

# Circular Economy Ontology Network (CEON) - Construction Module

## Metadata

### IRI

<http://w3id.org/CEON/demo/construction/>

### Title

Circular Economy Ontology Network (CEON) - Construction Module

### Creator

Robin Keskisärkkä

### Contributor

Eva Blomqvist

Huanyu Li

Mikael Lindecrantz

### Date Created

2023-09-14

### License

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

### Version Iri

<http://w3id.org/CEON/demo/construction/0.1/>

### Version Info

0.1

### Preferred Namespace Prefix

construction

### Preferred Namespace Uri

<http://w3id.org/CEON/demo/construction/>

### Description

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

## Classes

Condition <sup>C</sup>	
IRI	<a href="http://w3id.org/CEON/demo/construction/Condition">http://w3id.org/CEON/demo/construction/Condition</a>
Description	Condition is used to describe the condition of a specific product object.
In Range Of	<a href="#">has condition</a> <sup>OP</sup>
Super Class Of	<a href="#">Floor Tile Condition</a> <sup>C</sup>

## Contaminant<sup>c</sup>

**IRI** <http://w3id.org/CEON/demo/construction/Contaminant>

**Description**

A contaminant is any physical thing that is regarded as a contaminant when present in a product or product object.

**In Range Of** [has contaminant<sup>op</sup>](#)

## Dimensional Deviation<sup>c</sup>

**IRI** <http://w3id.org/CEON/demo/construction/DimensionalDeviation>

**In Range Of**

[has dimensional deviation<sup>op</sup>](#)

## Fire resistance rating<sup>c</sup>

**IRI** <http://w3id.org/CEON/demo/construction/FireResistanceRating>

**Description**

Fire resistance rating is expressed as 'F' followed by the minimum number of minutes in which the functionality of the product or product object can withstand fire. For example, F30 would therefore be a fire resistance duration of 30 min.

**In Range Of** [has frire resistance rating<sup>op</sup>](#)

**Named Individuals**

[F30<sup>ni</sup>](#)  
[F60<sup>ni</sup>](#)

## Fire Resistance Relation<sup>c</sup>

**IRI** <http://w3id.org/CEON/demo/construction/FireResistanceRelation>

**Sub Class Of** [actorODP:ResourceParticipation](#)

## Floor tile<sup>c</sup>

**IRI** <http://w3id.org/CEON/demo/construction/FloorTile>

**Description**

A floor tile is a type of product that used to cover a floor.

**Sub Class Of** [product:Product](#)

## Floor Tile Condition<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/FloorTileCondition">http://w3id.org/CEON/demo/construction/FloorTileCondition</a>
<b>Description</b>	Floor Tile Condition is used to describe the condition of a floor tile (good, medium, bad).
<b>Sub Class Of</b>	<a href="#">Condition<sup>c</sup></a>
<b>Named Individuals</b>	<a href="#">bad condition<sup>ni</sup></a> <a href="#">good condition<sup>ni</sup></a> <a href="#">medium condition<sup>ni</sup></a>

## Floor Tile Condition Relation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/FloorTileConditionRelation">http://w3id.org/CEON/demo/construction/FloorTileConditionRelation</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceParticipation</a>

## Galvanized Steel Material<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/GalvanizedSteelMaterial">http://w3id.org/CEON/demo/construction/GalvanizedSteelMaterial</a>
<b>Sub Class Of</b>	<a href="#">material:Material</a>

## Policy On Treatment<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/PolicyOnTreatment">http://w3id.org/CEON/demo/construction/PolicyOnTreatment</a>
<b>Description</b>	PolicyOnTreatment represents the the policy for treatment (reuse, refurbish or reprocessing)
<b>In Range Of</b>	<a href="#">policy on treatment<sup>op</sup></a>
<b>Named Individuals</b>	<a href="#">refurbish<sup>ni</sup></a> <a href="#">reprocess<sup>ni</sup></a> <a href="#">reuse<sup>ni</sup></a>

## Product quality<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/ProductQuality">http://w3id.org/CEON/demo/construction/ProductQuality</a>
<b>Description</b>	ProductQuality represents the quality of a product or product object.
<b>In Range Of</b>	<a href="#">has product quality</a> <sup>op</sup>
<b>Named Individuals</b>	<a href="#">Product quality high</a> <sup>ni</sup> <a href="#">Product quality low</a> <sup>ni</sup> <a href="#">Product quality medium</a> <sup>ni</sup>

## treatment policy<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/TreatmentPolicy">http://w3id.org/CEON/demo/construction/TreatmentPolicy</a>
<b>Description</b>	TreatmentPolicy is used to describe the policy for treatment for a given product or product object.
<b>Named Individuals</b>	<a href="#">refurbish</a> <sup>ni</sup> <a href="#">reprocess</a> <sup>ni</sup> <a href="#">reuse</a> <sup>ni</sup>

## Object Properties

### has condition<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasCondition">http://w3id.org/CEON/demo/construction/hasCondition</a>
<b>Description</b>	hasCondition is used to describe the condition of a specific product object.
<b>Sub Property Of</b>	<a href="#">topObjectProperty</a> <sup>op</sup>
<b>Domain</b>	<a href="#">product:Product</a> <sup>c</sup> <i>or</i> <a href="#">product:ProductObject</a> <sup>c</sup>
<b>Range</b>	<a href="#">Condition</a> <sup>c</sup>

## has contaminant<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasContaminant">http://w3id.org/CEON/demo/construction/hasContaminant</a>
<b>Description</b>	hasContaminant is used to express the presence of contaminants in a product or product object.
<b>Domain</b>	<a href="#">product:Product</a>
<b>Range</b>	<a href="#">Contaminant<sup>c</sup></a>

## has dimension<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasDimension">http://w3id.org/CEON/demo/construction/hasDimension</a>
<b>Description</b>	hasDimension is used to describe a dimension of a product or product object.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Super Property Of</b>	<ul style="list-style-type: none"><li>• <a href="#">has height<sup>op</sup></a></li><li>• <a href="#">has thickness<sup>op</sup></a></li><li>• <a href="#">has width<sup>op</sup></a></li></ul>
<b>Domain</b>	<a href="#">product:ProductObject<sup>c</sup></a> or <a href="#">product:Product<sup>c</sup></a>

## has dimensional deviation<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasDimensionalDeviation">http://w3id.org/CEON/demo/construction/hasDimensionalDeviation</a>
<b>Description</b>	hasDimensionalDeviation is used to describe the dimensional deviation class of a product.
<b>Sub Property Of</b>	<a href="#">topObjectProperty<sup>op</sup></a>
<b>Domain</b>	<a href="#">product:Product</a>
<b>Range</b>	<a href="#">DimensionalDeviation<sup>c</sup></a>

## has distance to recycling plant<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasDistanceToRecyclingPlant">http://w3id.org/CEON/demo/construction/hasDistanceToRecyclingPlant</a>
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

## has fire resistance rating<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasFireResistanceRating">http://w3id.org/CEON/demo/construction/hasFireResistanceRating</a>
<b>Description</b>	hasFireResistanceRating is used to represent the fire resistance rating of a product or product object.
<b>Sub Property Of</b>	<a href="#">topObjectProperty</a> <sup>op</sup>
<b>Domain</b>	<a href="#">product:Product</a> <sup>c</sup> or <a href="#">product:ProductObject</a> <sup>c</sup>
<b>Range</b>	<a href="#">Fire resistance rating</a> <sup>c</sup>

## has height<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasHeight">http://w3id.org/CEON/demo/construction/hasHeight</a>
<b>Description</b>	hasHeight is used to describe the height of a product or product object.
<b>Sub Property Of</b>	<a href="#">has dimension</a> <sup>op</sup>

## has market value for new product<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasMarketValueForNewProduct">http://w3id.org/CEON/demo/construction/hasMarketValueForNewProduct</a>
<b>Description</b>	hasMarketValueForNewProduct is used to describe the market value of a new product.
<b>Sub Property Of</b>	<a href="#">quantity:hasMarketValue</a>
<b>Domain</b>	<a href="#">product:Product</a>

## has market value for reused product<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasMarketValueForReusedProduct">http://w3id.org/CEON/demo/construction/hasMarketValueForReusedProduct</a>
<b>Description</b>	hasMarketValueForReusedProduct is used to describe the market value of a used product.
<b>Sub Property Of</b>	<a href="#">quantity:hasMarketValue</a>
<b>Domain</b>	<a href="#">product:Product</a>

## has product quality<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasProductQuality">http://w3id.org/CEON/demo/construction/hasProductQuality</a>
<b>Description</b>	hasProductQuality is used to represent the quality of a product or product object.
<b>Sub Property Of</b>	<a href="#">topObjectProperty<sup>op</sup></a>
<b>Domain</b>	<a href="#">product:Product<sup>c</sup></a> or <a href="#">product:ProductObject<sup>c</sup></a>
<b>Range</b>	<a href="#">Product quality<sup>c</sup></a>

## has recycling potential<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasRecyclingPotential">http://w3id.org/CEON/demo/construction/hasRecyclingPotential</a>
<b>Description</b>	hasRecyclingPotential describes the amount of the product or product object that can potentially be recycled.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Domain</b>	<a href="#">product:Product<sup>c</sup></a> or <a href="#">product:ProductObject<sup>c</sup></a>

## has recycling separability<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasRecyclingSeparability">http://w3id.org/CEON/demo/construction/hasRecyclingSeparability</a>
<b>Description</b>	<ul style="list-style-type: none"><li>• has recycling separability</li><li>• hasRecyclingSeparability is used to describe the amount of the product or product object that can be separated for recycling.</li></ul>
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Domain</b>	<a href="#">product:ProductObject<sup>c</sup></a> or <a href="#">product:Product<sup>c</sup></a>

## has resistance to earth<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasResistanceToEarth">http://w3id.org/CEON/demo/construction/hasResistanceToEarth</a>
<b>Description</b>	hasResistanceToEarth describes the resistance to earth of a product.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Domain</b>	<a href="#">product:Product</a>

## has reuse deconstructability<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasReuseDeconstructability">http://w3id.org/CEON/demo/construction/hasReuseDeconstructability</a>
<b>Description</b>	hasReuseDeconstructability is used to describe the amount of the product hat can be deconstructed for reuse.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Domain</b>	<a href="#">product:Product</a>

## has system weight<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasSystemWeight">http://w3id.org/CEON/demo/construction/hasSystemWeight</a>
<b>Description</b>	hasSystemWeight is used to express the system weight of a product or product object.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Domain</b>	<a href="#">product:ProductObject<sup>c</sup></a> or <a href="#">product:Product<sup>c</sup></a>

## has thickness<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasThickness">http://w3id.org/CEON/demo/construction/hasThickness</a>
<b>Description</b>	hasThickness is used to describe the thickness of a product or product object.
<b>Sub Property Of</b>	<a href="#">has dimension<sup>op</sup></a>

## has use span<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasUseSpan">http://w3id.org/CEON/demo/construction/hasUseSpan</a>
<b>Description</b>	hasUseSpan describes the use span of a product or prodcut object.
<b>Sub Property Of</b>	<a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>
<b>Super Property Of</b>	<ul style="list-style-type: none"><li><a href="#">has use span remaining<sup>op</sup></a></li><li><a href="#">has use span total<sup>op</sup></a></li></ul>
<b>Domain</b>	<a href="#">product:Product<sup>c</sup></a> or <a href="#">product:ProductObject<sup>c</sup></a>



## has use span remaining<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasUseSpanRemaining">http://w3id.org/CEON/demo/construction/hasUseSpanRemaining</a>
<b>Description</b>	hasUseSpanRemaining describes the remaining use span of a product or product object.
<b>Sub Property Of</b>	<a href="#">has use span<sup>op</sup></a>

## has use span total<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasUseSpanTotal">http://w3id.org/CEON/demo/construction/hasUseSpanTotal</a>
<b>Description</b>	hasUseSpanTotal describes the total use span of a product or product object.
<b>Sub Property Of</b>	<a href="#">has use span<sup>op</sup></a>

## has width<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasWidth">http://w3id.org/CEON/demo/construction/hasWidth</a>
<b>Description</b>	hasHeight is used to describe the height of a product or product object.
<b>Sub Property Of</b>	<a href="#">has dimension<sup>op</sup></a>

## policy on treatment<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/policyOnTreatment">http://w3id.org/CEON/demo/construction/policyOnTreatment</a>
<b>Description</b>	policyOnTreatment describes the policy for treatment of used product.
<b>Sub Property Of</b>	<a href="#">topObjectProperty<sup>op</sup></a>
<b>Domain</b>	<a href="#">product:Product</a>
<b>Range</b>	<a href="#">PolicyOnTreatment<sup>c</sup></a>

## Datatype Properties

### has accessories<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasAccessories">http://w3id.org/CEON/demo/construction/hasAccessories</a>
<b>Description</b>	hasAccessories is used to provide a text representation of the accessories related to a product or product object.
<b>Domain</b>	<a href="#">product:Product<sup>c</sup></a> or <a href="#">product:ProductObject<sup>c</sup></a>
<b>Range</b>	<a href="#">xsd:string</a>

### has certificate<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasCertificate">http://w3id.org/CEON/demo/construction/hasCertificate</a>
<b>Description</b>	hasCertificate is used to link a product or product object to a certificate. The certificate is represented as a string, which could refer to the URL, name, or identifier of a known certificate.
<b>Domain</b>	<a href="#">product:ProductObject<sup>c</sup></a> or <a href="#">product:Product<sup>c</sup></a>
<b>Range</b>	<a href="#">xsd:string</a>

### has dismantling method<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasDismantlingMethod">http://w3id.org/CEON/demo/construction/hasDismantlingMethod</a>
<b>Description</b>	hasDismantlingMethod is used to represent a textual description of the dismantling method for a product or product object.
<b>Sub Property Of</b>	<a href="#">topDataProperty<sup>dp</sup></a>
<b>Domain</b>	<a href="#">product:ProductObject<sup>c</sup></a> or <a href="#">product:Product<sup>c</sup></a>
<b>Range</b>	<a href="#">xsd:string</a>

## has installation date<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasInstallationDate">http://w3id.org/CEON/demo/construction/hasInstallationDate</a>
<b>Description</b>	hasInstallationDate is used to represent the installation date of a specific product object.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a>
<b>Range</b>	<a href="#">xsd:date</a>

## has packaging recommendations after dismantling<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasPackagingRecommendationsAfterDismantling">http://w3id.org/CEON/demo/construction/hasPackagingRecommendationsAfterDismantling</a>
<b>Description</b>	hasPackagingRecommendationsAfterDismantling is used to represent a textual description of the packaging recommendations after a product or product object has been dismantled.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:Product</a> <sup>c</sup> or <a href="#">product:ProductObject</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## has product description<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasProductDescription">http://w3id.org/CEON/demo/construction/hasProductDescription</a>
<b>Description</b>	<ul style="list-style-type: none"><li>• has product description</li><li>• hasProductDescription is used to represent a textual description of a product or product object.</li></ul>
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:Product</a> <sup>c</sup> or <a href="#">product:ProductObject</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## has product id<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasProductID">http://w3id.org/CEON/demo/construction/hasProductID</a>
<b>Description</b>	<ul style="list-style-type: none"><li>• has product ID</li><li>• hasProductID is used to represent the product ID of a product or product object.</li></ul>
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a> <sup>c</sup> or <a href="#">product:Product</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:int</a>

## has production date<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasProductionDate">http://w3id.org/CEON/demo/construction/hasProductionDate</a>
<b>Description</b>	hasProductionDate is used to represent the production date of a specific product object.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a>
<b>Range</b>	<a href="#">xsd:date</a>

## has production site<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasProductionSite">http://w3id.org/CEON/demo/construction/hasProductionSite</a>
<b>Description</b>	hasProductionSite is used to represent the site at which a given product or product object has been produced as a string. (This property could potentially be represented as an object property. The site could then potentially be treated as a location.)
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a> <sup>c</sup> or <a href="#">product:Product</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## has refurbishment method<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasRefurbishmentMethod">http://w3id.org/CEON/demo/construction/hasRefurbishmentMethod</a>
<b>Description</b>	hasRefurbishmentMethod is used to provide a textual description of the refurbishment process for a product or product object.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a> <sup>c</sup> or <a href="#">product:Product</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## has takeback program from original manufacturer<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasTakeBackProgramFromOriginalManufacturer">http://w3id.org/CEON/demo/construction/hasTakeBackProgramFromOriginalManufacturer</a>
<b>Description</b>	hasTakeBackProgramFromOriginalManufacturer is used to express whether the original manufacturer of a product has a take back program it (true/false).
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:Product</a>
<b>Range</b>	<a href="#">xsd:boolean</a>

## has takeback program from other manufacturer<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasTakeBackProgramOtherManufacturer">http://w3id.org/CEON/demo/construction/hasTakeBackProgramOtherManufacturer</a>
<b>Description</b>	hasTakeBackProgramFromOtherManufacturer is used to express whether another manufacturer has a take back program (true/false) for a product.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:Product</a>
<b>Range</b>	<a href="#">xsd:boolean</a>

## has technical requirements for take back and recycling<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForRecycling">http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForRecycling</a>
<b>Description</b>	hasTechnicalRequirmentsForTakeBackForRecycling is used to represent a textual description of the technical requirements of a product or product object for take back and recycling.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a> <sup>c</sup> or <a href="#">product:Product</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## has technical requirements for take back and reuse<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForReuse">http://w3id.org/CEON/demo/construction/hasTechnicalRequirementsForTakeBackForReuse</a>
<b>Description</b>	hasTechnicalRequirmentsForTakeBackForReuse is used to represent a textual description of the technical requirements of a product or product object for take back and reuse.
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:ProductObject</a> <sup>c</sup> or <a href="#">product:Product</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:string</a>

## is contaminated<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/demo/construction/isContaminated">http://w3id.org/CEON/demo/construction/isContaminated</a>
<b>Description</b>	isContaminated is used to express whether a specific product object contains any contaminants (true/false).
<b>Sub Property Of</b>	<a href="#">topDataProperty</a> <sup>dp</sup>
<b>Domain</b>	<a href="#">product:Product</a> <sup>c</sup> or <a href="#">product:ProductObject</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:boolean</a>

## Annotation Properties

contributor<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/contributor>

created<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/created>

creator<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/creator>

description<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/description>

license<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/license>

title<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/title>

preferred namespace prefix<sup>ap</sup>

**IRI** <http://purl.org/vocab/vann/preferredNamespacePrefix>

preferred namespace uri<sup>ap</sup>

**IRI** <http://purl.org/vocab/vann/preferredNamespaceUri>

covers requirements<sup>ap</sup>

**IRI** <http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#coversRequirements>

## Namespaces

:

<http://w3id.org/CEON/demo/construction/>

**actor**

<http://w3id.org/CEON/ontology/actor/>

**actorODP**

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

**datasheet**

<http://w3id.org/CEON/ontology/datasheet/>

**dcterms**

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

**material**

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

**odp**

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

**owl**

<http://www.w3.org/2002/07/owl#>

**product**

<http://w3id.org/CEON/ontology/product/>

**prov**

<http://www.w3.org/ns/prov#>

**quantity**

<http://w3id.org/CEON/ontology/quantity#>

**rdf**

<http://www.w3.org/1999/02/22-rdf-syntax-ns#>

**rdfs**

<http://www.w3.org/2000/01/rdf-schema#>

**vann**

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

**xsd**

<http://www.w3.org/2001/XMLSchema#>

## Legend

c

Classes

op

Object Properties

dp

Datatype Properties

ap

Annotation Properties