# Circular Economy Ontology Network (CEON) - Textile Module

## Metadata

**IRI**

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

**Title**

Circular Economy Ontology Network (CEON) - Textile Module

**Creator**

Eva Blomqvist

**Contributor**

Huanyu Li

Mikael Lindecrantz

Robin Keskisärkkä

**License**

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

**Version Iri**

http://w3id.org/CEON/ontology/textile/0.1/

**Version Info**

0.1

**Preferred Namespace Uri**

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

**Description**

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

## Classes

### Amount Interval Value <sup>C</sup>

| IRI | http://w3id.org/CEON/ontology/textile/AmountIntervalValue |
| --- | --- |
| **Super Class Of** | LeakageAmountInterval <sup>C</sup><br>PostConsumerRecycledContentInterval <sup>C</sup><br>PreConsumerRecycledContentInterval <sup>C</sup><br>RecyclingAtSameLevelAmountInterval <sup>C</sup> |

## Amount Threshold [C]

**IRI**  http://w3id.org/CEON/ontology/textile/AmountThreshold

**In Range Of**  disclosureValue[op]

**Named Individuals**

0.01%[ni]
0.1%[ni]
1%[ni]

## Availability [C]

**IRI**  http://w3id.org/CEON/ontology/textile/Availability

**Named Individuals**

public[ni]
secrecyAgreement[ni]

## Batch Of Textile Objects [C]

**IRI**  http://w3id.org/CEON/ontology/textile/BatchOfTextileObjects

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

**Restriction**  hasColor[op] some BatchOfTextileObjects[c]

## Chemical Finishing <sup>C</sup>

**IRI**　　　　　http://w3id.org/CEON/ontology/textile/ChemicalFinishing

**Sub Class Of**　　TextileFinishing<sup>c</sup>

**Named Individuals**
- anti-pilling<sup>ni</sup>
- antiStaticFinishing<sup>ni</sup>
- antibacterialFinishing<sup>ni</sup>
- coating<sup>ni</sup>
- coatingAcrylic<sup>ni</sup>
- coatingPU<sup>ni</sup>
- coatingPVC<sup>ni</sup>
- creaseResistance<sup>ni</sup>
- enzymeFinishing<sup>ni</sup>
- flameRetardant<sup>ni</sup>
- mattingAgent<sup>ni</sup>
- millWashing<sup>ni</sup>
- millingAgent<sup>ni</sup>
- naturalOiling<sup>ni</sup>
- opticalBrighteners<sup>ni</sup>
- permanentPress<sup>ni</sup>
- prepareForDyeing<sup>ni</sup>
- resins<sup>ni</sup>
- silicones<sup>ni</sup>
- soilRelease<sup>ni</sup>
- stainResistance<sup>ni</sup>

## Color <sup>C</sup>

**IRI**　　　　　http://w3id.org/CEON/ontology/textile/Color

**In Range Of**　　hasColor<sup>op</sup>

## Dye [C]

**IRI**    http://w3id.org/CEON/ontology/textile/Dye

**Sub Class Of**    TextileProperty [C]

**Named Individuals**
acidDye [ni]
analineDye [ni]
azoDye [ni]
basicDye [ni]
chromeDye [ni]
directDye [ni]
disperseDye [ni]
mordantDye [ni]
narturalDye [ni]
pigmentBiosynthetic [ni]
pigmentNatural [ni]
pigmentSynthetic [ni]
reactiveDye [ni]
vatDye [ni]

## Dyeing Process [C]

**IRI**    http://w3id.org/CEON/ontology/textile/DyeingProcess

**Sub Class Of**    TextileManufacturingProcess [C]

**In Range Of**    Dye Method [op]

## Leakage Amount Interval [C]

**IRI**    http://w3id.org/CEON/ontology/textile/LeakageAmountInterval

**Sub Class Of**    AmountIntervalValue [C]

**Named Individuals**
10-25% [ni]
1-10% [ni]
25-50% [ni]
50-75% [ni]
75-95% [ni]
>95% [ni]
lessThan1Perc [ni]

## Mechanical Finishing [c]

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/MechanicalFinishing |
| **Sub Class Of** | TextileFinishing [c] |
| **Named Individuals** | calendering [ni] <br> embossing [ni] <br> permanentCreasing [ni] <br> pre-shrinking [ni] <br> steaming [ni] <br> sueding [ni] |

## Post Consumer Recycled Content Interval [c]

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/PostConsumerRecycledContentInterval |
| **Sub Class Of** | AmountIntervalValue [c] |
| **Named Individuals** | 0% [ni] <br> 0-10% [ni] <br> 10-25% [ni] <br> 25-50% [ni] <br> 50-75% [ni] <br> 75-95% [ni] <br> >95% [ni] |

## Pre Consumer Recycled Content Interval [c]

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/PreConsumerRecycledContentInterval |
| **Sub Class Of** | AmountIntervalValue [c] |
| **Named Individuals** | 0% [ni] <br> 0-10% [ni] <br> 10-25% [ni] <br> 25-50% [ni] <br> 50-75% [ni] <br> 75-95% [ni] <br> >95% [ni] |

## Print [c]

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/Print |
| **Sub Class Of** | http://w3id.org/CEON/ontology/resourceODP/Constituent |

## Print Stuff [c]

**IRI**        http://w3id.org/CEON/ontology/textile/PrintStuff

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

**Named Individuals**

- acidDye [ni]
- analineDye [ni]
- azoDye [ni]
- basicDye [ni]
- chromeDye [ni]
- directDye [ni]
- disperseDye [ni]
- mordantDye [ni]
- narturalDye [ni]
- pigmentBiosynthetic [ni]
- pigmentNatural [ni]
- pigmentSynthetic [ni]
- reactiveDye [ni]
- sulfurDye [ni]
- vatDye [ni]

## Printing Process [c]

**IRI**        http://w3id.org/CEON/ontology/textile/PrintingProcess

**Sub Class Of**      TextileManufacturingProcess [c]

**In Range Of**      Print Method [op]

**Named Individuals**

- batikPrinted [ni]
- digitalPrinted [ni]
- handPainted [ni]
- inkjetPrinted [ni]
- rollerPrinted [ni]
- screenPrinted [ni]
- transferPrinted [ni]

## Recycling At Same Level Amount Interval [c]

**IRI**            http://w3id.org/CEON/ontology/textile/RecyclingAtSameLevelAmountInterval

**Sub Class Of**   AmountIntervalValue [c]

**Named Individuals**
0% [ni]
0-10% [ni]
10-25% [ni]
25-50% [ni]
50-75% [ni]
75-95% [ni]
95-99% [ni]
>99% [ni]

## Textile Chemical Substance Threshold Statement [c]

**IRI**            http://w3id.org/CEON/ontology/textile/TextileChemicalSubstanceThresholdStatement

**Sub Class Of**   TextileDataSheetStatement [c]

**In Domain Of**   disclosureValue [op]

## Textile Data Sheet [c]

**IRI**            http://w3id.org/CEON/ontology/textile/TextileDataSheet

**Sub Class Of**   http://w3id.org/CEON/ontology/datasheet/DataSheet

**Restriction**
http://w3id.org/CEON/ontology/resourceODP/isAbout some TextileDataSheet [c]
hasProperty [op] some TextileDataSheet [c]

## Textile Data Sheet Issuing Statement [c]

**IRI**            http://w3id.org/CEON/ontology/textile/TextileDataSheetIssuingStatement

**Sub Class Of**   TextileDataSheetStatement [c]

## Textile Data Sheet Statement <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileDataSheetStatement |
| **Sub Class Of** | http://w3id.org/CEON/ontology/provenance/Statement |

**Super Class Of**

TextileChemicalSubstanceThresholdStatement <sup>C</sup>
TextileDataSheetIssuingStatement <sup>C</sup>
TextileDataSheetUpdateStatement <sup>C</sup>
TextileManufacturerStatement <sup>C</sup>
TextileManufacturingSiteStatement <sup>C</sup>
TextileProductCertification <sup>C</sup>
TextileProductComponentRelation <sup>C</sup>
TextileProductCompositionDisclosureStatement <sup>C</sup>
TextileProductCompositionOfConcern <sup>C</sup>
TextileProductCompositionWeightFraction <sup>C</sup>
TextileProductDataSheet <sup>C</sup>
TextileProductDesignForDisassembly <sup>C</sup>
TextileProductDesignForRecycling <sup>C</sup>
TextileProductDesignForRefurbishment <sup>C</sup>
TextileProductDesignForRemanufacturing <sup>C</sup>
TextileProductDesignForReuseMethod <sup>C</sup>
TextileProductDesignedForBetterUse <sup>C</sup>
TextileProductManufacturingMethod <sup>C</sup>
TextileProductMatterCompositionRelation <sup>C</sup>
TextileProductRecycledContent <sup>C</sup>
TextileProductRenewableContet <sup>C</sup>

## Textile Data Sheet Update Statement <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileDataSheetUpdateStatement |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Finishing <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileFinishing |
| **Sub Class Of** | TextileProperty <sup>C</sup> |
| **In Range Of** | hasFinishing <sup>op</sup> |

**Super Class Of**

ChemicalFinishing <sup>C</sup>
MechanicalFinishing <sup>C</sup>

## Textile Manufacturer Statement [C]

**IRI**  http://w3id.org/CEON/ontology/textile/TextileManufacturerStatement

**Sub Class Of**  TextileDataSheetStatement [C]

## Textile Manufacturing Process [C]

**IRI**  http://w3id.org/CEON/ontology/textile/TextileManufacturingProcess

**In Range Of**  hasTextileManufacturingProcess [op]

**Super Class Of**

  DyeingProcess [C]
  PrintingProcess [C]

**Named Individuals**

  directDyed [ni]
  dopeDyed [ni]
  pieceDyed [ni]
  topDyed [ni]
  undyed [ni]
  yarnDyed [ni]

## Textile Manufacturing Site Statement [C]

**IRI**  http://w3id.org/CEON/ontology/textile/TextileManufacturingSiteStatement

**Sub Class Of**  TextileDataSheetStatement [C]

## Textile Product [C]

**IRI**  http://w3id.org/CEON/ontology/textile/TextileProduct

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

**In Domain Of**  hasTextileProductType [op]

**Restriction**

  hasColor [op] some TextileProduct [C]
  hasTextileProductType [op] some TextileProduct [C]

## Textile Product Certification [C]

**IRI**  http://w3id.org/CEON/ontology/textile/TextileProductCertification

**Sub Class Of**  TextileDataSheetStatement [C]

## Textile Product Component Relation [C]

**IRI**
http://w3id.org/CEON/ontology/textile/TextileProductComponentRelation

**Sub Class Of**
http://qudt.org/schema/qudt/Quantity
http://w3id.org/CEON/ontology/actorODP/ResourceParticipation
TextileDataSheetStatement [C]
http://qudt.org/schema/qudt/hasUnit some http://qudt.org/schema/qudt/Unit [C] *and*
http://qudt.org/schema/qudt/numericalValue some
nfc1675a901b74ce4811e2bed2d605cf1b15 [C] *and*
http://w3id.org/CEON/ontology/actorODP/participatingSubject some TextileProduct
[C] *and* http://w3id.org/CEON/ontology/actorODP/participatingObject some
http://w3id.org/CEON/ontology/resourceODP/Constituent [C]

## Textile Product Composition Disclosure Statement [C]

**IRI**
http://w3id.org/CEON/ontology/textile/TextileProductCompositionDisclosureStatement

**Sub Class Of**
TextileDataSheetStatement [C]

**In Range Of**
chemicalSubstanceDisclosureThreshold [op]

## Textile Product Composition Of Concern [C]

**IRI**
http://w3id.org/CEON/ontology/textile/TextileProductCompositionOfConcern

**Sub Class Of**
TextileDataSheetStatement [C]

## Textile Product Composition Weight Fraction [C]

**IRI**
http://w3id.org/CEON/ontology/textile/TextileProductCompositionWeightFraction

**Sub Class Of**
TextileDataSheetStatement [C]

## Textile Product Data Sheet [C]

**IRI**
http://w3id.org/CEON/ontology/textile/TextileProductDataSheet

**Sub Class Of**
TextileDataSheetStatement [C]

## Textile Product Design For Disassembly <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignForDisassembly |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |
| **Super Class Of** | TextileProductDesignToBeCleanlyRemoved <sup>C</sup><br>TextileProductDesignToBeDismantled <sup>C</sup> |

## Textile Product Design For Recycling <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignForRecycling |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |
| **In Range Of** | desinged for recycling at the same level of quality <sup>op</sup> |
| **Restriction** | recyclingAtSameQualityRange <sup>op</sup> some TextileProductDesignForRecycling <sup>C</sup> |

## Textile Product Design For Refurbishment <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignForRefurbishment |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Product Design For Remanufacturing <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignForRemanufacturing |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Product Design For Reuse Method <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignForReuseMethod |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Product Design To Be Cleanly Removed <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignToBeCleanlyRemoved |
| **Sub Class Of** | TextileProductDesignForDisassembly <sup>C</sup> |

## Textile Product Design To Be Dismantled <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignToBeDismantled |
| **Sub Class Of** | TextileProductDesignForDisassembly <sup>C</sup> |

## Textile Product Designed For Better Use <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductDesignedForBetterUse |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Product Manufacturing Method <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductManufacturingMethod |
| **Sub Class Of** | TextileDataSheetStatement <sup>C</sup> |

## Textile Product Matter Composition Relation <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductMatterCompositionRelation |
| **Sub Class Of** | http://qudt.org/schema/qudt/Quantity<br>http://w3id.org/CEON/ontology/actorODP/ResourceParticipation<br>TextileDataSheetStatement <sup>C</sup><br>http://w3id.org/CEON/ontology/actorODP/participatingSubject some<br>nfc1675a901b74ce4811e2bed2d605cf1b26 <sup>C</sup> *and*<br>http://w3id.org/CEON/ontology/actorODP/participatingObject some<br>http://w3id.org/CEON/ontology/resourceODP/Matter <sup>C</sup> |

## Textile Product Object <sup>C</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/TextileProductObject |
| **Sub Class Of** | http://w3id.org/CEON/ontology/product/ProductObject |
| **Restriction** | hasColor<sup>op</sup> some TextileProductObject <sup>C</sup> |

## Textile Product Recycled Content <sup>C</sup>

**IRI**        http://w3id.org/CEON/ontology/textile/TextileProductRecycledContent

**Sub Class Of**

http://qudt.org/schema/qudt/Quantity
http://w3id.org/CEON/ontology/actorODP/ResourceParticipation
TextileDataSheetStatement <sup>C</sup>
http://qudt.org/schema/qudt/hasUnit some http://qudt.org/schema/qudt/Unit <sup>C</sup> *and*
http://qudt.org/schema/qudt/numericalValue some
nfc1675a901b74ce4811e2bed2d605cf1b39 <sup>C</sup> *and*
http://w3id.org/CEON/ontology/provenance/statementAbout some
nfc1675a901b74ce4811e2bed2d605cf1b35 <sup>C</sup>

## Textile Product Renewable Contet <sup>C</sup>

**IRI**        http://w3id.org/CEON/ontology/textile/TextileProductRenewableContet

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

## Textile Product Type <sup>C</sup>

**IRI**        http://w3id.org/CEON/ontology/textile/TextileProductType

**In Range Of**    hasTextileProductType <sup>op</sup>

## Textile Property <sup>C</sup>

**IRI**        http://w3id.org/CEON/ontology/textile/TextileProperty

**Super Class Of**

Dye <sup>C</sup>
TextileFinishing <sup>C</sup>
WaterProperty <sup>C</sup>

## Textile Recycling Process <sup>C</sup>

**IRI**        http://w3id.org/CEON/ontology/textile/TextileRecyclingProcess

**In Range Of**    textileProductDesignForRecycling <sup>op</sup>

**Named Individuals**

biodigestion <sup>ni</sup>
biosphereCascading <sup>ni</sup>
homeComposting <sup>ni</sup>
incineration <sup>ni</sup>
industrialComposting <sup>ni</sup>

## Validation [c]

**IRI**  http://w3id.org/CEON/ontology/textile/Validation

**Named Individuals**
certified [ni]
validatedByThirdParty [ni]

## Water Property [c]

**IRI**  http://w3id.org/CEON/ontology/textile/WaterProperty

**Sub Class Of**  TextileProperty [c]

**In Range Of**  Water Property [op]

**Named Individuals**
Water repellent [ni]
Water resistant [ni]
Waterproof [ni]

# Object Properties

## anticipated leakage during use [op]

**IRI**  http://w3id.org/CEON/ontology/textile/anticipatedLeakageDuringUse

**Description**  Percentage of the product content anticipated to become leakage during the use phase due to for example wear & tear, oxidation, erosion, etc.

**Sub Property Of**  hasProperty [op]

## chemical substance disclosure threshold [op]

**IRI**  http://w3id.org/CEON/ontology/textile/chemicalSubstanceDisclosureThreshold

**Range**  TextileProductCompositionDisclosureStatement [c]

## desinged for recycling at the same level of quality <sup>op</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designedForRecyclingAtSameQuality

**Description**  Percentage of the product that is designed for recycling at the same level of quality. The remainder of the materials is foreseen by the manufacturer to be recycled at a lower quality than the original content.

**Sub Property Of**  hasProperty <sup>op</sup>

**Range**  TextileProductDesignForRecycling <sup>c</sup>

---

## disclosure value <sup>op</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/disclosureValue

**Sub Property Of**  http://w3id.org/CEON/ontology/quantity#objectValue

**Domain**  TextileChemicalSubstanceThresholdStatement <sup>c</sup>

**Range**  AmountThreshold <sup>c</sup>

---

## has color <sup>op</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/hasColor

**Domain**  http://w3id.org/CEON/ontology/product/ProductObject <sup>c</sup> *or*
http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects <sup>c</sup> *or*
http://w3id.org/CEON/ontology/product/Product <sup>c</sup>

**Range**  Color <sup>c</sup>

---

## Dye Method <sup>op</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/hasDyeMethod

**Sub Property Of**  hasTextileManufacturingProcess <sup>op</sup>

**Range**  DyeingProcess <sup>c</sup>

---

## Dye Stuff <sup>op</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/hasDyeStuff

**Sub Property Of**  hasProperty <sup>op</sup>

## has finishing <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasFinishing |
| **Sub Property Of** | hasProperty <sup>op</sup> |
| **Range** | TextileFinishing <sup>c</sup> |

## Finishing Step <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasFinishingStep |
| **Sub Property Of** | hasTextileManufacturingProcess <sup>op</sup> |

## has post consumer recycled content amount <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasPostConsumerRecycledContentAmount |
| **Sub Property Of** | http://w3id.org/CEON/ontology/product/hasComposition |

## has pre consumer recycled content amount <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasPreConsumerRecycledContentAmount |
| **Sub Property Of** | http://w3id.org/CEON/ontology/product/hasComposition |

## Print Finishing <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasPrintFinishing |
| **Sub Property Of** | hasProperty <sup>op</sup> |

## Print Method <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasPrintMethod |
| **Sub Property Of** | hasTextileManufacturingProcess <sup>op</sup> |
| **Range** | PrintingProcess <sup>c</sup> |

## Print Stuff <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasPrintStuff |
| **Sub Property Of** | hasProperty <sup>op</sup> |

## has property <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasProperty |
| **Super Property Of** | <ul><li>anticipatedLeakageDuringUse <sup>op</sup></li><li>desinged for recycling at the same level of quality <sup>op</sup></li><li>Dye Stuff <sup>op</sup></li><li>hasFinishing <sup>op</sup></li><li>Print Finishing <sup>op</sup></li><li>Print Stuff <sup>op</sup></li><li>Water Property <sup>op</sup></li></ul> |
| **Domain** | http://w3id.org/CEON/ontology/datasheet/DataSheet |
| **Range** | http://w3id.org/CEON/ontology/provenance/Statement |

## has textile manufacturing process <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasTextileManufacturingProcess |
| **Super Property Of** | <ul><li>Dye Method <sup>op</sup></li><li>Finishing Step <sup>op</sup></li><li>Print Method <sup>op</sup></li></ul> |
| **Range** | TextileManufacturingProcess <sup>c</sup> |

## has textile product type <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasTextileProductType |
| **Domain** | TextileProduct <sup>c</sup> |
| **Range** | TextileProductType <sup>c</sup> |

## Water Property <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/hasWaterProperty |
| **Sub Property Of** | hasProperty <sup>op</sup> |
| **Range** | WaterProperty <sup>c</sup> |

## product composition disclosure availability <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/productCompositionDisclosureAvailability |
| **Description** | A product composition disclosed at the defined threshold is publicly available or a product composition disclosed at the defined threshold is available to the customer under secrecy agreement. |

## product composition disclosure validation <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/productCompositionDisclosureValidation |
| **Description** | The product composition disclosed at the defined threshold has been validated by a third party or the product has been awarded an independent certification or standard related to its composition. |

## recycling at same quality range <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/recyclingAtSameQualityRange |
| **Sub Property Of** | http://w3id.org/CEON/ontology/quantity#objectValue |

## textile product design <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/textileProductDesign |
| **Super Property Of** | textileProductDesignForRecycling <sup>op</sup> |

## textile product design for recycling <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/textileProductDesignForRecycling |
| **Description** | Product designed for a certain recycling method. |
| **Sub Property Of** | textileProductDesign <sup>op</sup> |
| **Range** | TextileRecyclingProcess <sup>c</sup> |

## weight fraction of disclosed substances <sup>op</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/weightFractionOfDisclosedSubstances |
| **Description** | The weight fraction of all disclosed chemical substances is 0%, 0-10%, 10-25%, 25-50%, 50-75%, 75-95%, 95-99%, over 99%. |

# Datatype Properties

## C Emark <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/CEmark |
| **Description** | The product has theCE mark. |
| **Sub Property Of** | certification <sup>dp</sup> |
| **Range** | xsd:boolean |

## available information <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/availableInformation |
| **Super Property Of** | <ul><li>biodegradabilityTestAvailable <sup>dp</sup></li><li>materialSafetyDataSheetAvailable <sup>dp</sup></li><li>materialSafetyDataSheetForDyeingAvailable <sup>dp</sup></li><li>materialSafetyDataSheetForFinishingAvailable <sup>dp</sup></li><li>technicalDataSheetAvailable <sup>dp</sup></li></ul> |

## biodegradability test available <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/biodegradabilityTestAvailable |
| **Description** | Biodegradability test is available. |
| **Sub Property Of** | availableInformation <sup>dp</sup> |
| **Range** | xsd:boolean |

## certification <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/certification |
| **Super Property Of** | CEmark <sup>dp</sup> |

## chemical compliance <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/chemicalCompliance |

## collection parameter <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/collectionParameter |
| **Super Property Of** | collectionSystem <sup>dp</sup> |

## collection system <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/collectionSystem |
| **Description** | The manufacturer/ industry association has a dedicated collection system in place to gather and deliver products for recycling. |
| **Sub Property Of** | collectionParameter <sup>dp</sup> |
| **Range** | xsd:boolean |

## design for properties <sup>dp</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designForProperties

**Super Property Of**
- designedForRecycling <sup>dp</sup>
- designedForRefurbishment <sup>dp</sup>
- designedForRemanufacturing <sup>dp</sup>
- designedForReuse <sup>dp</sup>

## design for recycling amounts <sup>dp</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designForRecyclingAmounts

**Super Property Of**  emissionByDesign <sup>dp</sup>

## designed for recycling <sup>dp</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designedForRecycling

**Description**  The product is designed for recycling?e

**Sub Property Of**  designForProperties <sup>dp</sup>

## designed for refurbishment <sup>dp</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designedForRefurbishment

**Description**  The product is desinged for refurbishment?

**Sub Property Of**  designForProperties <sup>dp</sup>

## designed for remanufacturing <sup>dp</sup>

**IRI**  http://w3id.org/CEON/ontology/textile/designedForRemanufacturing

**Description**  The product is designed for remanufacturing?

**Sub Property Of**  designForProperties <sup>dp</sup>

## designed for reuse <sup>dp</sup>

**IRI**     http://w3id.org/CEON/ontology/textile/designedForReuse

**Description**     The product is designed for reused?

**Sub Property Of**     designForProperties <sup>dp</sup>

**Super Property Of**     designedForReuseWMinimalMod <sup>dp</sup>

---

## designed for reuse w minimal mod <sup>dp</sup>

**IRI**     http://w3id.org/CEON/ontology/textile/designedForReuseWMinimalMod

**Description**     The product is designed for re-use as-is or with minimal modification.

**Sub Property Of**     designedForReuse <sup>dp</sup>

---

## emission by design <sup>dp</sup>

**IRI**     http://w3id.org/CEON/ontology/textile/emissionByDesign

**Description**     The portion of the product known to be emitted into the environment during use is designed for that purpose.

**Sub Property Of**     designForRecyclingAmounts <sup>dp</sup>

---

## finishing steps <sup>dp</sup>

**IRI**     http://w3id.org/CEON/ontology/textile/finishingSteps

---

## material safety data sheet available <sup>dp</sup>

**IRI**     http://w3id.org/CEON/ontology/textile/materialSafetyDataSheetAvailable

**Description**     Material Safety Data Sheet for the product is available.

**Sub Property Of**     availableInformation <sup>dp</sup>

**Range**     xsd:boolean

## material safety data sheet for dyeing available <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/materialSafetyDataSheetForDyeingAvailable |
| **Description** | Material Safety Data Sheets for Dyeing are available. |
| **Sub Property Of** | availableInformation <sup>dp</sup> |
| **Range** | xsd:boolean |

## material safety data sheet for finishing available <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/materialSafetyDataSheetForFinishingAvailable |
| **Description** | Material Safety Data Sheets for Finishing are available. |
| **Sub Property Of** | availableInformation <sup>dp</sup> |
| **Range** | xsd:boolean |

## technical data sheet available <sup>dp</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/technicalDataSheetAvailable |
| **Description** | The Technical Data Sheet is available. |
| **Sub Property Of** | availableInformation <sup>dp</sup> |
| **Range** | xsd:boolean |

# Annotation Properties

## C Fmapping <sup>ap</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/CFmapping |

## Pcd Smapping <sup>ap</sup>

| | |
|---|---|
| **IRI** | http://w3id.org/CEON/ontology/textile/PCDSmapping |

# Namespaces

**:**

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

**dcterms**

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

**owl**

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

**prov**

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

**rdf**

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

**rdfs**

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

**vann**

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

**xsd**

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

## Legend

| | |
|---|---|
| c | Classes |
| op | Object Properties |
| dp | Datatype Properties |
| ap | Annotation Properties |