BUTTONS AND FASTENERS FOR FASHION PRODUCTS

PRODUCT CATEGORY CLASSIFICATION: UN CPC 38923

PCR REGISTRATION NUMBER TO BE ADDED BY THE SECRETARIAT
VERSION NUMBER TO BE ADDED BY THE SECRETARIAT

VALID UNTIL 20XX-YY-ZZ *(TO BE ADDED BY THE SECRETARIAT)*

NOTE: THIS DOCUMENT IS A PCR TEMPLATE TO BE USED IN PCR DEVELOPMENT. IT IS NOT A PCR.

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.

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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, 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.

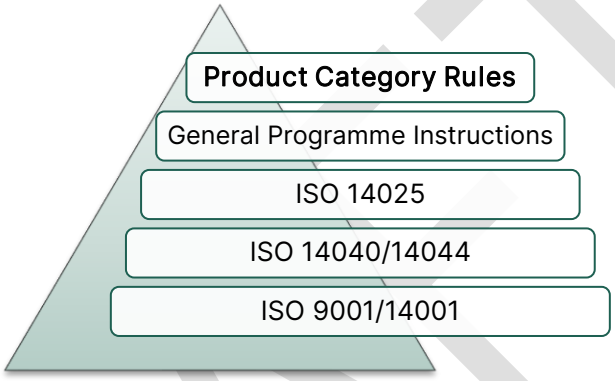

Figure 1. The hierarchy between PCRs, standards, and other documents.

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.

[1] Termed type III environmental declarations in ISO 14025.

2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Buttons and fasteners for fashion products
Registration number and version:	*To be added by the Secretariat*
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:	Paolo Tempesti, Ph.D., LBS Group, tempesti@kairosconsulenza.com
PCR Committee:	Bottonificio Lenzi 1955 S.r.l. Consorzio Physis S.r.l. S.B. World Trade Impex Ltd. Spin-PET S.r.l. CNA Bologna S.c.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 5.0.1, 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 *buttons and fasteners for fashion products* and the declaration of this performance by an EPD. The product category corresponds to CPA code 32.99.23 and UN CPC 38923 Press-fasteners, snap-fasteners, press-studs and parts thereof; buttons, slide fasteners.

The products included in the scope are buttons, slide fastners, press-fastners, snap-fastners, press-studs, and parts thereof made of:

- metal (such as brass, steel and others);
- plastics (such as galalith, polyesther, ABS, and others);
- natural materials (such as wood, corozo, horn, coconut, shell and others).

This product group excludes:

- Press-fasteners, snap-fasteners, press-studs and parts thereof; buttons, slide fasteners not intended to be used in clothing, leatherware, footwear or other fashion products.

The UN CPC classification hierarchy is represented as follow:

UN CPC CODE	Description
3	Other transportable goods, except metal products, machinery and equipment
38	Furniture, other transportable goods n.e.c.
389	Other manufactured articles n.e.c.
3982	Umbrellas, sun-umbrellas, walking-sticks, seat-sticks, whips, riding-crops, buttons, press-fasteners, snap-fasteners, press-studs, slide fasteners and parts thereof; button blanks
38923	Press-fasteners, snap-fasteners, press-studs and parts thereof; buttons, slide fasteners

Please, check https://unstats.un.org/unsd/classifications/Family/Detail/1074 for additional information.

[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.

2.2.2 GEOGRAPHICAL SCOPE

This PCR may be used globally.

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 1.0.0

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 1.0.0

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.
- EPD Italy. https://www.epditaly.it/

- ASTM International. https://www.astm.org/
- NSF International. www.nsf.org

No existing PCRs or other relevant internationally standardized 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. 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:

- Glew et al., 2012, How do end of life scenarios influence the environmental impact of product supply chains? Comparing biomaterial and petrochemical products, J. Clean. Prod., 29–30 (2012), pp. 122-131.
- Moazzem et al., 2021, Assessing environmental impact reduction opportunities through life cycle assessment of apparel products, Sustainable Production and Consumption, 28 (2021), pp. 663-674.
- Moazzem et al., 2021, Environmental impact of discarded apparel landfilling and recycling, Resour. Conserv. Recycl., 166 (2021).
- Sari et al., 2023, Assessing Environmental Impact in Brass Component Companies through Life Cycle Assessment: A Case Study of Brass Crafts SMEs, IOP Conference Series: Earth and Environmental Science, December 2023.
- Fùquene-Retamoso et al., 2010, Environmental Impact Assessment of Brass-Threaded Unions through Product Life Cycle Assessment (LCA), Ingeniería y Universidad, July 2010.
- Kai, 2016, Life Cycle Assessment (LCA) of Surface Treatment Products, Corrosion Control and Surface Finishing, 2016.
- LCA on galalith, horn, corozo and polyester buttons. Supporting study performed in parallel to the PCR development.

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.

As a reminder, note that the LCA modelling approach of the International EPD System is attributional LCA (in contrast to consequential LCA), meaning that specific or average data shall be used (i.e., not marginal data), and that allocation problems shall be solved via allocation and not by sub-dividing the unit process into two or more subprocesses, (also called system expansion beyond the system boundaries or "substitution". Credits for avoided environmental impact shall not be used to solve allocation problems).

4.2 DECLARED/FUNCTIONAL UNIT

This PCR refers to a declared unit instead of a functional unit as all functional and qualitative aspects are not possible to capture in the same unit due to the various possible downstream applications. These aspects should be taken into consideration when comparing EPDs based on this PCR. The declared unit shall be stated in the EPD. The environmental impact shall be given per declared unit. A description of the function of the product should be included in the EPD, if relevant.

The declared unit is defined as 1 kg of buttons/press-fasteners/press-studs/snap-fasteners/slide fasteners and parts thereof including primary (item) packaging, secondary (delivery) packaging and waste collection, transport, processing and disposal.

4.2.1 REFERENCE SERVICE LIFE (RSL)

This PCR refers to a declared unit. Therefore, it is not relevant to define an RSL.

4.2.2 PRODUCT LIFESPAN

The product lifespan for these categories of products is 5 years.

The product lifespan shall be declared in the product information section of the EPD (see Section 6.4.4).

For the definition on the term "product lifespan", see Section A.2.1 of the GPI.

4.2.3 TECHNICAL SPECIFICATION

The lifespan of the product is assumed as the time the product maintains its technical function. Such aspects are accounted for in the following standards:

- For buttons: BS 4162:1983 "Methods of test for buttons" standard, par.4.5.2 – Impact;
- For snap-fasteners/press-fasteners/press-studs: ASTM D4846-96(2021) "Standard Test Method for Resistance to Unsnapping of Snap Fasteners;
- For slide fasteners: EN 16732:2015 "Slide Fasteners (zips) – Specification" Annex F: Test for Resistance to Reciprocation.

Depending on the product, i.e., buttons or slide fasteners, the tests included in such standards are mandatory to be performed and shall be included in EPDs based on this PCR.

4.3 SYSTEM BOUNDARY

The scope of this PCR and EPDs based on it is *cradle-to-gate plus end-of-life*. Buttons, snap-fasteners and slide-fasteners use and end-of-life phases are generally connected to those of clothing, leatherware and footwear products, which have

several end-users' typologies. The end-of-life phase of the product will be mandatory to include. It should be stated on which basis the assumptions for the downstream processes are made, see chapter 4.3.1.3.

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:
  - 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.
  - A2: Transports to the manufacturer of the product
  - A3: Manufacturing of the product[3]
- Distribution stage, module A4:
  - A4: Transport of the product to the user site, including storage of product (e.g., warehouse and retail operations);
- End-of-life stage, modules C1-C4:
  - C1: Product removal/separation from clothing/leatherware/footwear
  - C2: Transport to waste processing and/or disposal
  - C3: Waste processing for reuse, recovery and/or recycling
  - C4: Disposal

In the EPD, the environmental performance of each of the life-cycle stages 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 Fel! Hittar inte referenskälla.–Fel! Hittar inte referenskälla. further describe the processes to include or exclude for each life-cycle stage.

4.3.1.1 Modules A1-A3: Product stage

- Module A1:
  - Process A1.1: Raw materials extraction and processing (e.g., metals extraction, animal breeding, plant/trees cultivation, etc.);
  - Process A1.2: Manufacturing of intermediate materials and components (e.g., alloy casting, slaughterhouse processes for animal-based materials, processing of vegetable-based materials, etc.);
  - Process A1.3: Processing of secondary material input (e.g., recycling of polyesters);
  - Process A1.4: Manufacturing of primary and secondary packaging.
- Module A2:
  - Process A2.1: Transport of intermediate materials and components to production site;
  - Process A2.2: Transport of distribution and consumer packaging to production site.
- Module A3:

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

- Process A3.1: Preparation of the final products (e.g., cutting and drilling for buttons, hot-stamping and die-casting for press-fasteners and slide fasteners, etc.);
- Process A3.2: Finishing operations (e.g., tumbling, varnishing, plating, etc.);
- Process A3.3: Waste treatment of waste generated during manufacturing.

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 Module A4: Distribution stage

- Module A4:
  - Process A4.1: Transport of the product to the user site, including storage of product (e.g., warehouse and retail operations).
  - Process A4.2: Waste treatment of distribution 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 C1-C4: End-of-life stage

- Module C1:
  - Process C1.1: Removal/separation of buttons/snap-fasteners/slide fasteners from clothing/leatherware/footwear products.
- Module C2:
  - Process C2.1: Transport to waste processing and/or disposal.
- Module C3:
  - Process C3.1: Waste processing for reuse, recovery and/or recycling
- Module C4:
  - Process C4.1: Disposal operations

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 Excluded processes

See Section A.3.1.1 of the GPI.

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.

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

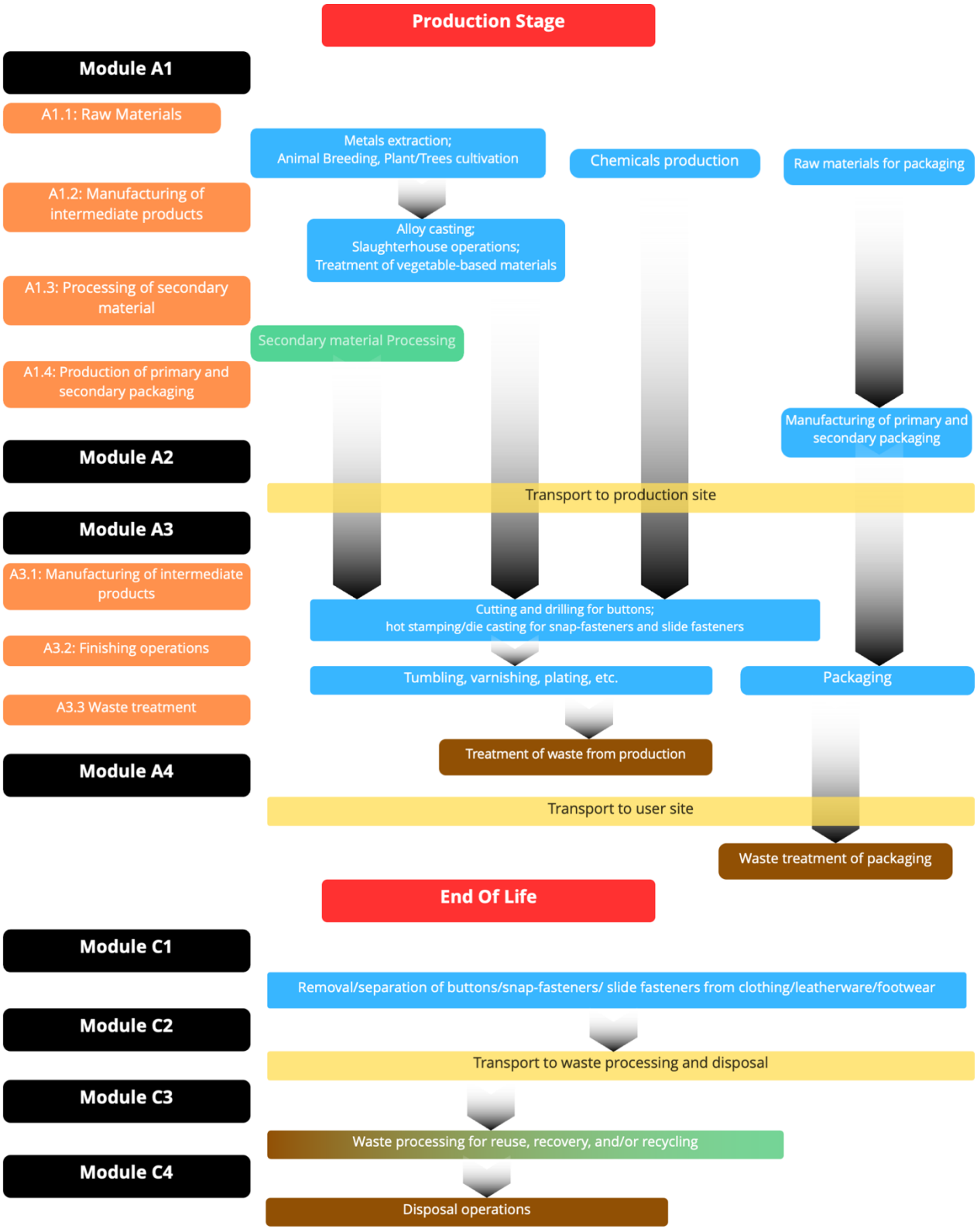

Figure 2. Process flow diagram illustrating the processes that shall be included in the product system, divided into the life-cycle stages. The illustration of processes to include may not be exhaustive.

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.

For key processes in the product system, Table 1Fel! Hittar inte referenskälla. provides specifications of the allocation method to use.

The use of allocation factors deviating from the default ones provided in the present document is strongly not suggested, since it greatly influences the results of the study and shall be justified.. These assumptions and data shall be made available in the EPD or, in the LCA report.

Table 1. Allocation method for key processes in the product system.

Process	Main product and co-products	Allocation method
Casein for galalith production from milk	Mass allocation	Subdivision shall be used for processes that can be directly attributed to certain outputs. When the processes cannot be subdivided, the remaining upstream burden shall be allocated to milk and rendering outputs using the mass allocation method. The default value that shall be used for mass allocation for casein is 2.8%. No change of allocation factors is allowed.
Water Buffalo Horn for button production from animal at slaughterhouse	Economic allocation	Subdivision shall be used for processes that can be directly attributed to certain outputs. When the processes cannot be subdivided, the remaining upstream burden shall be allocated to slaughterhouse and rendering outputs using the economic allocation method. The default value that shall be used for economic allocation for horn is 3.2%. No change of allocation factors is allowed.

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

Table 2 lists examples of databases and datasets to be used for secondary data. Note that a data quality assessment shall be performed also for data listed in the table, and that other data that fulfil the data quality requirements may also be used.

Table 2. Examples of databases and datasets to use for secondary data.

Process	Geographical scope	Dataset	Database
Metal	Global	Brass {RoW} | brass production	Ecoinvent
Horn from bovine production	Global	Beef cattle for slaughter, at beef farm, PEF compliant/ Economic	Agrifootprint
Polyester	Europe	Polyester resin {EU+EFTA+UK} | esterification and polymerization, from propylene glycol, phthalic anhydride and styrene | production mix, at plant | 1.22- 1.38 g/cm3	Environmental Footprint
Vegetable ivory (corozo) from palm oil cultivation	Global	Palm kernels {MY} | from crude palm oil production | production mix	Environmental Footprint
Chemicals	Global		Ecoinvent
Packaging	Global		Ecoinvent
Transports	Global		Ecoinvent

4.8 OTHER LCA RULES

See Section A.6 of the GPI.

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

The use of different values for allocation (Tables of cap. 4.6) deviating from the default ones provided in the present document is strongly not suggested, since it greatly influences the results of the study and shall be justified. The related assumptions and data shall be verified by a third party. These assumptions and data and the supporting verification opinion shall be made available in the EPD or, in the case of CFP (Carbon Footprint of Products), in the supporting document.

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

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

4.9.2 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.

4.10 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.

See Section 4.6.1 of the GPI.

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.

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.

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
GPI	General Programme Instructions
ISO	International Organization for Standardization
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 5.0.1, 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.

European Commission – Joint Research Centre – Institute for Environment and Sustainability (2010). International Reference Life Cycle Data System (ILCD) Handbook - General guide for Life Cycle Assessment - Detailed guidance. doi:10.2788/38479.

Glew et al., 2012, How do end of life scenarios influence the environmental impact of product supply chains? Comparing biomaterial and petrochemical products, J. Clean. Prod., 29–30 (2012), pp. 122-131.

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9 VERSION HISTORY OF PCR

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