Circular Economy Ontology Network (CEON) - Textile Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Textile Module

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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

Actor Resource Role C

Named Individuals brand ni

Adhesive ^c

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

Assembly Method C

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

Named Individuals

glued_assemblyⁿⁱ

heat_bonding_assemblyⁿⁱ machine_assemblyⁿⁱ manual_assemblyⁿⁱ regular_stich_assemblyⁿⁱ

stiched with Resortec thermo-dissolvable stitch assembly ni

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 some Color and hasColor op only Color c

Bio Derived Eva^c

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

Brand Of Resource C

Sub Class Of actorODP:ResourceRelation

Equivalentclass actorODP:participantRole_value brand actorODP:ResourceRelation actorODP:

Cellulose Material ^C

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

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

<u>coatingAcrylic</u>ⁿⁱ

coatingPUⁿⁱ

<u>coatingPVC</u>ⁿⁱ

<u>creaseResistance</u>ⁿⁱ

<u>enzymeFinishing</u>ni

<u>flameRetardant</u>ⁿⁱ

mattingAgentⁿⁱ

millWashingⁿⁱ

millingAgentⁿⁱ

naturalOiling ni

<u>opticalBrighteners</u>ⁿⁱ

permanentPressⁿⁱ

<u>prepareForDyeing</u>ⁿⁱ

resinsⁿⁱ siliconesⁿⁱ

soilReleaseⁿⁱ

stainResistanceⁿⁱ

Co Polymer Raisin^C

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

Color^C

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

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</u>^c

hasDyeMethod op some DyeMethod and hasDyeMethod op only DyeMethod o

hasDyeStuff^{op} only DyeStuff^c and hasDyeStuff^{op} some DyeStuff^c

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

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

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

In Range Of

hasFinishing^{op} hasFinishingStep^{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

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

<u>calendering</u>ⁿⁱ <u>embossing</u>ⁿⁱ

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

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

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
reactiveDyeⁿⁱ

<u>sulfurDye</u>ⁿⁱ <u>vatDye</u>ⁿⁱ Printing Process^C

Sub Class Of

<u>TextileProductionProcess^C</u>

hasPrintMethod op some PrintMethod and hasPrintMethod op only PrintMethod op

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

In Domain Of hasPrintMethod op

Raw Hide Processing C

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

Sub Class Of TextileProductionProcess^C

Raw Material Production ^c

n

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

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

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

<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 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

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

 $\underline{hasOrigin}^{op} \, only \, \underline{TextileProductOrigin}^{c} \, and \, \underline{hasOrigin}^{op} \, some \,$

<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^c

Textile Product Component Statement ^c

entStatement

Sub Class Of

<u>TextileDataSheetStatement</u>^C

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

<u>TextileProductMatterCompositionRelation</u> ^C or

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

<u>TextileProductComponentRelation</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/numericalValue dp some n674fb9188d594439a4c7727b37001658b70^c and

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

ToBeCleanlyRemoved

Sub Class Of <u>TextileProductDesignForDisassembly</u>^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

n674fb9188d594439a4c7727b37001658b83^c

In Domain Of hasTextileProductMatterCompositionValue op

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

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 n674fb9188d594439a4c7727b37001658b92 and

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

In Range Of hasTextileProductMatterCompositionValue op

Textile Product Object C

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

hasColor op some Color and hasColor op only Color only Color only Color only Color 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

<u>containsHazardousSubstanceAbove0.1ForPostConsumerRecycledContent</u> dp containsHazardousSubstanceAbove0.1ForPreConsumerRecycledContent dp

Restriction <u>hasTextileProductRecycledContentValue</u> op max 1

<u>TextileProductRecycledContent</u>^C

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

n674fb9188d594439a4c7727b37001658b106^C

In Range Of hasTextileProductRecycledContentValue op

Textile Product Renewable Content^C

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

bleContentValue

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/numericalValuedp some

n674fb9188d594439a4c7727b37001658b115^c

In Range Of hasTextileProductRenewableContentValue^{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

<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^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/demo/textile/95gt-100le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/ontology/statement/75gt-95le^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/ontology/statement/25gt-50le^c or
hasFractionOfProductToLeakageDuringUse^{op} value
http://w3id.org/CEON/demo/textile/0ge-1le^c or

<u>hasFractionOfProductToLeakageDuringUse</u>^{op} value <u>http://w3id.org/CEON/ontology/statement/50gt-75le</u>^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

upper_part_fabricⁿⁱ upper_shoe_componentⁿⁱ

Textile Product Virgin Content Value ^c

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
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>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

biodigestion ni

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

• <u>disclosureValue</u> op

• recyclingAtSameQualityRange op

anticipated leakage during use op

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

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

Domain http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects or

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

Range Color^c

has disassembly method op

 has dye method op

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

Sub Property Of topObjectProperty op

<u>Domain</u> <u>DyeingProcess</u>^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

Sub Property Of hasTextileProductionProcess op

Range FinishingProcess^C

has fraction of product to leakage during use op

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

ToLeakageDuringUse

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

Domain <u>TextileProductToLeakageStatement</u>^C

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

has origin ^{op}

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

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

Range TextileProductOrigin^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}

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

hasDyeStuff^{op}

• <u>hasFinishing</u>^{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 TextileProductComponentRelation^C

Range <u>TextileProductComponentValue</u>^C

has textile product matter composition value op

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 value op

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

е

Domain <u>TextileProduct</u>^C

Range <u>TextileProductType</u>^C

has textile production process op

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

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

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

ForRecycling

Datatype Properties

numerical value dp

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

available information dp

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

Super Property Of

- biodegradabilityTestAvailable^{dp}
- <u>isMaterialSafetyDataSheetForDyeingAvailable</u>dp
- <u>isMaterialSafetyDataSheetForFinishingAvailable</u>^{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

 $\verb|stanceAbove0.1ForPostConsumerRecycledContent|\\$

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

Range <u>xsd:boolean</u>

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

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

Domain <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

impossibleForMaintenanceOrRepair dp

isConsumablesEasilyReplacedByUntrainedPerson^{dp}

• isMaintainedOrRepairedByTrainedPersondp

• isMaintainedOrRepairedByUntrainedPerson^{dp}

• <u>isSparePartsAvailable dp</u>

• <u>needsMaintenanceOrRepair</u>dp

• withoutHarmfulDispersionOrEmission dp

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

Range xsd:boolean

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

designedForCleanIncinerationPyrolysis^{dp}

designedForCompostingInHomeComposter^{dp}

designedForCompostingInIndustrialFacility^{dp}

<u>designedForCyclingInTechnicalCycle</u> dp

designedForFullBiodegradability^{dp}

designedForIndustrialCascading^{dp}

• <u>designedForRecycling</u> dp

• <u>designedForRefurbishment</u>dp

<u>designedForRemanufacturing</u> 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

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 cycling in technical cycle dp

TechnicalCycle

Sub Property Of designForProperties dp

Range <u>xsd:boolean</u>

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

lCascading

Sub Property Of designForProperties dp

Range xsd:boolean

designed for recycling dp

DescriptionThe product is designed for recycling?e

Sub Property Of <u>designForProperties</u> dp

Range xsd:boolean

designed for refurbishment dp

ment

Sub Property Of designForProperties dp

Range xsd:boolean

designed for remanufacturing dp

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

turing

Sub Property Of designForProperties dp

Range xsd:boolean

designed for reuse dp

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

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 <u>xsd:boolean</u>

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^C</u>

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 <u>designForRecyclingAmounts</u> 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

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

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

Range <u>xsd:string</u>

has contained substance from reach very high concern list dp

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

eFromREACHVeryHighConcernList

Range <u>xsd:anyURI</u>

has country specific corporate identification number dp

rporateIdentificationNumber

Range <u>xsd:string</u>

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

DescriptionThe 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 <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

eplacedByUntrainedPerson

Sub Property Of designForBetterUse dp

is contained substance from reach very high concern list dp

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

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

edBy Trained Person

Sub Property Of designForBetterUse dp

Range <u>xsd:boolean</u>

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 availableInformation dp

Range xsd:boolean

is material safety data sheet for finishing available dp

SheetForFinishingAvailable

Description

Material 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

Description

Material 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

е

Sub Property Of designForBetterUse dp

is technical data sheet available dp

Available

DescriptionThe Technical Data Sheet is available.

Sub Property Of available Information dp

Range xsd:boolean

is warned under california proposition65 dp

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

niaProposition65

Range xsd:boolean

needs maintenance or repair dp

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

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 TextileProductRenewableContent^C

with public declaration of hazardous substances based on standard regulation dp

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

nOfHazardousSubstancesBasedOnStandardRegulation

Range xsd:boolean

without harmful dispersion or emission dp

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

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

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

udedOfInterval

has minimal value not included of interval ap

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

ncludedOfInterval

Ld Tmapping ap

Range <u>xsd:string</u>

Pcd Smapping ap

```
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
```