PRODUCT CATEGORY RULES (PCR)
DATE 2025-02-10

ABSORBENT HYGIENE PRODUCTS

PRODUCT CATEGORY CLASSIFICATION: UN CPC 32193

(NAPKINS FOR BABIES, TAMPONS AND SIMILAR HOUSEHOLD, SANITARY OR HOSPITAL ARTICLES)

PCR 2011:14
VERSION 3.0.4

VALID UNITL: 2025-08-11

TABLE OF CONTENTS

1 INTRODUCTION

This document constitutes Product Category Rules (PCR) developed in the framework of the International EPD System: a programme for type III environmental declarations[1] according to ISO 14025:2006. Environmental Product Declarations (EPD) are voluntary documents for a company or organisation to present transparent information about the life cycle environmental impact for their goods or services.

The rules for the overall administration and operation of the programme are the General Programme Instructions, publically available at www.environdec.com. A PCR complements the General Programme Instructions and the standards by providing specific rules, requirements and guidelines for developing an EPD for one or more specific product categories (see Figure 1). A PCR should enable different practitioners using the PCR to generate consistent results when assessing products of the same product category.

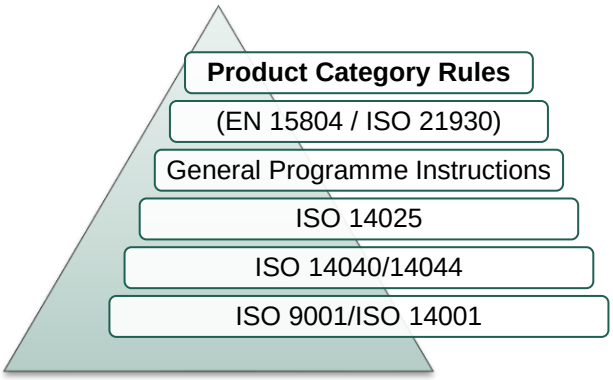

Figure 1 Illustration PCR in relation to the hierarchy of standards and other documents.

Within the present PCR, the following terminology is adopted:

- The term “shall” is used to indicate what is obligatory.
- The term “should” is used to indicate a recommendation, rather than a requirement.
- The term “may” or “can” is used to indicate an option that is permissible

For the definition of terms used in the document, see the normative standards.

A PCR is valid for a pre-determined period of time to ensure that it is updated at regular intervals. The latest version of the PCR is available via www.environdec.com. Stakeholder feedback on PCRs is very much encouraged. Any comments on this PCR document may be given via the PCR Forum at www.environdec.com or sent directly to the PCR moderator during its development or during the period of validity.

Any references to this document should include the PCR registration number, name and version.

The programme operator maintains the copyright of the document to ensure that it is possible to publish, update when necessary, and available to all organisations to develop and register EPDs. Stakeholders participating in PCR development should be acknowledged in the final document and on the website.

[1] Type III environmental declarations in the International EPD® System are referred to as EPD, Environmental Product Declarations.

2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Absorbent hygiene products (AHP)
Registration number and version:	2011:14, version 3.0.4
Programme:	The International EPD System
Programme operator:	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden. Website: www.environdec.com E-mail: info@environdec.com
PCR moderator:	Marta Roche Diez, EDANA, marta.roche@edana.org
PCR Committee:	EDANA, Essity, Evonik, Fater, Gama Healthcare, Ontex and Suominen
Date of publication and last revision:	2025-02-10 (version 3.0.4) A version history is available in Section 8.
Valid until:	2025-08-11
Schedule for renewal:	A PCR is valid for a pre-determined period of time to ensure that it is updated at regular intervals. When the PCR is about to expire the PCR moderator shall initiate a discussion with the Secretariat how to proceed with updating the document and renewing its validity. A PCR document may be revised during its period of validity provided significant and well-justified proposals for changes or amendments are presented. See www.environdec.com for up-to-date information and the latest version.
Standards conformance:	▪ General Programme Instructions of the International EPD System, version 3.01, based on ISO 14025 and ISO 14040/14044 ▪ PCR Basic Module, CPC Division 32 Pulp, paper and paper products, etc., version 3.0, dated 2018-05-03
PCR language(s):	This PCR was developed and is available in English. In case of translated versions the English version takes precedence in case of any discrepancies.

2.2 SCOPE OF PCR

2.2.1 PRODUCT CATEGORY DEFINITION AND DESCRIPTION

This document provides Product Category Rules (PCR) for the assessment of the environmental performance of UN CPC 32193 *(Absorbent hygiene products)* and the declaration of this performance by an EPD. The product category corresponds to UN CPC 32193

This PCR complies with the General Programme Instruction of the International EPD System, version 3.0 dated 2017-12-11. It is based on the requirements and guidelines given in “PCR Basic Module, CPC Division 32: Pulp, paper and paper products”, version 3.0 dated 2018-05-03,

This PCR document is publically available on www.environdec.com. The PCR document is a living document. If relevant changes in the LCA methodology or in the technology for the product category occur, the document will be revised and any changes will be published on the website.

Any comments to this PCR document may be given on the PCR Forum on www.environdec.com or directly to the PCR moderator during the period of validity. The PCR Moderator should initiate a revision process before the validity time expires to give due time for announcing and collecting comments.

EPDs shall be based on the latest version of the PCR, and refer to the version number and date of the PCR used. The production of new PCR versions does not affect the certification period of EPDs that are already published.

Absorbent Hygiene Products are a subset of products from UN CPC/division 32/subclass 32193: toilet paper, handkerchiefs, towels, serviettes, napkins for babies, tampons, and similar household, sanitary or hospital articles, and articles of apparel, of paper pulp, paper, cellulose wadding or webs of cellulose fibres.

UN CPC hierarchy:

- Section 3 - Other transportable goods, except metal products, machinery and equipment
    - Division 32 - Pulp, paper and paper products; printed matter and related articles
        - Group: 321 – Pulp. paper and paperboard
            - Class: 3219: Other paper and paperboard products

Subclass 32193 : Toilet paper, handkerchiefs, towels, serviettes, napkins for babies, tampons, and similar household, sanitary or hospital articles, and articles of apparel, of paper pulp, paper, cellulose wadding or webs of cellulose fibres

Note that in this PCR, the **following products groups are excluded**:

- toilet paper, handkerchiefs, towels, serviettes, and articles of apparel, of paper pulp, paper, cellulose wadding or webs of cellulose fibers, and
- non-disposable/multi-use products (except products with multi-use parts, such as washable mesh-pants).

The product group and UN CPC code shall be specified in the EPD.

The category consists of the following three groups of absorbent hygiene products:

- baby diapers
- feminine sanitary protection, and
- adult incontinence care products.

All products within these three categories, regardless of their design or composition, are covered by this PCR.

Baby diapers, sanitary pads, pantyliners and adult incontinence products typically consist of a top layer (nonwoven or perforated film), an absorbent core (fluff pulp and/or super absorbers), a back sheet (plastic film, nonwoven) and a fastening system (tape, belt or Velcro).

A tampon typically consists of a cover stock, an absorbent core and a string. Some types of tampons also include an applicator.

The adult incontinence care products covered by this PCR are all products classified in ISO 9949-2 (1993) Within each product group, the following types can be distinguished:

Product Group	**Products**
Feminine sanitary protection	Sanitary towels, alt. sanitary napkins
	Pantyliners, alt. panty shields
	Tampons
Baby diapers	Baby diapers
	Pant diapers
	Training pants
	Swimming pants

Adult incontinence products	All-in-one products: contains both the absorbent core and the outer shell with fastening (tapes, hook & loop, belts) (see1) insert pads (needs additional product for fastening) (see 2) Pants/briefs (see 3) Liner pads Male pouches Mesh briefs supports Bed protection, underpads

- All-in-one

- Insert pad

- Pant/brief

Depending on product type, both physical size and absorption capacity can vary. The product group and the variant of the product type shall be stated (e.g. baby diaper 5 – 10 kg, adult incontinence insert pad - large - extra dry).

2.2.2 GEOGRAPHICAL REGION

This PCR is applicable to be used globally.

2.2.3 EPD VALIDITY

An EPD based on this PCR shall be valid from its registration and publication at www.environdec.com and for a five year period starting from the date of the verification report (“approval date”), or until the EPD has been de-registered from the International EPD System.

An EPD shall be updated and re-verified during its validity if changes in technology or other circumstances have led to:

- an increase of 10% or more of any of the indicators listed in Section 5.4.5.1,
- errors in the declared information, or
- significant changes to the declared product information, content declaration, or additional environmental information.

If such changes have occurred, but the EPD is not updated, the EPD owner shall contact the Secretariat to de-register the EPD.

3 PCR REVIEW AND BACKGROUND INFORMATION

This PCR was developed in accordance with the process described in the General Programme Instructions of the International EPD System, including PCR review and open consultation.

3.1 PCR REVIEW

3.1.1 VERSION 1.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR moderator or PCR committee, and were excused from the review.

3.1.2 VERSION 2.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR moderator or PCR committee, and were excused from the review.
Chair of the PCR review:	Maurizio Fieschi
Review dates:	2014-12-08 until 2015-01-29

3.1.3 VERSION 3.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com Members of the Technical Committee were requested to state any potential conflict of interest with the PCR moderator or PCR committee, and were excused from the review.
Chair of the PCR review:	Maurizio Fieschi
Review dates:	2019-12-19 until 2020-01-14

3.2 OPEN CONSULTATION

3.2.1 VERSION 1.0

This PCR was available for open consultation from date 2011-02-03 until date 2011-03-23, during which any stakeholder was able to provide comments by posting on the PCR forum on www.environdec.com or by contacting the PCR moderator.

Stakeholders were invited via e-mail or other means to take part in the open consultation, and were encouraged to forward the invitation to other relevant stakeholders.

3.2.2 VERSION 2.0

This PCR was available for open consultation from date 2014-11-10 until date 2015-01-01, during which any stakeholder was able to provide comments by posting on the PCR forum on www.environdec.com or by contacting the PCR moderator.

Stakeholders were invited via e-mail or other means to take part in the open consultation, and were encouraged to forward the invitation to other relevant stakeholders.

3.2.3 VERSION 3.0

This PCR was available for open consultation from 2019-09-30 until 2019-11-26, during which any stakeholder was able to provide comments by posting on the PCR forum on www.environdec.com or by contacting the PCR moderator.

Stakeholders were invited via e-mail or other means to take part in the open consultation, and were encouraged to forward the invitation to other relevant stakeholders. No stakeholders provided comments during the open consultation, and agreed to be listed as contributors to the PCR and at www.environdec.com:

3.3 EXISTING PCRS FOR THE PRODUCT CATEGORY

As part of the development of this PCR, existing PCRs were considered in order to avoid overlaps in scope. The existence of such documents was checked in the public PCR listings of the following programmes based on ISO 14025 or similar:

- International EPD System. www.environdec.com.

The following ISO 14025 programmes were checked for relevant PCRs: GlobalEPD, IBU, EPD Norway No relevant PCRs were found in these programmes.

3.4 REASONING FOR DEVELOPMENT OF PCR

This PCR was developed in order to enable publication of Environmental Product Declarations (EPD) for this product category based on ISO 14025, ISO 14040/14044 and other relevant standards to be used in different applications and target audiences.

3.5 UNDERLYING STUDIES

The methodological choices made during the development of this PCR (functional unit, system boundary, allocation methods, impact categories, data quality rules, etc.) were primarily based on the following underlying studies:

- Environment Agency (2005) Life Cycle Assessment of Disposable and Reusable Nappies in the UK.
- Environment Agency (2008) An updated lifecycle assessment study for disposable and reusable nappies

4 GOAL AND SCOPE, LIFE CYCLE INVENTORY AND LIFE CYCLE IMPACT ASSESSMENT

The goal of this section is to provide specific rules, requirements and guidelines for developing an EPD for the product category as defined in Section 2.2.1.

4.1 FUNCTIONAL UNIT

The functional unit is one day of absorbent product use. The functional unit shall include the specification of a reference flow in terms of the number of product units used per day and the citation of an appropriate reference study. In addition, in the EPD, data may also be shown using an alternative functional unit of one product. Reference studies used in determining the rate of product use shall be based on a broad and representative consumer use study for the product in question and shall be available to the audience of the EPD. If different reference studies are available these studies shall be declared in the EPD and reported in the LCA study for the product being investigated. If an acceptable source of information regarding the number of products used per day is unavailable, the reference flow and functional unit shall be one product unit. The functional unit shall be declared in the EPD. The environmental impact shall be given per functional unit.

A description of the function of the product should be included in the EPD, if relevant.

4.2 REFERENCE SERVICE LIFE (RSL)

Not applicable for this product category.

4.3 SYSTEM BOUNDARY

The International EPD System uses an approach where all attributional processes from “cradle to grave” should be included using the principle of “limited loss of information at the final product”. This is especially important in the case of business-to-consumer communication.

The scope of this PCR and EPDs based on it is cradle-to-grave. For the disposable products covered by this PCR, the use phase is not relevant since the products are typical single use, i.e. used for a very short time and disposed of immediately afterwards.

4.3.1 LIFE CYCLE STAGES

For the purpose of different data quality rules and for the presentation of results, the life cycle of products is divided into three different life cycle stages:

- Upstream processes (from cradle-to-gate)
- Core processes (from gate-to-gate)
- Downstream processes (from gate-to-grave)

In the EPD, the environmental performance associated with each of the three life-cycle stages above shall be reported separately. The processes included in the scope of the PCR and belonging to each life cycle stage are described in Sections 4.3.1.1–4.3.1.3.

4.3.1.1. Upstream processes

The following attributional processes are part of the product system and classified as upstream processesneeded for the manufacture of absorbent hygiene products:

- Extraction and refinement of natural resources (e.g. forestry, agriculture and extraction of oil)
- Production of packaging materials; excluding pallets
- Production processes of the energy wares used for upstream processes
- Production of raw materials (e.g. pulp, cotton and other fibres, film, nonwoven, laminates, superabsorbers, elastics, adhesives, etc.)

Upstream processes not listed may also be included. All elementary flows at resource extraction shall be included, except for the flows that fall under the general cut-off rule in Section 4.5.

4.3.1.2. Core processes

The following attributional processes are part of the product system and classified as core processes:

- Transportation of input materials to the core process
- Manufacturing of absorbent hygiene products
- Production of energy wares used for core processes
- Electricity production according the proper energy mix hypotheses (see Section 4.10)
- Waste treatment of waste generated during manufacturing

Manufacturing processes not listed may also be included. The production of the raw materials used for production of all product parts shall be included. A minimum of 99% of the total weight of the declared product including packaging shall be included.

4.3.1.3. Downstream processes

The following attributional processes are part of the product system and classified as downstream processes:

- Transportation from final manufacturing to average customer (e.g. retailer) or distribution point
- Waste management of used products, packaging included

The following downstream processes are excluded from the system:

- For the disposable products covered by this PCR, the use phase is not relevant since the products are typical single use, i.e. used for a very short time and disposed of immediately afterwards.

4.3.2 OTHER BOUNDARY SETTING

4.3.2.1. Technical System

The technical system shall not include:

- Manufacturing of production equipment, buildings and other capital goods
- Business travel of personnel
- Travel to and from work by personnel
- Research and development activities
- Pallets

4.3.2.2. Boundaries in Time

The data from manufacturing of absorbent hygiene products shall be a maximum of two years old. If data are older it shall be justified in the LCA report.

4.3.2.3. Boundaries toward Geography

The data for the core module shall be representative for the actual production processes and representative for the site/region where the respective process is taking place.

4.3.2.4. Boundary towards nature

Boundaries to nature are defined as flows of material and energy resources from nature into the system. Emissions to air, water and soil cross the system boundary when they are emitted from or leaving the product system. E.g. biomass taken from natural system (forest) to technical system. Agricultural and similar production systems are part of the technical system.

4.3.2.5. Boundaries towards other technical systems

See Section 4.6.2.

If there is an inflow of recycled material to the production system in the production/manufacturing phase, the recycling process and the transportation from the recycling process to where the material is used shall be included. If there is an outflow of material to recycling, the transportation of the material to the recycling process shall be included. The material going to recycling is then an outflow from the production system (see the General Programme Instructions).

4.4 SYSTEM DIAGRAM

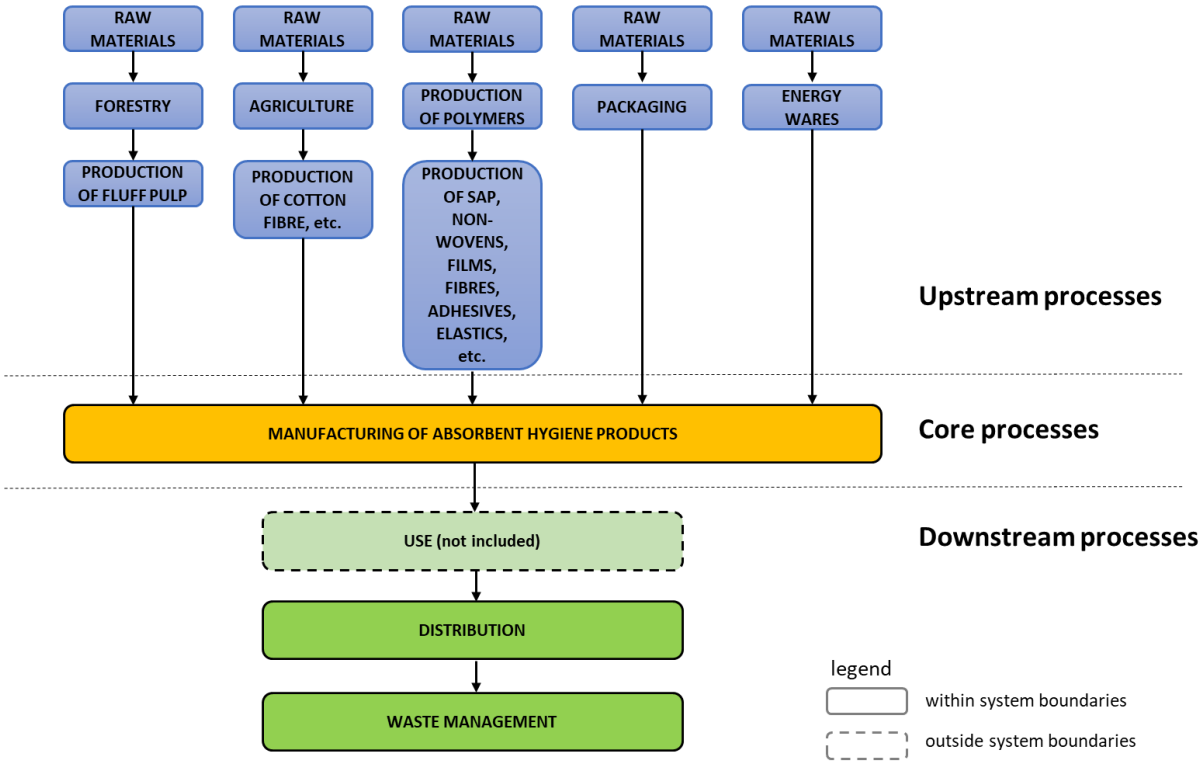

Figure 2 System diagram illustrating the processes that are included in the product system, divided into upstream, core and downstream processes.

4.5 CUT-OFF RULES

Data for elementary flows to and from the product system contributing to a minimum of 99% of the declared environmental impacts shall be included (not including processes that are explicitly outside the system boundary as described in Section 4.3).

The check for cut-off rules in a satisfactory way should be based on the combination of an expert judgment, with experience of similar product systems, and a sensitivity analysis in which it is possible to understand how the un-investigated input or output could affect the final results.

4.6 ALLOCATION RULES

4.6.1 CO-PRODUCT ALLOCATION

The following step-wise procedure shall be applied for multifunctional products and multiproduct processes:

1. Allocation shall be avoided, if possible, by dividing the unit process into two or more sub-processes and collecting the environmental data related to these sub-processes.

2. If allocation cannot be avoided, the inputs and outputs of the system shall be partitioned between its different products or functions in a way that reflects the underlying physical relationships between them; i.e. they should reflect the way in which the inputs and outputs are changed by quantitative changes in the products or functions delivered by the system.
3. Where physical relationships alone cannot be established or used as the basis for allocation (or they are too time consuming), the inputs should be allocated between the products and functions in a way that reflects other relationships between them. The PCR shall clearly specify the allocation method for each key process stage where an allocation problem may be expected and provide guidelines on how they should be handled.

4.6.2 REUSE, RECYCLING, AND RECOVERY

In the framework of the International EPD System, the methodological choices for allocation for reuse, recycling and recovery have been set according to the polluter pays principle (PPP). This means that the generator of the waste shall carry the full environmental impact until the point in the product's life cycle at which the waste is transported to a scrapyard or the gate of a waste processing plant (collection site). The subsequent user of the waste shall carry the environmental impact from the processing and refinement of the waste but not the environmental impact caused in the "earlier" life cycles. See the General Programme Instruction for further information and examples.

4.7 DATA QUALITY REQUIREMENTS

An LCA calculation requires two different kinds of information:

- data related to the environmental aspects of the considered system (such materials or energy flows that enter the production system). These data usually come from the company that is performing the LCA calculation.
- data related to the life cycle impacts of the material or energy flows that enter the production system. These data usually come from databases.

Data on environmental aspects shall be as specific as possible and shall be representative of the studied process.

Data on the life cycle of materials or energy inputs are classified into three categories – specific data, selected generic data, and proxy data, defined as follows:

specific data (also referred to as "primary data" or "site-specific data") – data gathered from the actual manufacturing plant where product-specific processes are carried out, and data from other parts of the life cycle traced to the specific product system under study, e.g. materials or electricity provided by a contracted supplier that is able to provide data for the actual delivered services, transportation that takes place based on actual fuel consumption, and related emissions, etc.,

generic data (sometimes referred to as "secondary data"), divided into**:**

- **selected generic data** – data from commonly available data sources (e.g. commercial databases and free databases) that fulfil prescribed data quality characteristics for precision, completeness, and,
- **proxy data** – data from commonly available data sources (e.g. commercial databases and free databases) that do not fulfil all of the data quality characteristics of "selected generic data".

As a general rule, specific data shall always be used, if available, after performing a data quality assessment. It is mandatory to use specific data for the core processes as defined above. For the upstream processes, downstream processes, and infrastructure, generic data may also be used if specific data are not available.

Any data used should preferably represent average values for a specific reference year. However, the way these data are generated could vary, e.g. over time, and in such cases they should have the form of a representative annual average value for a specified reference period. Such deviations should be declared.

4.7.1 RULES FOR USING GENERIC DATA

The attributional LCA approach in the International EPD System forms the basic prerequisites for selecting generic data. To allow the classification of generic data as "selected generic data", they shall fulfil selected prescribed characteristics for precision, completeness, and representativeness (temporal, geographical, and technological), such as:

- the reference year must be as current as possible and preferably assessed to be representative for at least the validity period of the EPD,

- the cut-off criteria to be met on the level of the modelled product system are the qualitative coverage of at least 99% of energy, mass, and overall environmental relevance of the flows,
- completeness in which the inventory data set should, in principle, cover all elementary flows that contribute to a relevant degree of the impact categories, and
- the representativeness of the resulting inventory in the given temporal, technological, and geographical reference should, as a general principle, be better than ±5% of the environmental impact of fully representative data.

Section 4.8 provides a list of recommended databases/data sets to be used for generic data.

If selected generic data that meets the requirements of the International EPD System are not available as the necessary input data, proxy data may be used and documented. The environmental impacts associated with proxy data shall not exceed 10% of the overall environmental impact from the product system.

The EPD may include a data quality declaration to demonstrate the share of specific data, selected generic data and proxy data for the environmental impacts.

4.8 RECOMMENDED DATABASES FOR GENERIC DATA

Table 1 lists recommended databases for generic data, including generic data for waste management. Please note that this listing does not imply that other data that fulfil the data quality requirements may not be used and that data quality assessment shall also be performed for the data sets in the recommended database by an LCA practitioner.

PROCESS	GEOGRAPHICAL SCOPE	RECOMMENDED DATASET	DATABASE
Energy mixes	Regional	-	Ecoinvent 3.1 or later
Transport	Global/European	-	Ecoinvent 3.1 or later
Plastics (and precursors)	Global/European	-	Ecoinvent 3.1 or later Plastics Europe
Packaging	Global/European	-	FEFCO
Other Chemicals	Global/European		Ecoinvent 3.1 or later
Waste statistics	OECD	OECD statistics	Latest version
Waste statistics	EU	Eurostat	Latest version
Waste processes for paper, PP, PE, PET, plastic mix, PU, viscose, $CaCO_3$, etc	Global, Europe	-	Ecoinvent 3.1 or later

Table 1 Recommended databases for generic data.

4.9 IMPACT CATEGORIES AND IMPACT ASSESSMENT

The EPD shall declare the default impact categories as described in the General Programme Instructions. The characterisation models and factors to use for the default impact categories are available on www.environdec.com/impact-categories and shall be updated on a regular basis based on the latest developments in LCA methodology and ensuring the market stability of EPDs. The source and version of the characterisation models and the factors used shall be reported in the EPD. Alternative regional life cycle impact assessment methods and characterisation factors are allowed to be calculated and displayed in addition to the default list. If so, the EPD shall contain an explanation of the difference between the different sets of indicators, as they may appear to the reader to display duplicate information.

4.10 OTHER CALCULATION RULES AND SCENARIOS

4.10.1 UPSTREAM PROCESSES

The following requirements apply to the upstream processes:

- Data referring to processes and activities upstream in a supply chain over which an organisation has direct management control shall be specific and collected on site.
- Data referring to contractors that supply main parts, packaging, or main auxiliaries should be requested from the contractor as specific data.
- The transport of main parts and components along the supply chain to a distribution point (e.g. a stockroom or warehouse) where the final delivery to the manufacturer can take place based on the actual transportation mode, distance from the supplier, and vehicle load.
- In case specific data is lacking, selected generic data may be used. If this is also lacking, proxy data may be used.
- For the electricity used in the upstream processes, electricity production impacts shall be accounted for in this priority when specific data are used in the upstream processes:

    1. Specific electricity mix as generated, or purchased, from an electricity supplier, demonstrated by a Guarantee of Origin (or similar, where reliability, traceability, and the avoidance of double-counting are ensured) as provided by the electricity supplier. If no specific mix is purchased, the residual electricity mix from the electricity supplier shall be used.[2]
    2. National residual electricity mix or residual electricity mix on the market
    3. National electricity production mix or electricity mix on the market.

    The mix of electricity used in upstream processes shall be documented in the EPD, where relevant.
- Packaging: specific data shall be used for the consumer packaging production if it is under the direct control of the organization or if the environmental impact related to the consumer packaging production is more than 10% of the total product environmental indicators. In other cases, generic data may be used. When consumer packaging shows the organization's logo, the LCA report should report the exerted/non exerted direct control on the production of consumer packaging by the organization.

4.10.2 CORE PROCESSES

The following requirements apply to the core processes:

- Specific data shall be used for the manufacture of the absorbent hygiene products
- For the electricity used in the core processes, electricity production impacts shall be accounted for in this priority:

    1. Specific electricity mix as generated, or purchased, from an electricity supplier, demonstrated by a Guarantee of Origin (or similar, where reliability, traceability, and the avoidance of double-counting are ensured) as provided by the electricity supplier. If no specific mix is purchased, the residual electricity mix from the electricity supplier shall be used.[3]
    2. National residual electricity mix or residual electricity mix on the market
    3. National electricity production mix or electricity mix on the market.

    The mix of electricity used in the core processes shall be documented in the EPD, where relevant.
- Transport from the final delivery point of raw materials, chemicals, main parts, and components (see above regarding upstream processes) to the manufacturing plant/place of service provision should be based on the actual transportation mode, distance from the supplier, and vehicle load, if available.
- Waste treatment processes of manufacturing waste should be based on specific data, if available.

4.10.3 DOWNSTREAM PROCESSES

The following requirements apply to the downstream processes:

[2] The residual electricity mix is the mix when all contract-specific electricity that has been sold to other customers has been subtracted from the total production mix of the electricity supplier.

[3] The residual electricity mix is the mix when all contract-specific electricity that has been sold to other customers has been subtracted from the total production mix of the electricity supplier.

- For the disposable products covered by this PCR, the use phase is not relevant since the products are typical single use, i.e. used for a very short time and disposed of immediately afterwards. Use of additional products or appliances related to cleaning activities during e.g. diapering of babies (e.g. hot water or baby wipes) is explicitly excluded from the system boundaries.
- In incontinence products made of an absorbing insert and mesh pants, the latter can be washed and reused. Since the washing phase would be highly variable and to maintain the EPD comparison principle, the use phase should be excluded.
- The EPD shall include the transport from manufacture to an average customer (retailer shop or warehouse) or distribution platform. The type of transport and transport distance should be representative to actual conditions on the market for which the EPD is valid. The transport distance may also be calculated as a fixed long transport, such as 1 000 km transport by lorry.
- Sea transports between continents may be calculated using the following tool: Sea-distances.org. The type of transport and transport distance should be representative to actual conditions on the market for which the EPD is valid.
- Scenarios for the end-of-life stage shall be technically and economically practicable and compliant with current regulations in the relevant geographical region based on the geographical scope of the EPD. Key assumptions regarding the end-of-life stage scenario shall be documented.
- Waste management of used products and packaging: The waste management shall be based on available municipal solid waste statistics from the region and the models to be used are listed in the table for generic data (see below). Waste management of transport packaging shall be included in the downstream module, based on scenarios for the relevant market. Waste from absorbent hygiene products are classified as household waste according to the European Waste Catalogue
- If the products are incinerated, an average humidity of 60% and a low calorific value of 7.2 MJ/kg (adult incontinence products and baby diapers) or 9.0 MJ/kg (feminine products) shall be used.
- The calculation of the environmental impacts due to waste management of absorbent hygiene products (AHPs) and their packaging shall be based on following allocation:
    - Landfilling shall be attributed to the studied process.
    - For the calculation of impacts related to incineration with energy recovery, the environmental impact of the incineration shall be attributed to the waste generator, and the impacts related to making use of the thermal energy shall be attributed to the next product life cycle. In the event of incineration without energy recovery4 the product system generating the waste shall include all of the environmental impacts from incineration. If the incineration is with energy recovery, 50% of the impacts of the waste incineration plant may be attributed to waste treatment and 50% to the energy recovery.
    - In case of recycling or other recovery (e.g. composting) impacts shall be borne by the product until it enters the facility gate where the process takes place. Benefits and credits of recovery are outside the system boundaries. An estimation of the avoided impacts due to such recovery could be made and declared separately.

[4] incineration with an efficiency of less than 60% is defined as ‘without energy recovery’ (Guidelines on the interpretation of the R1 energy efficiency formula for incineration facilities dedicated to the processing of municipal solid waste according to Annex II of Directive 2008/98/EC on Waste)

5 CONTENT AND FORMAT OF EPD

EPDs based on this PCR shall contain the information described in this section. Flexibility is allowed in the formatting and layout provided that the EPD still includes the prescribed information. A generic template for EPDs is available via www.environdec.com

As a general rule the EPD content:

- shall be in line with the requirements and guidelines in ISO 14020 (Environmental labels and declarations - General principles),
- shall be verifiable, accurate, relevant and not misleading, and
- shall not include rating, judgements or direct comparison with other products.

An EPD should be made with a reasonable number of pages for the intended audience and use.

5.1 EPD LANGUAGES

EPDs should be published in English, but may also be published in additional languages. If the EPD is not available in English, it shall contain an executive summary in English including the main content of the EPD. This summary is part of the EPD and thus subject to the same verification procedure.

5.2 UNITS AND QUANTITIES

The following requirements apply for units and quantities:

- The International System of Units (SI units) shall be used, e.g., kilograms (kg), Joules (J) and metres (m). Reasonable multiples of SI units may be decided in the PCR to improve readability, e.g., grams (g) or megajoules (MJ). The following exceptions apply:
  - Resources used for energy input (primary energy) should be expressed as kilowatt-hours (kWh) or megajoules (MJ), including renewable energy sources, e.g., hydropower, wind power and geothermal power.
  - Water use should be expressed in cubic metres (m^3)
  - Temperature should be expressed in degrees Celsius (°C),
  - Time should be expressed in the units most practical, e.g., seconds, minutes, hours, days or years.
- Three significant figures[5] should be adopted for all results, The number of significant digits shall be appropriate and consistent.
- The thousand separator and decimal mark in the EPD shall follow one of the following styles (a number with six significant figures shown for illustration):
  - SI style (French version): 1 234,56
  - SI style (English version): 1 234.56

  In case of potential confusion or intended use of the EPD in markets where different symbols are used, the EPD shall state what symbols are used for thousand separator and decimal mark.
- Dates and times presented in the EPD should follow the format in ISO 8601. For years, the prescribed format is YYYY-MM-DD, e.g., 2017-03-26 for March 26th, 2017.
- The result tables shall:
  - Only contain values or the letters “INA” (Indicator Not Assessed). It is not possible to specify INA for mandatory indicators. INA shall only be used for voluntary parameters that are not quantified because no data is available.[6]
  - Contain no blank cells, hyphens, less than or greater than signs or letters (except “INA”).

[5] Significant figures are those digits that carry meaning contributing to its precision. For example with two significant digits, the result of 123.45 shall be displayed as 120, and 0.12345 shall be displayed as 0.12. In scientific notation, these two examples would be displayed as $1.2*10^2$ and $1.2*10^{-2}$.

[6] This requirement does not intend to give guidance on what indicators are mandated (“shall”) or voluntary.

- Use the value 0 only for parameters that have been calculated to be zero.
- Footnotes shall be used to explain any limitation to the result value.

5.3 USE OF IMAGES IN EPD

Images used in the EPD, especially pictures featured on the cover page, may in themselves be interpreted as an environmental claim. Images such as trees, mountains, wildlife that are not related to the declared product should therefore be used with caution and in compliance with national legislation and best available practices in the markets in which the EPD is intended to be used.

5.4 EPD REPORTING FORMAT

The reporting format of the EPD shall include the following sections:

- Cover page (see Section 5.4.1)
- Programme information (see Section 5.4.2)
- Product information (see Section 5.4.3)
- Content declaration (see Section 5.4.4)
- Environmental performance (see Section 5.4.5)
- Additional environmental information (see the GPI)
- References (see Section 5.4.7)
- The following information shall be included, when applicable:
- Information related to Sector EPDs (see the GPI)
- Differences versus previous versions (see Section 5.4.6)
- Executive summary in English (see Section 5.4.8)

5.4.1 COVER PAGE

The cover page shall include:

- Product name and image,
- Name and logotype of EPD owner,
- The text “Environmental Product Declaration” and/or “EPD”
- *Programme: The International EPD System, www.environdec.com,*
- *Programme operator: EPD International AB*
- Logotype of the International EPD System,
- EPD registration number as issued by the programme operator[7],
- *Date of publication (issue): 20XX-YY-ZZ,*
- *Date of revision: 20XX-YY-ZZ*, when applicable,
- *Date of validity; 20XX-YY-ZZ*
- A note that “*An EPD should provide current information, and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com*.”
- A statement of conformity with ISO 14025,

[7] The EPD shall not include a “registration number” if such is provided by the certification body, as this may be confused with the registration number issued by the programme operator.

5.4.2 PROGRAMME INFORMATION

The programme information section of the EPD shall include:

- Address of programme operator: EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden, E-mail: info@environdec.com
- The following mandatory statement from ISO 14025: "*EPDs within the same product category but from different programmes may not be comparable*."
- A statement that the EPD owner has the sole ownership, liability and responsibility of the EPD

Information about verification[8] and reference PCR in a table with the following format and contents:

Product category rules (PCR): *<name, registration number, version and UN CPC code(s)>*
PCR review was conducted by: *<name and organisation of the review chair, and information on how to contact the chair through the programme operator>*
Independent third-party verification of the declaration and data, according to ISO 14025:2006: ☐ EPD process certification ☐ EPD verification
Third party verifier: *<name, organisation and signature of the third party verifier>* *In case of certification bodies:* Accredited by: *<name of the accreditation body and accreditation number, if applicable>.* *In case of individual verifiers:* Approved by: The International EPD System Technical Committee, supported by the Secretariat
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☐ No

5.4.3 PRODUCT INFORMATION

The product information section of the EPD shall include:

- Address and contact information to EPD owner,
- Description of the organisation. This may include information on products- or management system-related certifications (e.g. ISO 14024 Type I environmental labels, ISO 9001- and 14001-certificates and EMAS-registrations) and other relevant work the organisation wants to communicate (e.g. SA 8000, supply-chain management and social responsibility),
- Name and location of production site,
- Product identification by name, and an unambiguous identification of the product by standards, concessions or other means,
- Identification of the product according to the UN CPC scheme system. Other relevant codes for product classification may also be included, e.g.
  - Common Procurement Vocabulary (CPV),
  - United Nations Standard Products and Services Code® (UNSPSC),
  - Classification of Products by Activity (NACE/CPA) or
  - Australian and New Zealand Standard Industrial Classification (ANZSIC),

[8] If the EPD has been verified by an approved individual verifier who has received contractual assistance from a certification body that is not accredited, this certification body shall not be included in this table.

- Description of the product, its application/intended use and technical functions, e.g. expected service life time,
- Geographical scope of the EPD, i.e., for which geographical location(s) of use and end-of-life the product's performance has been calculated,
- Functional unit or declared unit,
- Reference service life (RSL), if applicable,
- Declaration of the year(s) covered by the data used for the LCA calculation and other relevant reference years,
- Reference to the main database(s) for generic data and LCA software used, if relevant,
- System diagram of the processes included in the LCA, divided into the life cycle stages,
- Description if the EPD system boundary is "cradle-to-gate", "cradle-to-gate with options" or "cradle-to-grave",
- Information on which life cycle stages are not considered (if any), with a justification of the omission,
- Relevant websites for more information or explanatory materials.

This section may also include:

- Name and contact information of organisation carrying out the underlying LCA study,
- Additional information about the underlying LCA-based information, such as assumptions, cut-off rules, data quality and allocation.

5.4.4 CONTENT DECLARATION

The content declaration shall have the form of a list of materials and chemical substances including information on their environmental and hazardous properties. The gross weight of material shall be declared in the EPD at a minimum of 99 % of one unit of product.

Information on the hazardous properties of materials and chemical substances should follow the requirements given in the latest revision of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)[9], issued by United Nations or national or regional applications of the GHS.

As an example, the following regulations should be used for EPDs intended to be used in the European Union:

Regulation (EC) No 1907/2006 of the European parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures

5.4.4.1. Information about recycled materials

When a product is made in whole or in part with recycled materials, the provenience of the materials (pre-consumer or post-consumer) shall be presented in the EPD as part of the content declaration.

To avoid any misunderstanding about which material may be considered "recycled material", the guidance given in ISO 14021 shall be taken into account. In brief, the standard states that:

- only pre-consumer or post-consumer materials (scraps) shall be considered in the accounting of the recycled materials, and
- materials coming from scrap reutilisation (such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it) shall not be considered as recycled content.

5.4.4.2. Information about packaging

As packaging is strongly connected with the product, the producer shall provide information about packaging in the EPD, when applicable. Packaging may be classified as:

[9] The GHS document is available on www.unece.org.

- Distribution Packaging: packaging designed to contain one or more articles or packages, or bulk materials, for the purposes of transport, handling and/or distribution (ISO 21067-1:2016, Par. 2.2.6)
- Consumer Packaging: packaging constituting, with its content, a sales unit for the final user or consumer at the point of retail (ISO 21067-1:2016, Par. 2.2.7).

Consumer packaging is generally the outcome of eco-design processes, or other activities, under direct control of the organisation. Many critical categories with strict legal requirements belong to consumer packaging category like food contact packaging and pharmaceutical packaging.

The type and function of packaging shall be reported in the EPD.

A statement of the source of the materials (pre-consumer or post-consumer) shall be presented in the EPD when the packaging is made in whole or in part by recycled materials.

5.4.5 ENVIRONMENTAL PERFORMANCE

5.4.5.1. Environmental impacts

The indicators related to potential environmental impact shall be declared per functional unit and per life cycle stage. The characterisation models and factors to use for the default impact categories are available at http://www.environdec.com/indicators and will be updated on a regular basis based on the latest developments in LCA methodology and ensuring the market stability of EPDs. The source and version of the characterisation models and the factors used shall be reported in the EPD. Alternative regional life cycle impact assessment methods and characterisation factors are allowed to be calculated and displayed in addition to the default list. If so, the EPD shall contain an explanation of the difference between the different sets of indicators, as they may appear to the reader to display duplicate information.

5.4.5.2. Use of resources

The EPD shall declare the indicators for resource use listed at www.environdec.com/indicators per functional unit, per life-cycle stage and in aggregated form.

5.4.5.3. Waste production and output flows

Waste generated along the whole life cycle production chains shall be treated following the technical specifications described in the GPI. The EPD shall declare the indicators for waste production and output flows as listed at www.environdec.com/indicators per functional unit, per life-cycle stage and in aggregated form.

5.4.5.4. Other environmental indicators

The EPD may add other environmental indicators from the inventory or impact assessment. Such indicators should be based on international standards or similar methodologies developed in a transparent procedure. Reference to the chosen indictors and methodologies shall be reported.

5.4.6 DIFFERENCES VERSUS PREVIOUS VERSIONS

For EPDs that have been updated, the following information shall also be included:

- a description of the differences versus previously published versions, e.g. a description of the percentage change in results and the main reason for the change, and
- a revision date on the cover page.

5.4.7 REFERENCES

A list of references shall be included, including references to the General Programme Instructions (including version number), standards and PCR (registration number, name and version).

5.4.8 EXECUTIVE SUMMARY IN ENGLISH

For EPDs published in another language than English, an executive summary in English shall be included.

The executive summary should contain relevant summarised information related to the programme, product, environmental performance, additional information, information related to sector EPDs, references and differences versus previous versions.

6 GLOSSARY

ADP	Abiotic depletion potential
AHP	Absorbent hygiene product
ANZSIC	Australian and New Zeeland standard industrial classification
AP	Acidification potential
CaCo3	Calcium carbonate
CO_2	Carbon dioxide
CPC	Central product classification
CPV	Common Procurement vocabulary
EP	Eutrophication potential
EPD	Environmental product declaration
FEFCO	European Federation of Corrugated Board Manufacturers
GHS	Globally harmonized system of classification and labelling of chemicals
GWP	Global warming potential
INA	Indicator not assessed
ISO	International Organization for Standardization
NACE/CPA	Classification of products by activity
PE	Polyethylene
PET	Polyethylene Terephthalate
POCP	Formation potential of tropospheric ozone
PP	Polypropylene
PPP	Polluter pays principle
PU	Polyurethane
Kg	kilogram
KWh	Kilowatt/hours
m^3	Cubic metre
MJ	Megajoule
LCA	Life cycle assessment
LCI	Life cycle inventory
PCR	Product Category Rules
REACH	Registration, Evoluation, Authorisation and Restriction
SI	The International System of Units
SO_2	Sulphur dioxide
UN	United Nations
UNSPSC	United Nations standard products and services code

7 REFERENCES

EPD International (2017) General Programme Instructions for the International EPD System. Version 3.0, dated 2017-12-11. www.environdec.com

ISO (2000), ISO 14020:2000, Environmental labels and declarations – General principles

ISO (2004), ISO 8601:2019 Data elements and interchange formats – Information interchange – Representation of dates and times

ISO (2006a), ISO 14025:2006, Environmental labels and declarations – Type III environmental declarations – Principles and procedures

ISO (2006b), ISO 14040:2006, Environmental management – Life cycle assessment – Principles and framework

ISO (2006c), ISO 14044: 2006/Amd 1:2017, Environmental management – Life cycle assessment – Requirements and guidelines

ISO (2014), ISO 14046:2014, Environmental management – Water footprint – Principles, requirements and guidelines

ISO (2017a), ISO 14026:2017, Environmental labels and declarations -- Principles, requirements and guidelines for communication of footprint information

ISO (2017b), ISO/TS 14027:2017, Environmental labels and declarations -- Development of product category rules

ISO (2018), ISO 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification and communication

8 VERSION HISTORY OF PCR

VERSION 1.0, 2011-10-14

- Update of PCR for Absorbent Hygiene Products based on PCR 2007:06.

VERSION 1.01, 2013-07-25

- Compliance with to the General Programme Instructions, Version 2.01.
- Use of the latest template

VERSION 2.0, 2015-02-19

- Use of latest template
- Section 5 Units and quantities – clarification that scientific notation can be used as found appropriate
- Section 6 General system boundaries - Clarification that production of energy wares shall be reported in the different parts of the system respectively, upstream process and core process
- Section 6 General system boundaries – waste treatment of production waste and electricity generation in core process
- Section 7.1.3 Boundaries towards nature – example added for clarification
- Section 7.3 Allocation rules – Clarification that justification of choices in the underlying LCA shall be done in the LCA report and not in the EPD
- Section 8.2.1 Rules for generic data – Updated table for generic data
- Section 10.1 Use of resources – Requirements on the resource declaration are added
- Section 12 Validity of the EPD – clarification of follow up of data, agreement with verifier

VERSION 2.1, 2017-05-24

- Updated version during PCR validity to clarify that cotton products are included in the scope:
  - Section 2
  - System diagram in Section 6
  - Section 6.1
  - Section 8.2
  - Section 9.2
- Editorial changes

VERSION 3.0, 2020-02-12

- Update according to General Programme Instructions, Version 3.01
- Clarification of scope
- Update of system diagram in section 4.4
- Editorial changes

VERSION 3.01, 2020-06-03

- Section 5.4.5.1 was updated. The table with detault impact categories was removed, and instead the PCR only refers to www.environdec.com/impact-categories for the list of detault impact categories. The removed table erroneously included the impact category Land use change (in m^2*a), which is thus no longer listed as a default impact category in the PCR.

ABSORBENT HYGIENE PRODUCTS
PRODUCT CATEGORY CLASSIFICATION: UN CPC 32193

VERSION 3.0.2, 2022-04-20

- Editorial changes in Sections 5.4.5.1 to 5.4.5.4, to clarify the indicator list at www.environdec.com applies also for the indicators of resource use, waste production and other output flows.

VERSION 3.0.3, 2023-11-03

- Prolonged validity with one year due to the initiation of an updating process.
- Editorial changes.

VERSION 3.0.4, 2025-02-10

- Prolonged validity with another six months due to delayed updating process.
- Change of PCR Moderator.