Circular Economy Ontology Network (CEON) - Textile Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Textile Module

Creator

Huanyu Li

Contributor

Eva Blomqvist

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Version Iri

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

Version Info

0.2

Preferred Namespace Uri

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

Description

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

Classes

						_
Cel	lul	ose	M	late	rial	L

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

Cotton Material ^C

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

Leather Material^C

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

Plastic Material ^C

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

Actor Resource Role C

Named Individuals brandni

Adhesive Finishing C

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

Sub Class Of FinishingProcess^C

Batch Of Textile Objects ^C

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

S

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

hasColor op only Color and hasColor op some Color colo

Brand Of Resource ^C

Sub Class Of actorODP:ResourceRelation

Equivalentclass actorODP:participantRole value brand actorODP:ResourceRelation actorODP:

Chemical Compliance C

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

Super Class Of

GRSCompliance^C
ZDHCCompliance^C

Chemical Finishing ^C

Sub Class Of FinishingProcess^C

Named Individuals

anti-pilling ni

antiStaticFinishingⁿⁱ antibacterialFinishingⁿⁱ

coating ni

coatingAcrylicⁿⁱ

coatingPUⁿⁱ coatingPVCⁿⁱ

creaseResistanceⁿⁱ

enzymeFinishingⁿⁱ

<u>flameRetardant</u>ⁿⁱ

mattingAgentⁿⁱ

millWashingⁿⁱ

millingAgentⁿⁱ

naturalOilingⁿⁱ

opticalBrightenersⁿⁱ

permanentPressⁿⁱ

<u>prepareForDyeing</u>ⁿⁱ

resinsⁿⁱ siliconesⁿⁱ

<u>soilReleaseⁿⁱ</u>

stainResistanceⁿⁱ

Color^C

Sub Class Of TextileProperty^C

In Range Of hasColor op

Named Individuals

blueⁿⁱ redⁿⁱ

<u>yellow</u>ⁿⁱ

Double Adhesive Coated Material^C

Material

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

Dye Method ^C

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

In Range Of hasDyeMethod op

Named Individuals

directDyedⁿⁱ
dopeDyedⁿⁱ
pieceDyedⁿⁱ
topDyedⁿⁱ
undyedⁿⁱ
yarnDyedⁿⁱ

Dye Stuff^C

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

In Range Of hasDyeStuff^{op}

Named Individuals

acidDyeⁿⁱ
analineDyeⁿⁱ
azoDyeⁿⁱ
basicDyeⁿⁱ
chromeDyeⁿⁱ
directDyeⁿⁱ
disperseDyeⁿⁱ
mordantDyeⁿⁱ
narturalDyeⁿⁱ
pigmentBiosynthe

pigmentBiosyntheticⁿⁱ pigmentNaturalⁿⁱ pigmentSyntheticⁿⁱ reactiveDyeⁿⁱ vatDyeⁿⁱ

Dyeing Process^C

Sub Class Of

<u>TextileProductionProcess</u>^C

<u>hasDyeMethod</u>^{op} some <u>DyeMethod</u>^c and <u>hasDyeMethod</u>^{op} only <u>DyeMethod</u>^c

 $\underline{\text{hasDyeStuff}}^{op} \text{ only } \underline{\text{DyeStuff}}^{c} \text{ and } \underline{\text{hasDyeStuff}}^{op} \text{ some } \underline{\text{DyeStuff}}^{c}$

In Domain Of

hasDyeMethod op hasDyeStuff op

Ethyl Vinyl Acetate Film ^C

m

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

Ethyl Vinyl Acetate Resin^c

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

in

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

Fabric Production ^C

Sub Class Of TextileProductionProcess^C

Finishing Process^C

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

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

In Range Of

hasFinishing^{op} hasFinishingStep^{op}

Super Class Of

AdhesiveFinishing ChemicalFinishing MechanicalFinishing SkivedFinishing ChemicalFinishing ChemicalFini

Grs Compliance ^C

Sub Class Of ChemicalCompliance^C

Equivalentclass http://w3id.org/CEON/ontology/product/complianceWith-value GRS^C

Inorganic F Iller^C

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

Msds Compliance ^C

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

Equivalentclass http://w3id.org/CEON/ontology/product/complianceWith-value MSDS

Mechanical Finishing ^C

Sub Class Of FinishingProcess^C

Named Individuals

calenderingⁿⁱ embossingⁿⁱ

permanentCreasingⁿⁱ
pre-shrinkingⁿⁱ
steamingⁿⁱ
suedingⁿⁱ

Polyester Fibres^C

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

Print Method ^C

In Range Of hasPrintMethod op

Named Individuals

batikPrintedⁿⁱ
digitalPrintedⁿⁱ
handPaintedⁿⁱ
inkjetPrintedⁿⁱ
rollerPrintedⁿⁱ
screenPrintedⁿⁱ
transferPrintedⁿⁱ

Print Stuff^C

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

In Range Of hasPrintStuff^{op}

Named Individuals

analineDyeni
azoDyeni
basicDyeni
chromeDyeni
directDyeni
disperseDyeni
mordantDyeni
narturalDyeni
pigmentBiosyntl

acidDye ni

pigmentBiosyntheticni pigmentNaturalni pigmentSyntheticni reactiveDyeni sulfurDyeni vatDyeni Printing Process^C

Sub Class Of

<u>TextileProductionProcess</u>^C

hasPrintMethod op only PrintMethod and hasPrintMethod op some PrintMethod op

hasPrintStuff^{op} only PrintStuff^c and hasPrintStuff^{op} some PrintStuff^c

In Domain Of

<u>hasPrintMethod</u>^{op} <u>hasPrintStuff</u>^{op}

Raw Hide Processing ^C

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

Raw Material Production ^c

n

Sub Class Of TextileProductionProcess^C

Shoe Lace^C

Sub Class Of TextileProduct^C

Shoe Sole C

Sub Class Of TextileProduct^C

Single Adhesive Coated Material C

Material

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

Skived Finishing^C

Sub Class Of FinishingProcess^C

Spinning Process^C

Sub Class Of TextileProductionProcess^C

Styrene Butadiene Latex^C

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

Χ

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

Textile Chemical Substance Threshold Statement^C

anceThresholdStatement

Sub Class Of http://w3id.org/CEON/ontology/statement/DisclosedChemicalSubtanceStateme

nt

<u>TextileDataSheetStatement</u>^C

In Domain Of <u>disclosure Value op</u>

Textile Data Sheet^c

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

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

ingStatement

Sub Class Of TextileDataSheetStatement^C

Textile Data Sheet Statement c

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

ement

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

Super Class Of

<u>TextileChemicalSubstanceThresholdStatement</u>^C

TextileDataSheetIssuingStatement^c
TextileDataSheetUpdateStatement^c
TextileManufacturerStatement^c
TextileManufacturingSiteStatement^c

 $\label{eq:consumer} \underline{\textbf{TextilePostConsumerRecycledCompositionStatement}^{\textbf{C}}} \\ \underline{\textbf{TextilePostConsumerRecycledContentWeightStatement}^{\textbf{C}}} \\ \underline{\textbf{TextilePreConsumerRecycledCompositionStatement}^{\textbf{C}}} \\ \underline{\textbf{TextilePreConsumerRecycledContentWeightStatement}^{\textbf{C}}} \\ \underline{\textbf{TextilePreConsumerRecycledContentWeigh$

<u>TextileProductCertification</u>^C

<u>TextileProductComponentStatement</u>^C

<u>TextileProductCompositionDisclosureStatement</u>^C

<u>TextileProductCompositionOfConcern</u>^C <u>TextileProductCompositionWeightFraction</u>^C

<u>TextileProductDataSheet</u>^C

TextileProductDesignForDisassembly^C
TextileProductDesignForDismantling^C
TextileProductDesignForRecycling^C
TextileProductDesignForRefurbishment^C
TextileProductDesignForRemanufacturing^C
TextileProductDesignForReuseMethod^C
TextileProductDesignedForBetterUse^C
TextileProductManufacturingMethod^C
TextileProductRenewableContet^C

Textile Data Sheet Update Statement^c

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

teStatement

Sub Class Of TextileDataSheetStatement^C

Textile Manufacturer Statement ^C

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

tatement

Sub Class Of TextileDataSheetStatement^C

Textile Manufacturing Site Statement ^c

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

SiteStatement

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

Textile Post Consumer Recycled Composition Statement^c

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

ecycledCompositionStatement

Sub Class Of <u>TextileDataSheetStatement</u>^c

Textile Post Consumer Recycled Content Weight Statement ^C

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

ecycledContentWeightStatement

Sub Class Of http://w3id.org/CEON/ontology/statement/MFOfPostConsumerRecycledMaterial

ContentStatement

<u>TextileDataSheetStatement</u>^C

Textile Pre Consumer Recycled Composition Statement^c

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

cycledCompositionStatement

Sub Class Of http://w3id.org/CEON/ontology/statement/PreConsumerRecycledMaterialComp

<u>ositionStatement</u>

<u>TextileDataSheetStatement</u>^C

Textile Pre Consumer Recycled Content Weight Statement C

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

cycledContentWeightStatement

Sub Class Of http://w3id.org/CEON/ontology/statement/MFOfPreConsumerRecycledMaterial

ContentStatement

<u>TextileDataSheetStatement</u>^c

Textile Product ^C

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

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

hasColor op some Color and hasColor op only Color c

hasOrigin^{op} some TextileProductOrigin^c and hasOrigin^{op} only

TextileProductOrigin^C

<u>hasTextileProductType</u> only <u>TextileProductType</u> and <u>hasTextileProductType</u>

op some TextileProductTypeC

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

hasTextileProductionProcess op

Super Class Of

ShoeLace^C

ShoeSole^C

Textile Product Certification ^C

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

ication

Sub Class Of TextileDataSheetStatement^C

Textile Product Component Relation ^c

entRelation

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

<u>actorODP:ResourceParticipation</u> <u>actorODP:participatingObject_some</u>

http://w3id.org/CEON/ontology/resourceODP/Constituent^c and

actorODP:participatingSubject some TextileProduct[©]

In Domain Of hasTextileProductComponentValue op

Restriction hasTextileProductComponentValue^{op} max 1 TextileProductComponentRelation^c

Textile Product Component Statement ^c

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

entStatement

Sub Class Of TextileDataSheetStatement C

http://w3id.org/CEON/ontology/statement/statementAbout_max 1

<u>TextileProductComponentRelation</u>^c or

http://w3id.org/CEON/ontology/statement/statementAbout_max 1

<u>TextileProductMatterCompositionRelation</u>^C

Textile Product Component Value ^C

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

entValue

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

http://qudt.org/schema/qudt/hasUnit_some http://qudt.org/schema/qudt/Unit_c

and http://qudt.org/schema/qudt/numericalValue dp some

nb44de2ef19804811afe77d27c577a1dfb70^c

In Range Of hasTextileProductComponentValue^{op}

Textile Product Composition Disclosure Statement^C

itionDisclosureStatement

Sub Class Of http://w3id.org/CEON/ontology/statement/MassFractionOfDisclosedChemicalSu

bstanceStatement

<u>TextileDataSheetStatement</u>^C

Textile Product Composition Of Concern^c

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

itionOfConcern

Sub Class Of TextileDataSheetStatement^C

Textile Product Composition Weight Fraction ^c

itionWeightFraction

Sub Class Of TextileDataSheetStatement^C

Textile Product Data Sheet^c

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

eet

Sub Class Of TextileDataSheetStatement^C

Textile Product Design For Disassembly ^c

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

ForDisassembly

Sub Class Of http://w3id.org/CEON/ontology/statement/DisassemblyStatement

<u>TextileDataSheetStatement</u>^C

In Domain Of <u>designedForUsingReversibleConnector</u>^{dp}

Super Class Of

<u>TextileProductDesignToBeCleanlyRemoved</u>^C
<u>TextileProductDesignToBeDismantled</u>^C

Textile Product Design For Dismantling ^C

ForDismantling

Sub Class Of http://w3id.org/CEON/ontology/statement/DismantlingStatement

<u>TextileDataSheetStatement</u>^C

Textile Product Design For Recycling c

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

ForRecycling

Sub Class Of http://w3id.org/CEON/ontology/statement/RecyclingStatement

<u>TextileDataSheetStatement</u>^c

In Range Of desinged for recycling at the same level of quality op

Restriction http://w3id.org/CEON/ontology/statement/statementAbout_some

<u>TextileProductDesignForRecycling</u>^C

http://w3id.org/CEON/ontology/statement/statementAbout_some

<u>TextileProductDesignForRecycling</u>^C

Textile Product Design For Refurbishment^c

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

ForRefurbishment

Sub Class Of TextileDataSheetStatement^C

Textile Product Design For Remanufacturing ^C

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

ForRemanufacturing

Sub Class Of TextileDataSheetStatement^C

Textile Product Design For Reuse Method^C

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

ForReuseMethod

Sub Class Of TextileDataSheetStatement^C

Textile Product Design To Be Cleanly Removed C

ToBeCleanlyRemoved

Sub Class Of TextileProductDesignForDisassembly^C

Textile Product Design To Be Dismantled C

ToBeDismantled

Sub Class Of TextileProductDesignForDisassembly^C

Textile Product Designed For Better Use^c

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

edForBetterUse

Sub Class Of TextileDataSheetStatement^C

In Domain Of designForBetterUse dp

Textile Product Manufacturing Method ^c

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

cturingMethod

Sub Class Of TextileDataSheetStatement^C

Textile Product Matter Composition Relation C

CompositionRelation

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

actorODP:ResourceParticipation actorODP:participatingSubject_some

nb44de2ef19804811afe77d27c577a1dfb83^c and actorODP:participatingObject

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

In Domain Of hasTextileProductMatterCompositionValue op

Restriction <u>hasTextileProductMatterCompositionValue</u>^{op} max 1

<u>TextileProductMatterCompositionRelation</u>^c

Textile Product Matter Composition Value ^c

CompositionValue

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

 $\frac{http://qudt.org/schema/qudt/numericalValue}{nb44de2ef19804811afe77d27c577a1dfb92^{\textbf{c}}} \textit{and}$

http://qudt.org/schema/qudt/hasUnit_some http://qudt.org/schema/qudt/UnitC

In Range Of hasTextileProductMatterCompositionValue op

Textile Product Object^C

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

hasColor op some Color and hasColor op only Color only

Textile Product Origin^C

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

In Range Of hasOrigin op

Named Individuals

originalⁿⁱ recycledⁿⁱ reusedⁿⁱ

Textile Product Recycled Content^C

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

edContent

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

actorODP:ResourceParticipation

In Domain Of

hasTextileProductRecycledContent^{op}

 $\frac{contains Hazardous Substance Above 0.1 For Post Consumer Recycled Content}{contains Hazardous Substance Above 0.1 For PreConsumer Recycled Content}{content}{contains Hazardous Substance Above 0.1 For PreConsumer Recycled Content}{c$

Restriction hasTextileProductRecycledContent op max 1 TextileProductRecycledContent TextileProdu

Textile Product Recycled Content Value c

edContentValue

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

http://qudt.org/schema/qudt/hasUnit_some http://qudt.org/schema/qudt/Unit_c

and http://qudt.org/schema/qudt/numericalValue dp some

nb44de2ef19804811afe77d27c577a1dfb106^C

In Range Of hasTextileProductRecycledContent op

Textile Product Renewable Content^c

bleContent

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

actorODP:ResourceParticipation

In Domain Of

hasTextileProductRenewableContent^{op}

reneableContentManagedInSustainableWay^{dp}

Restriction hasTextileProductRenewableContent^{op} max 1 TextileProductRenewableContent

С

Textile Product Renewable Content Value ^c

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

bleContentValue

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

http://qudt.org/schema/qudt/numericalValue dp some nb44de2ef19804811afe77d27c577a1dfb115 and

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

In Range Of hasTextileProductRenewableContent op

Textile Product Renewable Contet^c

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

bleContet

Sub Class Of http://w3id.org/CEON/ontology/statement/MassFractionOfRenewableMaterialSt

atement

<u>TextileDataSheetStatement</u>^C

Restriction http://w3id.org/CEON/ontology/statement/statementAbout_some

<u>TextileProductRenewableContet</u>^C

http://w3id.org/CEON/ontology/statement/statementAbout_some

<u>TextileProductRenewableContet</u>^C

Textile Product To Leakage Statement^c

 ${\it ageStatement}$

Sub Class Of http://w3id.org/CEON/ontology/statement/ReleasedIntoEnvironmentStatement

hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/ontology/statement/75gt-95le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/demo/textile/95gt-100le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/ontology/statement/10gt-25le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/ontology/statement/50gt-75le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/demo/textile/1gt-10le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/ontology/statement/25gt-50le^c or
hasFractionOfProductToLeakageDuringUse^{op} value

http://w3id.org/CEON/demo/textile/0ge-1le^C

In Domain Of hasFractionOfProductToLeakageDuringUse op

Textile Product Type C

Sub Class Of TextileProperty^C

In Range Of hasTextileProductType op

Textile Production Process^C

cess

Sub Class Of http://w3id.org/CEON/ontology/processODP/Process

In Range Of hasTextileProductionProcess op

Super Class Of

DyeingProcess^c
FabricProduction^c
FinishingProcess^c
PrintingProcess^c
RawHideProcessing^c
RawMaterialProduction^c
SpinningProcess^c
TrimProduction^c

Textile Property^C

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

Super Class Of

Color^c

<u>TextileProductType^c</u> <u>WaterProperty^c</u>

Textile Recycling Process ^C

ess

Sub Class Of http://w3id.org/CEON/ontology/processODP/Process

Named Individuals

biodigestionⁿⁱ

biosphereCascading ni homeComposting ni incineration ni industrialComposting ni

Trim Production^C

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

Water Property ^C

Sub Class Of TextileProperty^C

In Range Of hasWaterProperty^{op}

Named Individuals

Water repellentⁿⁱ
Water resistantⁿⁱ
Waterproofⁿⁱ

Zdhc Compliance ^C

Sub Class Of ChemicalCompliance^C

Equivalentclass http://w3id.org/CEON/ontology/product/complianceWith-value-ZDHC

Object Properties

object value op

Super Property Of

disclosureValue^{op}

<u>recyclingAtSameQualityRange</u> op

anticipated leakage during use op

ringUse

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

desinged for recycling at the same level of quality op

AtSameQuality

DescriptionPercentage 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 op

Range <u>TextileProductDesignForRecycling</u>^c

disclosure value op

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

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

<u>Domain</u> <u>TextileChemicalSubstanceThresholdStatement^C</u>

has color op

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

Sub Property Of hasProperty op

<u>Domain</u> <u>http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects^C or</u>

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

Range Color^C

has dye method op

Sub Property Of topObjectProperty op

DyeingProcess^C

Range <u>DyeMethod</u>^C

has dye stuff op

Sub Property Of hasProperty op

<u>DyeingProcess^c</u>

Range DyeStuff^C

has finishing op

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

Sub Property Of hasProperty op

Range <u>FinishingProcess</u>^C

has finishing step op

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

Sub Property Of hasTextileProductionProcess op

Range <u>FinishingProcess</u>^C

has fraction of product to leakage during use op

ToLeakageDuringUse

Sub Property Of http://w3id.org/CEON/ontology/statement/hasQuantityInterval

<u>Domain</u> <u>TextileProductToLeakageStatement</u>^c

Range http://w3id.org/CEON/ontology/quantity#QuantityInterval

has origin op

Domain <u>TextileProduct^C or TextileProductObject^C</u>

Range <u>TextileProductOrigin</u>^C

has post consumer recycled content amount op

ledContentAmount

Sub Property Of http://w3id.org/CEON/ontology/product/hasComposition

has pre consumer recycled content amount op

edContentAmount

Sub Property Of http://w3id.org/CEON/ontology/product/hasComposition

Print Finishing op

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

Sub Property Of hasProperty op

has print method op

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

Sub Property Of topObjectProperty op

Domain PrintingProcess^C

Range PrintMethod^C

has print stuff op

Sub Property Of hasProperty op

Domain PrintingProcess^C

Range PrintStuff^C

has property op

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

Super Property Of

• anticipatedLeakageDuringUse op

· desinged for recycling at the same level of quality op

<u>hasColor</u>^{op}

hasDyeStuff^{op}

• hasFinishingop

• Print Finishing op

• hasPrintStuff^{op}

hasWaterProperty^{op}

has textile product component value op

ponentValue

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

Domain <u>TextileProductComponentRelation</u>^C

Range <u>TextileProductComponentValue</u>^C

has textile product matter composition value op

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

terCompositionValue

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

<u>Domain</u> <u>TextileProductMatterCompositionRelation</u>^C

Range <u>TextileProductMatterCompositionValue</u>^C

has textile product recycled content op

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

ycledContent

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

<u>Domain</u> <u>TextileProductRecycledContent</u>^C

Range <u>TextileProductRecycledContentValue</u>^C

has textile product renewable content op

ewableContent

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

Domain <u>TextileProductRenewableContent</u>^C

Range <u>TextileProductRenewableContentValue</u>^C

has textile product type op

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

е

Domain <u>TextileProduct</u>^C

Range <u>TextileProductType</u>^C

has textile production process op

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

Process

Super Property Of hasFinishingStep op

Domain <u>TextileProduct</u>^C

Range <u>TextileProductionProcess</u>^C

has water property op

Sub Property Of hasProperty op

Range WaterProperty^C

product composition disclosure availability op

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

sclosureAvailability

Range http://w3id.org/CEON/ontology/statement/Availability

product composition disclosure validation op

sclosureValidation

Range http://w3id.org/CEON/ontology/statement/Validation

recycling at same quality range op

tyRange

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

Datatype Properties

numerical value dp

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

available information dp

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

Super Property Of

• isBiodegradabilityTestAvailabledp

- isMaterialSafetyDataSheetForDyeingAvailabledp
- isMaterialSafetyDataSheetForFinishingAvailable dp
- <u>isMaterialSafetyDataSheetForProductAvailable</u>dp
- <u>isTechnicalDataSheetAvailable</u>dp

contains hazardous substance above0.1for post consumer recycled content dp

stanceAbove0.1ForPostConsumerRecycledContent

Domain <u>TextileProductRecycledContent</u>^c

Range xsd:boolean

contains hazardous substance above0.1for pre consumer recycled content dp

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

stanceAbove0.1ForPreConsumerRecycledContent

Domain <u>TextileProductRecycledContent</u>^C

Range xsd:boolean

design for better use dp

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

Sub Property Of topDataProperty dp

Super Property Of

- <u>designedForActivelyPositiveImpact</u>dp
- impossibleForMaintenanceOrRepair dp
- isConsumablesEasilyReplacedByUntrainedPerson^{dp}
- <u>isMaintainedOrRepairedByTrainedPerson</u>dp
- isMaintainedOrRepairedByUntrainedPersondp
- <u>isSparePartsAvailable</u>^{dp}
- needsMaintenanceOrRepair dp
- withoutHarmfulDispersionOrEmission dp

<u>Domain</u> <u>TextileProductDesignedForBetterUse^C</u>

Range xsd:boolean

design for properties dp

Super Property Of

- designedForCleanBiodigestion dp
- designedForCleanIncinerationPyrolysis dp
- <u>designedForCompostingInHomeComposter</u>dp
- designedForCompostingInIndustrialFacility^{dp}
- designedForIndustrialCascading^{dp}
- <u>designedForRecycling</u> dp
- <u>designedForRefurbishment</u>^{dp}
- <u>designedForRemanufacturing</u> dp
- <u>designedForReuse</u>^{dp}
- <u>designedForReuseWithMinimalModification</u> dp
- <u>designedForUsingReversibleConnector</u>^{dp}

Range xsd:boolean

design for recycling amounts dp

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

ounts

Super Property Of emissionByDesign dp

designed for actively positive impact dp

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

ositiveImpact

Sub Property Of designForBetterUse dp

designed for clean biodigestion dp

igestion

Sub Property Of designForProperties dp

Range xsd:boolean

designed for clean incineration pyrolysis dp

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

nerationPyrolysis

Sub Property Of designForProperties dp

designed for composting in home composter dp

gInHomeComposter

Sub Property Of designForProperties dp

Range xsd:boolean

designed for composting in industrial facility dp

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

gInIndustrialFacility

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for industrial cascading dp

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

lCascading

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for recycling dp

DescriptionThe product is designed for recycling?e

Sub Property Of designForProperties dp

Range xsd:boolean

designed for refurbishment dp

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

ment

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for remanufacturing dp

turing

Sub Property Of designForProperties dp

Range xsd:boolean

designed for reuse dp

Sub Property Of designForProperties dp

Range xsd:boolean

designed for reuse with minimal modification dp

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

MinimalModification

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for using reversible connector dp

rsibleConnector

Sub Property Of designForProperties dp

<u>Domain</u> <u>TextileProductDesignForDisassembly</u>^c

Range xsd:boolean

emission by design dp

Description

The portion of the product known to be emitted into the environment during use

is designed for that purpose.

Sub Property Of designForRecyclingAmounts dp

has cas number dp

has chemical compliance dp

е

has collection parameter dp

er

Super Property Of isCollectionSystemAvailable dp

has company name dp

Sub Property Of http://w3id.org/CEON/ontology/actor/hasOrganisationName

Range <u>xsd:string</u>

has country specific corporate identification number dp

rporateIdentificationNumber

Range <u>xsd:string</u>

has finishing steps dp

has product id code dp

Range <u>xsd:string</u>

has textile type dp

Description Description of the kind of textile product.

Range <u>xsd:string</u>

impossible for maintenance or repair dp

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

anceOrRepair

Sub Property Of designForBetterUse dp

is biodegradability test available dp

stAvailable

DescriptionBiodegradability test is available.

Sub Property Of available Information dp

Range xsd:boolean

is ce marked ^{dp}

Description The product has theCE mark.

Sub Property Of http://w3id.org/CEON/ontology/product/hasCertificate

Range <u>xsd:boolean</u>

is collection system available dp

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

ailable

DescriptionThe manufacturer/ industry association has a dedicated collection system in

place to gather and deliver products for recycling.

Sub Property Of hasCollectionParameter dp

Range xsd:boolean

is consumables easily replaced by untrained person dp

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

eplacedByUntrainedPerson

Sub Property Of designForBetterUse^{dp}

is contained substance from reach very high concern list dp

FromREACHVeryHighConcernList

Range xsd:boolean

is contained substance in cmr harmonized classfication dp

InCMRHarmonizedClassfication

Range xsd:boolean

is maintained or repaired by trained person dp

ed By Trained Person

Sub Property Of designForBetterUse dp

Range xsd:boolean

is maintained or repaired by untrained person dp

edByUntrainedPerson

Sub Property Of designForBetterUse dp

Range xsd:boolean

is material safety data sheet for dyeing available ^{dp}

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

SheetForDyeingAvailable

DescriptionMaterial Safety Data Sheets for Dyeing are available.

Sub Property Of availableInformation dp

Range xsd:boolean

is material safety data sheet for finishing available dp

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

SheetForFinishingAvailable

DescriptionMaterial Safety Data Sheets for Finishing are available.

Sub Property Of availableInformation dp

Range <u>xsd:boolean</u>

is material safety data sheet for product available dp

SheetForProductAvailable

DescriptionMaterial Safety Data Sheet for the product is available.

Sub Property Of availableInformation dp

Range xsd:boolean

is metal contained dp

Description The product contains metal.

Range xsd:boolean

is restriced susbtance contained out of reachxvii dp

ContainedOutOfREACHXVII

Range xsd:boolean

is spare parts available dp

е

Sub Property Of designForBetterUse dp

is technical data sheet available dp

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

Available

Description The Technical Data Sheet is available.

Sub Property Of availableInformation dp

Range <u>xsd:boolean</u>

is trims included dp

Description The product includes trims.

Range xsd:boolean

is warned under california proposition65 dp

niaProposition65

Range <u>xsd:boolean</u>

needs maintenance or repair dp

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

pair

Sub Property Of designForBetterUse dp

Range xsd:boolean

reneable content managed in sustainable way dp

edInSustainableWay

Sub Property Of http://w3id.org/CEON/ontology/product/hasCertificate

Domain <u>TextileProductRenewableContent</u>^C

Range xsd:boolean

without harmful dispersion or emission dp

sionOrEmission

Sub Property Of designForBetterUse dp

Annotation Properties

has maximal value included of interval ap

udedOfInterval

has minimal value included of interval ap

udedOfInterval

has minimal value not included of interval ap

IRI http://w3id.org/CEON/ontology/quantity#hasMinimalValueNotI

ncludedOfInterval

Ld Tmapping ap

Range xsd:string

Pcd Smapping ap

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

Namespaces

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

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

Legend

xsd

С	Classes
ор	Object Properties
dp	Datatype Properties
ар	Annotation Properties