Circular Economy Ontology Network (CEON) - Textile Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Textile Module

Publisher

Onto-DESIDE

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Version Iri

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

Version Info

0.2

Prior Version

0.1

Preferred Namespace Prefix

ceon-demo-textile

Preferred Namespace Uri

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

Description

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

Classes

Actor Resource Role C

Named Individuals brandni

Adhesive ^c

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

Assembly Method C

Named Individuals

glued_assemblyⁿⁱ

heat_bonding_assemblyⁿⁱ machine_assemblyⁿⁱ manual_assemblyⁿⁱ regular_stich_assemblyⁿⁱ

stiched_with_Resortec_thermo-dissolvable_stitch_assemblyni

Batch Of Textile Objects C

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

S

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

<u>hasColor</u>^{op} some <u>Color</u>^c and <u>hasColor</u>^{op} only <u>Color</u>^c

Bio Derived Eva^c

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

Brand Of Resource C

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

Sub Class Of actorODP:ResourceRelation

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole value brand brand actorODP:participantRole value brand brand

Cellulose Material C

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

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

<u>anti-pillingⁿⁱ</u>

antiStaticFinishingⁿⁱ antibacterialFinishingⁿⁱ

<u>coating</u>ⁿⁱ

coatingAcrylicⁿⁱ

coatingPUⁿⁱ coatingPVCⁿⁱ

creaseResistanceⁿⁱ

enzymeFinishingⁿⁱ

<u>flameRetardant</u>ni

mattingAgentⁿⁱ

millWashingⁿⁱ

millingAgentⁿⁱ

naturalOiling ni

<u>opticalBrighteners</u>ⁿⁱ

<u>permanentPressⁿⁱ</u>

<u>prepareForDyeing</u>ni

resinsⁿⁱ siliconesⁿⁱ

<u>soilReleaseⁿⁱ</u>

stainResistanceⁿⁱ

Co Polymer Raisin ^C

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

Color^C

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

Sub Class Of TextileProperty^C

In Range Of hasColor op

Named Individuals

<u>blue</u>ni

redⁿⁱ yellowⁿⁱ

Cotton Material ^C

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

Disassembly Method ^C

Named Individuals

cut lining fabric disassemblyⁿⁱ cut stitches disassemblyⁿⁱ

manual_disassemblyⁿⁱ

peel out heel counter disassemblyⁿⁱ solvent separation disassemblyⁿⁱ

Double Adhesive Coated Material C

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

Material

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

Dye Method ^c

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

pigmentBiosyntheticⁿⁱ pigmentNaturalⁿⁱ pigmentSyntheticⁿⁱ reactiveDyeⁿⁱ vatDyeⁿⁱ Dyeing Process^C

Sub Class Of

<u>TextileProductionProcess^C</u>

hasDyeMethod op only DyeMethod and hasDyeMethod op some DyeMethod op

hasDyeStuff^{op} only <u>DyeStuff^c</u> and <u>hasDyeStuff^{op}</u> some <u>DyeStuff^c</u>

In Domain Of hasDyeMethod op

Ethyl Vinyl Acetate Film ^c

m

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

Ethyl Vinyl Acetate Resin^c

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

in

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

Fabric Production ^C

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

Sub Class Of TextileProductionProcess^C

Finishing Process^C

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

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

In Range Of

<u>hasFinishing</u>^{op} <u>hasFinishingStep</u>^{op}

Super Class Of

<u>ChemicalFinishing</u>^c <u>MechanicalFinishing</u>^c

Named Individuals

AdhesiveFinishingⁿⁱ SkivedFinishingⁿⁱ Grs Compliance C

Sub Class Of ChemicalCompliance^C

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

Inorganic F Iller^C

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

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

Leather Material ^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

Nylon^C

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

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

Plastic Material ^C

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

Polyester ^C

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

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

acidDyeⁿⁱ
analineDyeⁿⁱ
azoDyeⁿⁱ
basicDyeⁿⁱ
chromeDyeⁿⁱ
directDyeⁿⁱ
disperseDyeⁿⁱ
mordantDyeⁿⁱ
narturalDyeⁿⁱ
pigmentBiosyntheticⁿⁱ
pigmentSyntheticⁿⁱ

pigmentNaturalⁿⁱ
pigmentSyntheticⁿⁱ
reactiveDyeⁿⁱ
sulfurDyeⁿⁱ
vatDyeⁿⁱ

Printing Process^C

Sub Class Of

<u>TextileProductionProcess</u>^c

hasPrintMethod op some PrintMethod and hasPrintMethod op only PrintMethod op

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

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

Raw Hide Processing C

Sub Class Of TextileProductionProcess^C

Raw Material Production ^c

n

Sub Class Of TextileProductionProcess^C

Recycled Pes Fibres^C

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

Recycled Polyester^C

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

Rubber ^c

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

Single Adhesive Coated Material C

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

Material

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

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

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

anceThresholdStatement

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

<u>nt</u>

<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

TextilePostConsumerRecycledCompositionStatement^C
TextilePostConsumerRecycledContentWeightStatement^C
TextilePreConsumerRecycledCompositionStatement^C
TextilePreConsumerRecycledContentWeightStatement^C

<u>TextileProductCertification</u>^C

<u>TextileProductComponentStatement^c</u>

<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

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 TextileDataSheetStatement^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

cycledCompositionStatement

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

ositionStatement

<u>TextileDataSheetStatement</u>^C

Textile Pre Consumer Recycled Content Weight Statement^C

cycledContentWeightStatement

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

ContentStatement

<u>TextileDataSheetStatement</u>^c

Textile Product ^C

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

hasColor op some Color and hasColor op only Color c

hasOrigin op some TextileProductOrigin and hasOrigin op only

<u>TextileProductOrigin</u>^c

 $\underline{\text{hasTextileProductType}}^{\text{op}} \, \text{some} \, \, \underline{\text{TextileProductType}}^{\text{c}} \, \text{and} \, \, \underline{\text{hasTextileProductType}}^{\text{c}}$

op only TextileProductType^C

In Domain Of hasTextileProductType^{op}

hasTextileProductionProcess op

Textile Product Certification ^C

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

ication

Sub Class Of TextileDataSheetStatement^C

Textile Product Component Relation ^c

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

entRelation

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

actorODP:ResourceParticipation

actorODP:participatingSubject some TextileProduct^C and

<u>actorODP:participatingObject_some</u>

http://w3id.org/CEON/ontology/resourceODP/Constituent^C

In Domain Of hasTextileProductComponentValue op

Restriction hasTextileProductComponentValue op max 1 TextileProductComponentRelation of max 1 TextileProductComponentRe

Textile Product Component Statement ^c

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

entStatement

Sub Class Of

<u>TextileDataSheetStatement</u>^C

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

<u>TextileProductComponentRelation</u> 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

n71f64a18055c447c8ebcbd186d6374bfb70^c

In Range Of <u>hasTextileProductComponentValue^op</u>

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^dp</u>

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

ForReuseMethod

Sub Class Of TextileDataSheetStatement^C

Textile Product Design To Be Cleanly Removed C

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

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:participatingObject some

http://w3id.org/CEON/ontology/resourceODP/Matter^C and

actorODP:participatingSubject some n71f64a18055c447c8ebcbd186d6374bfb83^c

In Domain Of hasTextileProductMatterCompositionValue op

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

TextileProductMatterCompositionRelation C

Textile Product Matter Composition Value ^c

CompositionValue

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

http://qudt.org/schema/qudt/numericalValue dp some n71f64a18055c447c8ebcbd186d6374bfb92 and

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

In Range Of hasTextileProductMatterCompositionValue op

Textile Product Object C

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

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

hasColor op only Color and hasColor op some Color c

Textile Product Origin^C

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

In Range Of hasOrigin op

Named Individuals

<u>originalⁿⁱ</u> recycled ni 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

<u>containsHazardousSubstanceAbove0.1ForPostConsumerRecycledContent</u>^{dp} containsHazardousSubstanceAbove0.1ForPreConsumerRecycledContent^{dp}

Restriction hasTextileProductRecycledContentValue op max 1

<u>TextileProductRecycledContent</u>^C

Textile Product Recycled Content Value ^c

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

edContentValue

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

http://qudt.org/schema/qudt/numericalValue dp some n71f64a18055c447c8ebcbd186d6374bfb106^c and

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

In Range Of hasTextileProductRecycledContentValue op

Textile Product Renewable Content^c

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

bleContent

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

In Domain Of reneableContentManagedInSustainableWay^{dp}

Restriction hasTextileProductRenewableContentValue^{op} max 1

<u>TextileProductRenewableContent</u>^c

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 n71f64a18055c447c8ebcbd186d6374bfb115 and

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

In Range Of hasTextileProductRenewableContentValue^{op}

Textile Product Renewable Contet^C

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

bleContet

Sub Class Of

 $\underline{http://w3id.org/CEON/ontology/statement/MassFractionOfRenewableMaterialSt}$

<u>atement</u>

<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

 ${\tt ageStatement}$

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

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

http://w3id.org/CEON/demo/textile/0ge-1le^c or hasFractionOfProductToLeakageDuringUse^{op} value http://w3id.org/CEON/demo/textile/95gt-100le^c

In Domain Of hasFractionOfProductToLeakageDuringUse op

Textile Product Type ^C

In Range Of hasTextileProductType op

Named Individuals

heel counter toe puff areani

insoleⁿⁱ
lacesⁿⁱ
midsoleⁿⁱ
outsoleⁿⁱ
rubber_layerⁿⁱ
shoeⁿⁱ
soleⁿⁱ

<u>upper part fabricⁿⁱ</u> <u>upper shoe componentⁿⁱ</u>

Textile Product Virgin Content Value ^c

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

ContentValue

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

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
EabricProduction^c
EinishingProcess^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>WaterProperty</u>^c

Textile Recycling Process^C

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

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 TextileProductionProcess^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

associated process for property op

Property

Domain http://w3id.org/CEON/ontology/processODP/Process

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

object value op

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

Super Property Of

• disclosureValue op

• recyclingAtSameQualityRange op

anticipated leakage during use op

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

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

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 http://qudt.org/schema/qudt/quantityValue

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 assembly method op

has color op

Sub Property Of hasProperty op

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

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

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

Range Color^C

has disassembly method op

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

has dye method op

Sub Property Of topObjectProperty op

Domain DyeingProcess^C

Range <u>DyeMethod</u>^C

has dye stuff^{op}

Sub Property Of hasProperty op

Range <u>DyeStuff</u>^c

has finishing op

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

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

Sub Property Of hasProperty op

has print method op

Sub Property Of topObjectProperty op

Domain PrintingProcess^C

Range PrintMethod^C

has print stuff op

Sub Property Of hasProperty op

Range PrintStuff^c

has property op

Super Property Of

• anticipatedLeakageDuringUse op

hasColor^{op}

- <u>hasDyeStuff</u>op
- hasFinishing op
- Print Finishing op
- hasPrintStuff^{op}
- hasWaterProperty^{op}

has textile product component value op

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

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

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

terCompositionValue

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

<u>Domain</u> <u>TextileProductMatterCompositionRelation</u> <u>CompositionRelation</u> <u>TextileProductMatterCompositionRelation</u> <u>CompositionRelation</u> <u>CompositionRelationR</u>

Range <u>TextileProductMatterCompositionValue</u>^C

has textile product recycled content value op

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

ycledContentValue

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

Range <u>TextileProductRecycledContentValue</u>^C

has textile product renewable content value op

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

ewableContentValue

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

Range <u>TextileProductRenewableContentValue</u>^C

has textile product type op

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

e

Domain <u>TextileProduct</u>^C

Range <u>TextileProductType</u>^c

has textile production process op

Process

Super Property Of hasFinishingStep op

Domain TextileProduct^C

Range <u>TextileProductionProcess</u>^c

has water property op

Sub Property Of hasProperty op

Range WaterProperty^C

product composition disclosure availability op

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

textile product design for recycling op

ForRecycling

Datatype Properties

numerical value dp

available information dp

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

Super Property Of

- biodegradabilityTestAvailable^{dp}
- isMaterialSafetyDataSheetForDyeingAvailabledp
- isMaterialSafetyDataSheetForFinishingAvailable dp
- <u>isMaterialSafetyDataSheetForProductAvailable</u>dp
- <u>isTechnicalDataSheetAvailable</u> dp

biodegradability test available dp

Available

DescriptionBiodegradability test is available.

Sub Property Of availableInformation dp

Range <u>xsd:boolean</u>

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

 $stance Above {\tt 0.1} For Post Consumer Recycled Content$

Domain <u>TextileProductRecycledContent</u>^C

Range <u>xsd:boolean</u>

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

 $\verb|stanceAbove0.1ForPreConsumerRecycledContent|\\$

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

Range xsd:boolean

contains metal dp

DescriptionThe product contains metal.

design for better use dp

Sub Property Of topDataProperty dp

Super Property Of

<u>designedForActivelyPositiveImpact</u>dp

• <u>impossibleForMaintenanceOrRepair</u>dp

isConsumablesEasilyReplacedByUntrainedPerson^{dp}

• isMaintainedOrRepairedByTrainedPersondp

• <u>isMaintainedOrRepairedByUntrainedPerson</u>dp

• isSparePartsAvailable^{dp}

• <u>needsMaintenanceOrRepair</u>dp

withoutHarmfulDispersionOrEmission^{dp}

Domain <u>TextileProductDesignedForBetterUse^C</u>

Range <u>xsd:boolean</u>

design for demounting dp

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

design for properties dp

Super Property Of

• <u>designForDemounting</u> dp

• <u>designedForCleanBiodigestion</u>dp

• <u>designedForCleanIncinerationPyrolysis</u> dp

• <u>designedForCompostingInHomeComposter^{dp}</u>

• <u>designedForCompostingInIndustrialFacility</u> dp

<u>designedForCyclingInTechnicalCycle</u> dp

designedForFullBiodegradability^{dp}

designedForIndustrialCascadingdp

<u>designedForRecycling</u>^{dp}

• <u>designedForRefurbishment</u>^{dp}

designedForRemanufacturing dp

<u>designedForReuse</u>^{dp}

designedForReuseWithMinimalModification dp

• designedForUsingReversibleConnectordp

Range xsd:boolean

design for recycling amounts dp

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

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

gInIndustrialFacility

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for cycling in technical cycle dp

TechnicalCycle

Sub Property Of designForProperties dp

designed for full biodegradability dp

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

gradability

Sub Property Of designForProperties dp

Range xsd:boolean

designed for industrial cascading dp

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

lCascading

Sub Property Of designForProperties dp

Range xsd:boolean

designed for recycling dp

DescriptionThe product is designed for recycling?e

Sub Property Of designForProperties dp

Range xsd:boolean

designed for refurbishment dp

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

ment

Sub Property Of designForProperties dp

Range xsd:boolean

designed for remanufacturing dp

turing

Sub Property Of designForProperties dp

Range xsd:boolean

designed for reuse dp

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

designed for reuse with minimal modification dp

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

MinimalModification

Sub Property Of designForProperties dp

Range xsd:boolean

designed for using reversible connector dp

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

rsibleConnector

Sub Property Of designForProperties dp

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

Range xsd:boolean

emission by design dp

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

is designed for that purpose.

Sub Property Of designForRecyclingAmounts dp

has biodegradability test dp

est

Range xsd:anyURI

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 xsd:string

has contained substance from reach very high concern list dp

eFromREACHVeryHighConcernList

Range <u>xsd:anyURI</u>

has country specific corporate identification number dp

rporateIdentificationNumber

Range xsd:string

has finishing steps dp

has product id code dp

Range xsd:string

has textile type dp

Description Description of the kind of textile product.

Range xsd:string

impossible for maintenance or repair dp

anceOrRepair

Sub Property Of designForBetterUse dp

includes trims dp

Description The product includes trims.

Range xsd:boolean

is ce marked ^{dp}

DescriptionThe product has theCE mark.

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

Range xsd:boolean

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

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

is maintained or repaired by trained person dp

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

edByTrainedPerson

Sub Property Of designForBetterUse dp

Range xsd:boolean

is maintained or repaired by untrained person dp

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

edByUntrainedPerson

Sub Property Of designForBetterUse dp

Range xsd:boolean

is material safety data sheet for dyeing available dp

SheetForDyeingAvailable

DescriptionMaterial Safety Data Sheets for Dyeing are available.

Sub Property Of available Information dp

Range xsd:boolean

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

SheetForFinishingAvailable

DescriptionMaterial Safety Data Sheets for Finishing are available.

Sub Property Of available Information dp

Range xsd:boolean

is material safety data sheet for product available dp

SheetForProductAvailable

DescriptionMaterial Safety Data Sheet for the product is available.

Sub Property Of available Information dp

is restriced susbtance contained out of reachxvii dp

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

ContainedOutOfREACHXVII

Range xsd:boolean

is spare parts available dp

e

Sub Property Of designForBetterUse dp

is technical data sheet available dp

Available

DescriptionThe Technical Data Sheet is available.

Sub Property Of availableInformation dp

Range <u>xsd:boolean</u>

is warned under california proposition65 dp

niaProposition65

Range xsd:boolean

needs maintenance or repair dp

pair

Sub Property Of designForBetterUse dp

Range <u>xsd:boolean</u>

reneable content managed in sustainable way dp

edInSustainableWay

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

Domain <u>TextileProductRenewableContent</u>^C

with public declaration of hazardous substances based on standard regulation dp

nOfHazardousSubstancesBasedOnStandardRegulation

Range xsd:boolean

without harmful dispersion or emission dp

 $\verb|sionOrEmission||$

Sub Property Of designForBetterUse dp

without known hazardous substance based on standard regulation dp

sSubstanceBasedOnStandardRegulation

Range xsd:boolean

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

ncludedOfInterval

Ld Tmapping ap

Range <u>xsd:string</u>

Pcd Smapping ap

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

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

Legend

```
c Classes

op Object
Properties

dp Datatype
Properties

ap Annotation
Properties
```