalEntity
Domain	Material ^c
Range	ChemicalEntity ^c

has material component ^{op}

IRI	http://w3id.org/CEON/ontology/material/hasMaterialComponent
Domain	Material ^c
Range	MaterialComponent ^c

Datatype Properties

anonymous formula ^{dp}

IRI	http://w3id.org/CEON/ontology/material/anonymousFormula

descriptive formula ^{dp}

IRI	http://w3id.org/CEON/ontology/material/descriptiveFormula

hill formula ^{dp}

IRI	http://w3id.org/CEON/ontology/material/hillFormula

reduced chemical formula ^{dp}

IRI	http://w3id.org/CEON/ontology/material/reducedChemicalFormula

Namespaces

:

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

dcterms

http://purl.org/dc/terms/

odp

http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#

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#

resourceODP

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

vann

http://purl.org/vocab/vann/

Legend

c	Classes
op	Object Properties
dp	Datatype Properties