INTERNATIONAL EPD SYSTEM

COSMETICS (SOAP, PERFUME AND TIOLET PREPARATIONS)

PRODUCT CATEGORY CLASSIFICATION: UN CPC 35321, 35323

PCR FOR OPEN CONSULTATION

PCR 2015:07
VERSION 3.0.0
VALID UNTIL 20XX-YY-ZZ *(TO BE ADDED BY THE SECRETARIAT)*

A cover image of the PCR will be added by the Secretariat.

The PCR Committee may propose a cover image by submitting it to the Secretariat. The image shall be representative for the scope of the PCR, be of high resolution, and its use as cover image shall be approved by the copyright holder.

INTRODUCTION TO OPEN CONSULTATION

This draft PCR document is available for open consultation from 2025-12-29 until 2026-03-01. Feel free to forward the draft to any other stakeholder you might think is relevant, including colleagues and other organisations.

We are interested in comments from stakeholders on:

- General
    1. Alignment with PCRs available in other programmes for type III environmental declarations, industry-specific LCA guidelines or similar.
- Scope of PCR
    2. Product category definition and description
    3. Classification of product category using CPC codes
- Goal and scope, life cycle inventory and life cycle impact assessment
    4. Functional unit/declared unit
    5. System boundary
    6. Allocation rules
    7. Data quality requirements
    8. Recommended databases for generic data
    9. Impact categories and impact assessment methodology
- Additional information

Comments shall be sent directly to the PCR Moderator (contact details available in Section 1). There is a template for comments on www.environdec.com that may be used.

For questions about the PCR, please contact the PCR moderator. For general questions about the International EPD System, EPD or PCR development, please contact the Secretariat via https://www.environdec.com/support.

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1 INTRODUCTION

This document constitutes Product Category Rules (PCR) developed in the framework of the International EPD System: a programme for Environmental Product Declarations (EPD)[1] according to ISO 14025:2006, ISO 14040:2006, ISO 14044:2006,

1 Termed type III environmental declarations in ISO 14025.

and product-specific standards, such as EN 15804 and ISO 21930 for construction products. EPDs are voluntary documents for a company or an industry association to present transparent, consistent, and verifiable information about the environmental performance of their products (goods or services).

The General Programme Instructions (GPI), publicly available on www.environdec.com, includes the rules for the overall administration and operation of the programme and the basic rules for developing EPDs registered in the programme. A PCR complements the GPI and the normative standards by providing specific rules, and guidelines for developing an EPD for one or more specific product categories (see Figure 1), thereby enabling the generation of consistent EPDs within a product category. A PCR should not repeat the rules and guidelines of the GPI, but include additions, specifications and deviations to the rules set in the GPI. As such, a PCR shall be used together with the GPI.

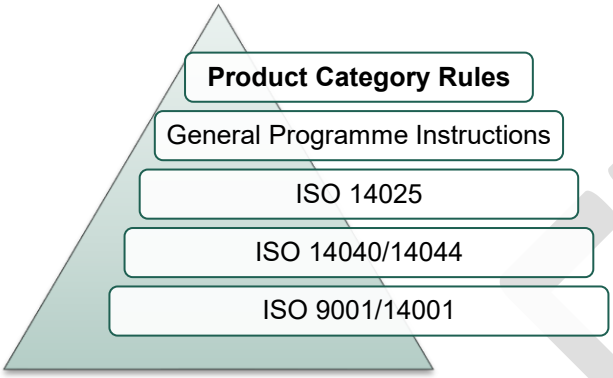

Figure 1. The hierarchy between PCRs, standards, and other documents.

The present PCR uses the following terminology:

- The term “shall” is used to indicate what is obligatory, i.e., a requirement.
- The term “should” is used to indicate a recommendation. Any deviation from a recommendation shall be justified in the EPD development process.
- The terms “may” or “can” are used to indicate an option that is permissible.

For definitions of other terms used in the document, see the GPI and normative standards.

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

The programme operator maintains the copyright of the PCR to ensure that it is possible to publish, update, and make it 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.

2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Cosmetics (soap, perfume and toilet preparations)
Registration number and version:	2015:07, Version 3.0.0
Programme:	EPD INTERNATIONAL EPD SYSTEM
Programme operator:	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden. Website: www.environdec.com E-mail: support@environdec.com
PCR Moderator:	Simona Canzanelli, Ambiente Italia S.r.l., simona.canzanelli@ambienteitalia.it, on behalf of Unifarco S.p.A.
PCR Committee:	Unifarco S.p.A. Ambiente Italia S.r.l.
Publication date:	*To be added by the Secretariat* See Section 9 for a version history of the PCR.
Valid until:	*To be added by the Secretariat* The validity may change. See www.environdec.com for the latest version of the PCR and the latest information on its validity and transition periods between versions.
Development and updates:	The PCR has been developed following ISO 14027, including public consultation and review. The rules for the development and updating processes are described in Section 9 of the GPI. The PCR is valid for a pre-determined time period 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 on if and how to proceed with updating the PCR and renewing its validity. A PCR may be updated before it expires, based on changes in normative standards or provided significant and well-justified proposals for changes or amendments are presented. When there has been an update of the PCR, the new version should be used to develop EPDs. For small updates (change of third-digit version number), the previous version is normally immediately removed from the PCR library on www.environdec.com and there is no transition period. For medium updates (change of second-digit version number), the previous version of the PCR is valid in parallel during a transition period of at least 90 days, but not exceeding its previously set validity period. For large updates (change of first-digit version number), the previous version is valid in parallel during a transition period of at least 180 days, but not exceeding its previously set validity period.

	Stakeholder feedback on PCRs is very much encouraged. Any comments on this PCR may be sent directly to the PCR Moderator and/or the Secretariat during its development or during its period of validity.
Standards and documents conformance:	General Programme Instructions of the International EPD System, version 5.0, based on ISO 14025 and ISO 14040/14044.[2]
PCR language(s):	At the time of publication, this PCR was available in English. If the PCR is available in several languages, these are available on www.environdec.com. 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 cosmetics (soap, perfume and toilet preparations) and the declaration of this performance by an EPD. The product category corresponds to UN CPC 35321 "Soap; organic surface-active products and preparations for use as soap; paper, wadding, felt and nonwovens, impregnated, coated or covered with soap or detergent" and UN CPC 35323 "Perfume and toilet preparations"[3].

This PCR refers to cosmetic products: any substance or mixture intended to be placed in contact with the external parts of the human body (epidermis, hair system, nails, lips and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours. The product category includes also soaps and preparations in primary packaging of any size, format, type of closure and virgin, reusable or recycled container

This PCR specifies the requirements for the LCA study and for the format and content of the EPD for UN CPC 35321 and CPC 35323. The product category is defined under ISIC – CPC's classification:

- Division: 35 - Other chemical products; man-made fibres
  - Group: 353 - Soap, cleaning preparations, perfumes and toilet preparations
    - Class: 3532 - Soap and detergents, perfume and toilet preparations
      - Subclass: 35321 - Soap; organic surface-active products and preparations for use as soap; paper, wadding, felt and nonwovens, impregnated, coated or covered with soap or detergent (this PCR); and
      - Subclass: 35323 - Perfume and toilet preparations (this PCR)
      - Subclass: 35322 - Detergents and washing preparations
      -
- Division: 35 - Other chemical products; man-made fibres
  - Group: 353 - Soap, cleaning preparations, perfumes and toilet preparations
    - Class: 3532 - Soap and detergents, perfume and toilet preparations

2.2.2 GEOGRAPHICAL SCOPE

This PCR may be used globally.

[2] Some rules influencing EPD development are independent of the GPI version referred to in the PCR. For example, the latest rules on EPD verification procedures in the GPI shall be followed within 90 days of its publication. See Section 5.1 in the GPI for a description of the four categories of rules and when they shall be followed.

[3] https://unstats.un.org/unsd/classifications/Family/Detail/1074 for additional information.

2.2.3 EPD VALIDITY

An EPD becomes valid as of its version date (see Section 8.4.5 of the GPI). When an EPD is originally published, the validity period is normally five years starting from the version date or until the EPD has been de-registered from the International EPD System. Shorter validity periods are also accepted, for example if decided by the EPD owner.

For rules on when an EPD shall be updated and re-verified during its validity, see Section 6.8.1 of the GPI. For validity periods in case of updates of EPDs, see Section 6.8 of the GPI.

The version date and the period of validity shall be stated in the EPD.

Publication of a new version of the PCR or the GPI does not affect the validity of already published EPDs.

3 REVIEW AND BACKGROUND INFORMATION

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

3.1 OPEN CONSULTATION

3.1.1 VERSION 1.0

This PCR was available for open consultation from date 2015-06-23 until date 2015-09-01, 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.

3.1.2 VERSION 2.0

This PCR was available for open consultation from 2019-10-29 until 2019-12-29, 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.

3.1.3 VERSION 3.0.0

Version 1.0.0 of this PCR was available for open consultation from *date* until *date*, during which any stakeholder was able to provide comments by contacting the PCR Moderator and/or the Secretariat.

Above dates shall be given in the following format: 20YY-MM-DD.

Add information about any physical or web-based meetings held during the open consultation, if applicable.

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. The following stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and on www.environdec.com:

- *List of stakeholder names and affiliation (to be added after the open consultation).*

In case no stakeholders provided comments and agreed to be listed as contributors, the above sentence shall be adjusted accordingly ("No stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and on www.environdec.com.") and the bullet list shall be removed.

In case of multiple major revisions of the PCR (1.0, 2.0, etc.), information about each open consultation should be added as sub-sections (3.2.1, 3.2.2, etc.).

3.2 PCR REVIEW

3.2.1 VERSION 1.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. The review panel may be contacted via support@environdec.com.

	Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.
Chair of the PCR review:	Rita Schenk
Review dates:	2015-10-06 until 2015-10-29

3.2.2 VERSION 2.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. The review panel may be contacted via support@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.
Chair of the PCR review:	Hüdai Kara
Review dates:	2020-01-13 until 2020-06-07

3.2.3 VERSION 3.0.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. The review panel may be contacted via support@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.
Chair of the PCR review:	*To be added by the Secretariat*
Review dates:	*To be added by the Secretariat*

3.3 EXISTING PCRS FOR THE PRODUCT CATEGORY

As part of the development of this PCR, existing PCRs and other internationally standardised methods that could potentially act as PCRs were considered to avoid unnecessary overlaps in scope and to ensure harmonisation with established methods of relevance for the product category. The existence of such documents was checked among the following EPD programmes and international standardisation bodies:

International EPD System. www.environdec.com.

- PEP Ecopassport® program. http://www.pep-ecopassport.org/
- ASTM International. https://www.astm.org/
- EPD Norge. https://www.epd-norge.no/
- Institut Bauen und Umwelt (IBU): https://epd-online.com
- ASTM International EPD Program - USA https://www.astm.org/CERTIFICATION/EpdAndPCRs.html

▪ EPD Denmark – Danemark http://www.epddanmark.dk/site/download.html

No existing PCRs or other relevant internationally standardised methods with overlapping scope were identified.

3.4 REASONING FOR DEVELOPMENT OF PCR

This PCR was developed to enable publication of EPDs for the product category defined in Section 2.2.1 based on ISO 14025 and ISO 14040/14044 and other relevant standards to be used in different applications and target audience. The PCR enables different practitioners to generate consistent results when assessing the environmental impact of products of the same product category, and thereby it supports comparability of products within a product category.

3.5 UNDERLYING STUDIES USED FOR PCR DEVELOPMENT

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

- Commission Decision (EU) 2021/1870 of 22 October 2021 establishing the EU Ecolabel criteria for *rinse-off cosmetic products and animal care products*
- Sustainability: how the cosmetics industry is greening up. Edited by Sahota, Organic Monitor, London, UK, 2014.
- UNIFARCO S.p.A., Valutazione del ciclo di vita dei prodotti cosmetici Unifarco, Ambiente Italia S.r.l.
- Revision of EU Ecolabel Criteria for Cosmetic Products and Animal Care Products (previously Rinse-off Cosmetic Products) – Final Technical Report: Final Criteria.
- Steiling, W., Bartsch, J., Blaikie, L., Botelho, D., Germann, P., Jäckh, C., et al. (2018). *Principles for the Safety Evaluation of Cosmetic Powders. Toxicology Letters*, 297, pp. 8–18.
- CIR (Cosmetic Ingredient Review) (2024). ADMIN Inhalation: Evaluation of Inhalation Exposure for Cosmetic Powders. CIR, Washington, DC, USA.

4 LCA METHOD

This section provides rules for the LCA method used to develop an EPD for the product category as defined in Section 2.2.1. The basic rules of the LCA method are set in Annex A of the GPI, and this section only includes additions, specifications and deviations to the rules set in the GPI. Guidance and examples of applying the LCA method are also available on www.environdec.com/methodology.

4.1 MODELLING APPROACH

See Section A.1 of the GPI.

4.2 FUNCTIONAL UNIT

The functional unit shall be the quantity of products estimated as daily exposure levels for product type and its packaging. The estimated daily amount applied shall be according to most updated data from recognized organizations, for instance, Cosmetics Europe's data for some products[4] The corresponding values for the product categories included in this PCR are shown in Table 1. This table is not exhaustive. For any other types of products that are aligned with the definition of cosmetic products (See section 2.2.), the related functional unit shall be defined and documented. The functional unit shall be stated 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.

Table 1. Functional Unit Values Based on Estimated Application Amounts

Products type	Products name	unit	value
Bathing, showering	Shower gel	g/d	18.67
	Solid bar soap	g/d	5.8
Haircare	Shampoo	g/d	10.46
	Dry Shampo (non-propellant form)	g/d	2.4
	Dry Shampo (propellant-based)	g/d	4.0
	Hair styling products	g/d	4.0
	Hair conditioner	g/d	3.92
	Semi-permanent hair dyes (and lotionas)	ml / application	35
	Oxidative/permanent hair dyes	ml / application	100
Skin care	Body lotion	g/d	7.82
	Face cream	g/d	1.54
	Hand cream	g/d	2.16
	Facial oil	g/d	0.25
	Body oil	g/d	4.5
Make-up	Liquid foundation	g/d	0.51
	Lipstick / lip salve	g/d	0.057
	Make-up remover	g/d	5.00
	Eye shadow	g/d	0.02
	Mascara	g/d	0.025
	Eyeliner	g/d	0.005
Deodorant	Deodorant non-spray	g/d	1.50
	Deodorant spray	g/d	6.54
Oral hygiene	Toothpaste (adult)	g/d	2.75
	Mouthwash	g/d	21.62
Other	Essential oil	g/d	10.5

[4] Estimated daily amount levels for different cosmetic product types according to Cosmetics Europe's data elaborated by Scientific Committee on Consumer Safety, published in the document" SCCS (Scientific Committee on Consumer Safety), SCCS Notes of Guidance for the Testing of Cosmetic Ingredients and their Safety Evaluation 12th revision, 15 May 2023, corrigendum 1 on 26 October 2023, corrigendum 2 on 21 December 2023, SCCS/1647/22.

4.2.1 TECHNICAL SPECIFICATION, LIFESPAN AND REFERENCE SERVICE LIFE (RSL)

As a requirement of the GPI, the technical specification shall include sufficient information for a user of the EPD to assess the technical performance and usefulness of a product in each relevant context. The Figures below, together with the technical information provided in this section, reflect the parameters associated with the functional unit defined in Section 4.2.

Product type	Estimated daily amount applied q_x (g/d)	Relative daily amount applied[1] q_x /bw (mg/kg bw/d)	Retention factor[2] f_{ret}	Calculated daily exposure $E_{product}$ (g/d)	Calculated relative daily exposure[1] $E_{product}$ /bw (mg/kg bw/d)
Bathing, showering					
Shower gel	18.67	279.20	0.01	**0.19**	**2.79**
Hair care					
Shampoo	10.46	150.49	0.01	**0.11**	**1.51**
Hair styling products	4.00	57.4	0.10	**0.40**	**5.74**
Skin care					
Body lotion	7.82	123.2	1.00	**7.82**	**123.2**
Face cream	1.54	24.14	1.00	**1.54**	**24.14**
Hand cream	2.16	32.70	1.00	**2.16**	**32.70**
Make-up					
Liquid foundation	0.51	7.90	1.00	**0.51**	**7.90**
Lipstick, lip salve	0.057	0.90	1.00	**0.057**	**0.90**
Deodorant					
Deodorant non-spray	1.50	22.08	1.00	**1.50**	**22.08**
Deodorant spray[3]	6.54	93.7	1.00	**6.54**	**93.7**
Oral hygiene					
Toothpaste (adult)	2.75	43.29	0.05	**0.138**	**2.16**
Mouthwash	21.62	325.40	0.10	**2.16**	**32.54**

[1] The specific body weight of the persons involved in the study is used and not the default value of 60 kg.
[2] The retention factor (f_{ret}) was introduced by the SCCNFP to take into account rinsing off and dilution of finished products by application on wet skin or hair (*e.g.* shower gels, shampoos) (SCCNFP/0321/00); f_{ret} has no units.
[3] For **deodorant spray**, the exposure values were obtained by measuring the product leaving the can, thus this value includes dermal deposition and the inhaled fraction, which was not determined separately. Steiling *et al.*, 2012 have derived worst case exposure fractions for dermal exposure that can be applied to derive dermal exposure estimates (23.5 % and 11.4% for ethanol-based and non-ethanol-based sprays, are available for dermal exposure, respectively).

Figure 2 Estimated daily amount applied for some products.

Product type	Estimated daily amount applied q_x (g/d)	Relative daily amount applied[4] q_x /bw (mg/kg bw/d)	Retention factor[1] f_{ret}	Calculated daily exposure $E_{product}$ (g/d)	Calculated relative daily exposure $E_{product}$ /bw (mg/kg bw/d)
Hair care					
Hair conditioner[2]	3.92	-	0.01	**0.04**	**0.67**
Semi-permanent hair dyes (and lotions)[2]	35 ml (per application)	-	0.1	**Not calculated[3]**	-
Oxidative/permanent hair dyes[2]	100 ml (per application)	-	0.1	**Not calculated[3]**	-
Make-up					
Make-up remover[2]	5.00	-	0.10	**0.50**	**8.33**
Eye shadow[2]	0.02	-	1.00	**0.02**	**0.33**
Mascara[2]	0.025	-	1.00	**0.025**	**0.42**
Eyeliner[2]	0.005	-	1.00	**0.005**	**0.08**

[1] The retention factor (f_{ret}) was introduced by the SCCNFP to take into account rinsing off and dilution of finished products by application on wet skin or hair (*e.g.* shower gels, shampoos, ...) (SCCNFP/0321/00). Being a fraction between 0 and 1, f_{ret} has no units.
[2] Product categories not covered by Hall *et al.*, 2007, 2011.
[3] Daily exposure value not calculated due to the low frequency of application.
[4] The specific body weight of the persons involved is used and not the default value of 60 kg.

Figure 3 Estimated daily amount applied for some products (continued).

For solid bar soap, a daily use of 5.8 g per person is adopted, consistent with the reference flow reported in the EU Ecolabel Technical Background Report (European Commission JRC, 2021). This value is derived from consumer-use data provided by the Nordic Council of Ministers (2012), which reports an average dosage of 0.35 g per hand-wash event and 4 g per shower, assuming five hand-wash events and one shower per day.

For powder dry shampoo (non-propellant form), a daily use of 2.4 g per person is applied as a reference assumption, consistent with the exposure values reported in the CIR "ADMIN Inhalation" document (2024). This reference adopts the 2.4 g/day use level from Steiling et al. (2018), which represents a conservative screening-level estimate for powder cosmetic applications (e.g., loose face powder, dry shampoo).

For aerosol (propellant-based) dry shampoos, a reference use of 4 g of product per person per day is applied, consistent with the exposure assumptions used for hair-styling sprays in the SCCS Notes of Guidance, 12th Revision (see Figure 2).

For essential oil, facial oil, and body oil, the functional unit values applied in Section 4.2 are based on laboratory test results, corresponding to 10.5 g/day for essential oil, 0.25 g/day for facial oil, and 4.5 g/day for body oil.

4.3 SYSTEM BOUNDARY

The scope of this PCR and EPDs based on it is cradle-to-grave. Given the importance of the use stage, deviations from a cradle-to-grave system boundary are not allowed for the "rinse-off"[5] products that fall under the scope of this PCR. For leave-on products, cradle-to-gate EPDs may also be developed, provided that the selected system boundary complies with the requirements of the GPI (see Annex A, Section A.3).

4.3.1 LIFE-CYCLE STAGES AND INFORMATION MODULES

Because of different data quality rules and the presentation of results, the product life cycle shall be divided into the following life-cycle stages and information modules:

- Product stage, modules A1-A3:

[5] "Rinse-off" products: cosmetics included in the PCR scope (section 2.2) which are washed off or rinsed off with water, and therefore are not left on the skin or hair. On the contrary, "Leave-on" product are applied on the body, but they are not rinsed off after use.

1. A1: Raw material extraction and processing (e.g., mining, agricultural and forestry operations), production of intermediate materials and components (e.g., including transformation processes such as rolling, drawing and extrusion), processing of secondary material input (e.g., recycling processes), production of distribution and consumer packaging, etc.
2. A2: Transports to the manufacturer of the product
3. A3: Manufacturing of the product[6],

- Distribution and installation stage, modules A4-A5:

4. A4: Transport of the product to the building/installation site/user, including storage of product (e.g., warehouse and retail operations)
5. A5: Storage of the product (e.g., retail operations) and waste processing of product losses, if relevant, and intermediate packaging.

- Use stage, modules B1-B7:

6. B1: Use/application of the product (e.g., including direct emissions associated with its use)
7. B2: Maintenance of the product: not applicable
8. B3: Repair of the product: not applicable
9. B4: Replacement: not applicable
10. B5: Refurbishment: not applicable
11. B6: Energy use in use/application (e.g., for water heating)
12. B7: Water use in use/application (e.g., for diluting or washing off, if applicable)

- End-of-life stage, modules C1-C4:

13. C1: De-construction/demolition/deinstallation: not applicable
14. C2: Transport to waste processing and/or disposal
15. C3: Waste processing for reuse, recovery and/or recycling
16. C4: Disposal

In addition, consequences of recovered material/energy beyond the product cycle shall be reported in module D.

In the EPD, the environmental performance of each of the life-cycle stages and module D shall be reported separately, and in aggregated form for the life-cycle stages (modules A-C).

Section A.3.1 of the GPI outlines rules for how to assign generation of electricity and production of fuels, steam and other energy carriers used, and losses arising, in each information module.

Sections Error! Reference source not found.–Error! Reference source not found. further describe the processes to include or exclude for each life-cycle stage.

4.3.1.1 Modules A1-A3: Product stage

- Module A1:
  - Extraction and production of raw material for ingredients and the product packaging production. Main raw materials shall be characterised;
  - Generation of electricity and production of fuels used in the upstream module;
  - Production of auxiliary products used such as detergents for cleaning, etc;
  - Production of ingredients for the final product;
  - Production of main component for packaging;

[6] These are often, but not always, the processes under operational control of the EPD owner.

- Manufacturing of primary and secondary packaging;
- Transport of resources to refinement.

- Module A2:
  - Transport of the ingredients and the packaging components to the manufacturer of the final product.
- Module A3:
  - Manufacturing of the product;
  - Generation of electricity and production of fuels used in the core module;
  - Internal transportation within the factory;

Waste treatment of waste generated during manufacturing/packaging. Processes not listed here 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 Modules A4-A5: Distribution and retail stage

- Module A4:
  - Transportation from production facility to average retailer/distribution platform/user.
  - Refrigeration along the distribution chain, if applicable.
  - Waste processing of product losses occurring in transport processes in module A4.
- Module A5:
  - Storage of product, if relevant.
  - End-of-life processes of distribution's packaging (tertiary packaging)

Processes not listed here 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.

4.3.1.3 Modules B1-B7: Use stage

- Module B1:
  - Consumer or costumer use of the product (e.g., direct emissions in water)
- Module B6:
  - Consumption of energy (electric and/or thermal) during the use of the product
- Module B7:
  - Consumption of water during the use of the product

Processes not listed here 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.

4.3.1.4 Modules C1-C4: End-of-life stage

- Module C2:
  - Transport of any packaging or wasted part of the product to waste processing and/or disposal.
- Module C3:
  - Waste/recovery end/or recycling processes of any wasted part of the product after use, if relevant.
  - Waste/recovery end/or recycling processes of packaging waste.

- Module C4:
  - Disposal (e.g., incineration, composting, landfill) of any packaging or wasted part of the product.

Processes not listed here 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.

4.3.1.5 Excluded processes

See Section A.3.1.1 of the GPI.

4.3.2 OTHER BOUNDARY SETTING RULES

See Section A.3.2 of the GPI for rules on setting boundaries to nature as well as geographical and temporal boundaries. See Section A.4 of the GPI and Section 4.6 below for rules on setting boundaries to other product systems.

4.4 PROCESS FLOW DIAGRAM

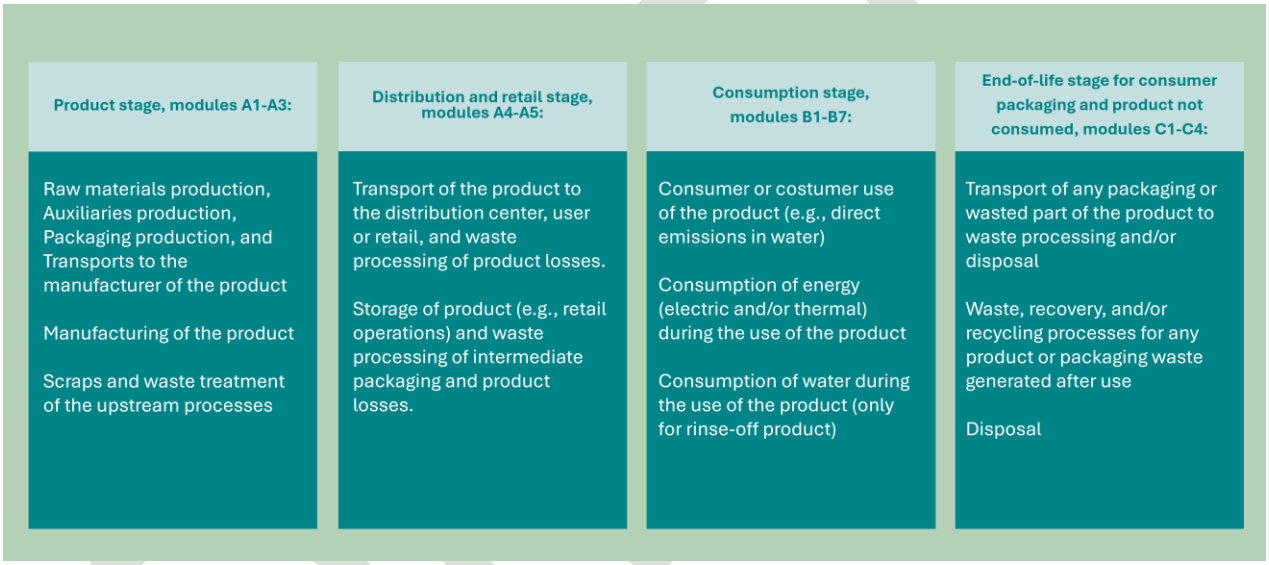

Figure 4. Process flow diagram illustrating the processes that shall be included in the product system, divided into the life-cycle stages. The illustration of processes to include may not be exhaustive.

4.5 CUT-OFF RULES

See Section A.3.3 of the GPI.

4.6 ALLOCATION RULES

See Section A.4 of the GPI.

4.6.1 ALLOCATION OF CO-PRODUCTS

See Section A.4.1 of the GPI.

4.6.2 ALLOCATION OF WASTE

See Section A.4.2 of the GPI.

4.7 DATA AND DATA QUALITY RULES

See Section A.5 of the GPI.

See Section 4.8 for further rules related to data and data quality per life-cycle stage and module D.

4.7.1 DATA CATEGORIES

See Section A.5.1 of the GPI.

4.7.2 DATA QUALITY REQUIREMENTS FOR PRIMARY DATA

See Section A.5.2 of the GPI.

4.7.3 DATA QUALITY REQUIREMENTS FOR REPRESENTATIVE SECONDARY DATA

See Section A.5.3 of the GPI.

4.7.4 DATA QUALITY ASSESSMENT AND DECLARATION

See Section A.5.4 of the GPI.

4.7.5 EXAMPLES OF DATABASES FOR SECONDARY DATA

This PCR does not list any examples of databases to be used for secondary data.

4.8 OTHER LCA RULES

See Section A.6 of the GPI.

For specific LCA rules per life-cycle stage, see Section 4.9.

If data for chemicals is lacking, stoichiometry may be used to model chemical processes.

4.8.1 MASS BALANCE

See Section A.6.1 of the GPI.

4.8.2 ELECTRICITY MODELLING

See Section A.6.2 of the GPI.

4.8.3 BIOGAS MODELLING

See Section A.6.3 of the GPI.

4.9 SPECIFIC RULES PER LIFE-CYCLE STAGE AND MODULE D

See Section A.7 of the GPI.

Below are further data quality requirements and other LCA rules per life-cycle stage, and for module D, of relevance for the product category.

4.9.1 PRODUCT STAGE, A1-A3

The following requirements apply to the product stage:

- Data referring to processes and activities product stage in a supply chain over which an organization 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 primary data, as well as infrastructure, 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.
- In case primary data is lacking, representative secondary data may be used. If this is also lacking, proxy data shall be used. This shall be justified in the LCA report.
- For the electricity used in the product stage, electricity generation impacts shall be accounted for in this priority when primary data are used in the product stage:

    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[7].
    2. National residual electricity mix, or residual electricity mix on market.
    3. National electricity production mix or electricity mix on market.

    The mix of electricity used shall be documented in the EPD.

    - Primary data shall be used for the assembly of the product and for the manufacture of main parts as well as for on-site generation of steam, heat, electricity, etc., where relevant. Primary data are gathered from the actual manufacturing plant(s) where 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 from a contracted supplier being able to provide data for the actual delivered services, transportation taking place based on the actual fuel consumption and related emissions, etc.
    - Waste treatment processes of manufacturing waste should be based on specific data, if available.

4.9.2 DISTRIBUTIONSTAGE, MODULES A4-A5

The following requirements apply to the distribution stage: The transport of the product to the customer shall be described in the reference PCR, which should reflect the actual situation to the best extent possible. The following priority should be used:

1. Actual transportation distances and types.

2. Calculated as the average distance of a product of that product type transported by different means of transport modes.

3. Calculated as a fixed long transport, such as 1 000 km transport by lorry or 10 000 km by airplane, according to product type.

4.9.3 USE STAGE, MODULES B1-B7

The following requirements apply to the use stage:

- Data for the use stage is usually based on scenarios, but specific data should be used when available and relevant. The use stage shall be included only for rinse-off products. Results of the LCA with and without use stage shall be declared separately. - If specific data is not available, the following assumptions shall be made. For showering

[7] 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.

products, 100 liters of water use (20 liters/minutes for a shower of 5 minutes); for bathing products, 180 liters of water use; for bar soap, 0.5 liters of water use; 40% of the water used for showering / bath products shall be considered to be heated up to 40°C; 100% of the water used for removing face and hand cleansers shall be considered to be heated up to 30°C. Estimations for other products (e.g. toothpaste) shall be based on typical water and energy consumption of the use stages of such products; the hypotheses used for these estimation shall be declared in the EPD.

- The inclusion of other data is optional and should be based on documented tests, verified studies in conjunction with average or typical product use, or recommendations concerning suitable product use. Whenever applicable, test methods shall be internationally recognized.

- Data on pollutant emissions from the use stage should be based on documented tests, verified studies in conjunction with average or typical product use, or recommendations concerning suitable product use. Whenever applicable, test methods shall be internationally recognized.

- The use of electricity in the region/country where the product is sold and used (as specified in the geographical scope of the EPD) shall be accounted for in the following priority:

  1. National residual electricity mix or residual mix on the market

  2. National electricity production mix or electricity mix on the market

- The mix of electricity used in the use stage should be based on the weighted average of electricity mix of the major export markets of the product (more than 50% at least); it shall be documented in the EPD, where relevant.

4.9.4 END-OF-LIFE STAGE, MODULES C1-C4

This PCR does not provide any additions to the rules and guidance in the GPI on the modelling of the end-of-life stage

4.9.5 CONSEQUENCES FOR RECOVERED MATERIAL/ENERGY BEYOND THE PRODUCT LIFE CYCLE (MODULE D)

This PCR does not provide any additions to the rules and guidance in the GPI on the modelling of module D.

4.10 ENVIRONMENTAL PERFORMANCE INDICATORS

See Section A.8 of the GPI.

4.11 SPECIFIC RULES PER EPD TYPE

4.11.1 MULTIPLE PRODUCTS FROM THE SAME COMPANY

See Section A.9.1 of the GPI.

4.11.2 SECTOR EPD

See Section A.9.2 of the GPI.

4.11.3 EPD OWNED BY A TRADER

See Section A.9.3 of the GPI.

4.11.4 EPD OF PRODUCT NOT YET ON THE MARKET

See Section A.9.4 of the GPI.

4.11.5 EPD OF PRODUCT RECENTLY ON THE MARKET

See Section A.9.5 of the GPI.

5 CONTENT OF LCA REPORT

Data for verification shall be presented in the form of an LCA report – a systematic and comprehensive summary of the project documentation that supports the verification of an EPD. The LCA report is not part of the public communication.

See Section 8.3.1 of the GPI for rules on the content of the LCA report.

Note that there may be rules on the content of the LCA report elsewhere in the GPI or in this PCR.

6 CONTENT AND FORMAT OF EPD

See Section 7 of the GPI.

6.1 EPD LANGUAGES

See Section 7.1 of the GPI.

6.2 UNITS AND QUANTITIES

See Section 7.2 of the GPI.

6.3 USE OF IMAGES IN EPD

See Section 7.3 of the GPI.

6.4 SECTIONS OF THE EPD

See Section 7.4 of the GPI.

6.4.1 COVER PAGE

See Section 7.4.1 of the GPI.

6.4.2 GENERAL INFORMATION

See Section 7.4.2 of the GPI.

6.4.3 INFORMATION ABOUT EPD OWNER

See Section 7.4.3 of the GPI.

6.4.4 PRODUCT INFORMATION

See Section 7.4.4 of the GPI.

6.4.5 CONTENT DECLARATION

See Section 7.4.5 of the GPI.

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)[8], 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)

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

▪ 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

6.4.6 LCA INFORMATION

See Section 7.4.6 of the GPI.

6.4.7 ENVIRONMENTAL PERFORMANCE

See Section 7.4.7 of the GPI.

The EPD shall declare the environmental performance indicators listed or referred to in Section 4.10, per declared unit, per life-cycle stage and module D.

6.4.8 ADDITIONAL ENVIRONMENTAL INFORMATION

See Section 7.4.8 of the GPI.

6.4.9 ADDITIONAL SOCIAL AND ECONOMIC INFORMATION

See Section 7.4.9 of the GPI.

6.4.10 INFORMATION RELATED TO SECTOR EPDS

See Section 7.4.10 of the GPI.

6.4.11 VERSION HISTORY

See Section 7.4.11 of the GPI.

6.4.12 ABBREVIATIONS

See Section 7.4.12 of the GPI.

6.4.13 REFERENCES

See Section 7.4.13 of the GPI.

7 LIST OF ABBREVIATIONS

CPC	Central product classification
EPD	Environmental product declaration
g	gram
GHS	Globally Harmonized System
GPI	General Programme Instructions
ISO	International Organization for Standardization
kg	kilogram
LCA	Life cycle assessment
PCR	Product category rules
RSL	Reference service life
UN	United Nations

8 REFERENCES

CEN (2021) EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products.

EPD International (2024) General Programme Instructions for the International EPD System. Version 5.0.0, dated 2024-06-19. Available on www.environdec.com.

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, Environmental management – Life cycle assessment – Requirements and guidelines.

ISO (2015a) ISO 14001:2015, Environmental management systems – Requirements with guidance for use.

ISO (2015b) ISO 9001:2015, Quality management systems – Requirements.

ISO (2017) ISO 21930:2017, Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services.

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

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European Commission (2022). *Scientific Committee on Consumer Safety (SCCS) Notes of Guidance for the Testing of Cosmetic Ingredients and Their Safety Evaluation – 12th Revision.* Publications Office of the European Union, Luxembourg.

Faraca, G., Vidal-Abarca Garrido, C., Kaps, R. B., Fernández, A., & Wolf, O. (2021). *Revision of EU Ecolabel Criteria for Cosmetic Products and Animal Care Products (previously Rinse-off Cosmetic Products) – Final Technical Report: Final Criteria*, Publications Office of the European Union, Luxembourg; ISBN 978-92-76-37218-9,

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9 VERSION HISTORY OF PCR

VERSION 1.0.0, 2015-11-20

Original version published

VERSION 2.0, 2020-10-27

Update to comply with the latest General Programme Instructions and to prolong validity of PCR.

VERSION 2.0.1, 2024-04-09

Updated with changed PCR Moderators.

VERSION 2.0.2, 2025-01-22

Updated with extended validity with one year (until 2025-10-27) due the initiation of an updating process that will prolong the validity with another four years.

VERSION 3.0.0, 20YY-MM-DD

- Alignment of the PCR to a new version of the GPI (version 5.0.1).
- General methodological updates and editorial revisions have been made to improve consistency.
- The functional units have been reviewed and updated, and new product types have been added.

Other descriptions of the PCR version, to be added after open consultation

COSMETICS (SOAP, PERFUME AND TIOLET PREPARATIONS)

PRODUCT CATEGORY CLASSIFICATION: UN CPC 35321, 35323