

GRANULATED AND MICRONIZED STONE FROM QUARRY PRODUCT CATEGORY CLASSIFICATION: UN CPC 152, 153, 161, 162, 163, 376, 379 (SUBSETS)

PCR 2020:01 DRAFT VERSION 2.0.0. DO NOT USE OR CITE.

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

DRAFT VERSION FOR OPEN CONSULTATION



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INTRODUCTION TO OPEN CONSULTATION

This draft PCR document is available for open consultation from 2025-02-11 until 2025-04-10. 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
 - Alignment with PCRs available in other programmes for type III environmental declarations, industry-specific LCA guidelines or similar.
- Scope of PCR
 - Product category definition and description
 - Classification of product category using CPC codes
- Goal and scope, life cycle inventory and life cycle impact assessment
 - Declared unit
 - System boundary
 - Allocation rules
 - Data quality requirements
 - Recommended databases for generic data
 - 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 <u>www.environdec.com</u> 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 <u>support@environdec.com</u>.



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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 <u>www.environdec.com</u>, 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.

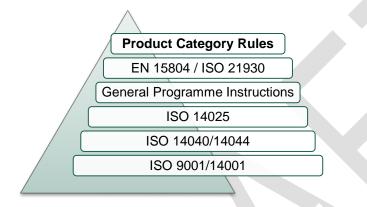


Figure 1. The hierarchy between PCRs, standards, and other documents. EN 15804 and ISO 21930 are normative standards for construction products only.

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.



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2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Granulated and micronized stone from quarry				
Registration number and version:	2020:01, version 2.0.0				
Programme:	The International EPD System				
Programme operator:	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden. Website: <u>www.environdec.com</u>				
PCR Moderator:	E-mail: <u>support@environdec.com</u> Elena Neri, Indaco2 SRL, <u>elena.neri@indaco2.it</u>				
PCR Committee:	Indaco2 Srl, Nuovasima srl, Gola Della Rossa Mineraria Spa, Emy Fuffa				
Publication date:	<i>To be added by the Secretariat</i> See Section 9 for a version history of the PCR.				
Valid until:	<i>To be added by the Secretariat</i> The validity may change. See <u>www.environdec.com</u> 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 <u>www.environdec.com</u> 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.				



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Standards and documents conformance:	General Programme Instructions of the International EPD System, version 5.0.0, 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 <u>www.environdec.com</u> . 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 granulated and micronized stone from quarry and the declaration of this performance by an EPD. The product category corresponds to a subset of UN CPC classes 152, 153, 161, 162, 163, 376 and 379.

The granulated or micronized stone is intended as the grinded or pulverized stone from quarry, which granulometry is lower than 2 mm. The micronized stone from quarry is an ultra-fine powder, obtained from rock grinding, it is characterized by a selected granulometry lower than 200 µm. It is used as additive in zootechnic, agri-food, pharmaceutic, cosmetic, wastewater purification, painting and building sectors, depending on the characteristics and chemical composition of the stone of origin. For example, micronized limestone is mainly used as calcium carbonate additive in agriculture (e.g. fertilizer or chemical for organic management) and feeding stuffs, but it can be used also in pharmaceutic sector. The PCR covers also stone and sand that naturally has granulometry lower than 2 mm, without being subject to grinding. The products in the scope of the PCR do not in general fall under EN 15804, as the products are not defined as construction products themselves. Specific products may however fall under the definition of construction products. In such cases this PCR shall not be used, but PCR 2019:14 Construction products available on www.environdec.com.

The classification in the UN CPC system is a subset of classes 152, 153, 161, 162, 163, 376, 379:

- Division <u>15</u> "Stone, sand and clay"
 - Group <u>152</u> "Gypsum; anhydrite; limestone flux; limestone and other calcareous stone, of a kind used for the manufacture of lime or cement"
 - Group 153 " Sands, pebbles, gravel, broken or crushed stone, natural bitumen and asphalt"
- Division <u>16</u> "Other minerals"
 - Group <u>161</u> "Chemical and fertilizer minerals"
 - Group <u>162</u> "Salt and pure sodium chloride; sea water"
 - Group 163 "Precious and semi-precious stones; pumice stone; emery; natural abrasives; other minerals"
 - Division 37 "Glass and glass products and other non-metallic products n.e.c."
 - Group <u>376</u> "Monumental or building stone and articles thereof"
 - Group <u>379</u> "Other non-metallic mineral products n.e.c."

This PCR is not addressed to other micronized materials that do not derive from natural stones (e.g. plastics, chemicals, any material obtained by plants, lignocellulosic materials, aggregated composed by different materials) or materials obtained by natural stones characterized by a granulometry higher than 2 mm.

More information is available on https://unstats.un.org/unsd/classifications/Family/Detail/1074.

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.



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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.



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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 2019-06-18 until 2019-08-18, during which any stakeholder was able to provide comments by contacting the PCR Moderator and/or the Secretariat.

A total of 46 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 in the PCR and on www.environdec.com.

3.1.2 VERSION 2.0.0

This PCR is available for open consultation from 2025-02-11 until 2025-04-10, during which any stakeholder is able to provide comments by contacting the PCR Moderator and/or the Secretariat.

A total of XX 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 <u>www.environdec.com</u>:

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

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 <u>www.environdec.com</u> . The review panel may be contacted via <u>support@environdec.com</u> . 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:	Maurizio Fieschi			
Review dates:	2019-09-19 until 2019-12-19			

3.2.2 VERSION 2.0.0

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



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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
- IBU Institut Bauen und Umwelt e.V.
- EPD Norway
- EPD Italy
- JEMAI EcoLeaf
- KEITI
- UL Environment
- ASTM International EPD Program
- SM Transparency Report Programe
- Carbon Leadership Forum PCRs

Table 1 lists the identified PCRs and other standardised methods.

Table 1. Existing PCRs and other internationally standardised methods that were considered to avoid overlap in scope and to ensure harmonisation with established methods.

Name of PCR/standard, incl. registration number	Programme/ standardisati on body	Version number/date of publication	Scope
PCR 2016:03 Preparations used in animal feeding for food- producing animals	International EPD System	Version 2.0, published 2021- 09-10	Group: 233 - Preparations used in animal feeding; lucerne (alfalfa) meal and pellets; Class: 2331 - Preparations used in animal feeding; Class: 2332 - Lucerne (alfalfa) meal and pellets
PCR 2010:20 Mineral or chemical fertilizers	The International EPD® System	Version 3.0.3, published 2024- 01-06	Group: 346 - Fertilizers and pesticides; Class 3461 - Mineral or chemical fertilizers, nitrogenous; Class 3462 - Mineral or chemical fertilizers, phosphatic; Class 3463 - Mineral or chemical fertilizers, potassic; Class 3464 - Mineral or chemical fertilizers containing at least two nutrients of nitrogen, phosphate and potash; Class 3465 - Other fertilizers.
PCR 2019:14 Construction products (EN 15804+A2)	The International EPD® System	Version 1.3.4, published 2024- 04-30	Construction products
c-PCR-001 Cement and building lime (EN 16908)	The International EPD® System	Version 2024- 04-30	Group: 374 - Plaster, lime and cement



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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.

The existing PCRs look inadequate to deal with granulated or micronized stone. In particular, the existing PCRs refer to products that already include the granulated or micronized stone inside them (e.g. animal feeding, fertilizers), as raw material in the upstream phase. This PCR is focused on the production processes to make granulated or micronized stone available for different uses (that mainly depends on chemical composition of the basic stone). This PCR is relevant not only for EPDs of this specific product, but also as a system expansion for all products that contain a percentage of granulated or micronized stone (i.e. as a detailed focus concerning the raw material extraction in the upstream).

Furthermore, an increasing interest of quarrying industries in environmental implications of their activities emphasizes the need to develop reference guideline to perform LCA in this sector.

The first version of 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.

The PCR was updated to GPI v.5 and enlarged in the scope (i.e., added more UN CPC codes).

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 based on the studies carried out by Neri and Fuffa (2019) concerning the "Life Cycle Assessment of micronized limestone", Neri and Esposito (2022 a, 2022 b, 2023) about the Life Cycle Assessment of micronized basalt and other natural stone. Literature is lacking of underlying studies for granulated or micronized stones as specific product. Whilst, several studies exist for quarrying activity (e.g. Bianco et al., 2019; Agwa-Ejon et al., 2018; Capitano et al., 2014, 2018; Mendoza et al., 2014; Cardu et al., 2013; Careddu et al., 2011; Traverso et al., 2010; Liguori et al., 2008; University of Tennessee, 2008).



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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 DECLARED/FUNCTIONAL UNIT

EPDs based on this PCR shall use a declared unit (DU). The declared unit shall be 1000 kg (i.e. 1 t) of granulated or micronized stone and its packaging, if applicable. The 1000 kg refers to the net weight of granulated or micronized stone and does not include the packaging weight.

The reference flow in the Life Cycle Assessment shall be defined at the processing/blending company gate, at the shelf or the retailer or at the marketplace.

This PCR uses a declared unit instead of a functional unit, independent to the functional and qualitative aspect of the product. When comparing EPDs based on this PCR it should be taken into consideration.

The declared unit shall be stated in the EPD. The environmental performance results shall be given per declared unit. A description of the function of the product should be included in the EPD, if relevant.

4.2.1 TECHNICAL SPECIFICATION AND LIFESPAN

Not applicable for this product category.

4.3 SYSTEM BOUNDARY

The scope of this PCR and EPDs based on it is *cradle-to-gate* (A1-A3), optionally plus additional modules. The EPD may be limited to A1-A3.

The optional modules may be one or more selected from A4–A5, B, C, D.

All environmentally relevant processes from "cradle to gate" should be included, so that at minimum 95% of the total energy use, mass of product content, and environmental impact is accounted for (see Section 4.5).

For more information on the setting of system boundaries, see Section A.3 of the GPI.

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 (mandatory for this product category):
 - A1: production of raw material, energy resources consumed in the module, packaging, etc.
 - A2: External transportation to the core processes
 - A3: Manufacturing of the product³
- Distribution and installation stage, modules A4-A5 (optional for this product category):

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

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- A4: Transportation from preparation to an average processing/blending company gate, or to the shelf, retailer or to the marketplace
- A5: End-of-life processes of packaging waste. Other processes for installation are not relevant for this product category.
- Use stage, modules B1-B7 (optional for this product category):
 - For more information see Section A.3.1 of the GPI
- End-of-life stage, modules C1-C4 (optional for this product category):
 - For more information see Section A.3.1 of the GPI

In addition, consequences of recovered material/energy beyond the product cycle shall be reported in module D (optional for this product category).

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 4.3.1.1 to 4.3.1.5 further describe the processes to include or exclude for each life-cycle stage.

4.3.1.1 Modules A1-A3: Product stage (mandatory for this product category)

- Module A1:
 - Production of raw materials
 - Production of auxiliary products used such as detergents for cleaning, etc. and maintenance (e.g. of machineries)
 - Production of chemicals (e.g. that constitute the explosives)
 - Manufacturing of primary and secondary packaging
 - Production, distribution and use of electricity and fuels consumed in the module
- Module A2:
 - External transportation to the core processes
- Module A3:
 - Production processes (e.g. Stone extraction; Grinding / wet cutting / washing; Series of milling and sifting; Drying; Packaging, if applicable)
 - Storage and material handling
 - Production, distribution and use of electricity and fuels consumed in the module
 - Waste treatment of waste generated during manufacturing

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

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.

If the primary stone extraction is not carried out by the same company that mills the product in granulated or micronized stone, the quarrying activity shall be included in the module A1. For example, if a company purchase stone by suppliers,

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mining and/or crushing and handling process in quarry shall be included in module A1, and transportation of the stone from quarry to company site shall be included in module A2.

4.3.1.2 Modules A4-A5: Distribution and installation stage

- Module A4:
 - Transportation from preparation to an average processing/blending company gate, or to the shelf, retailer or to the marketplace
- Module A5:
 - End-of-life processes of packaging waste

Other processes of installation are not relevant for this product category.

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

For more information on the setting of system boundaries, see Section A.3.1 of the GPI.

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

For more information on the setting of system boundaries, see Section A.3.1 of the GPI.

4.3.1.5 Excluded processes

See Section A.3.1.1 of the GPI.

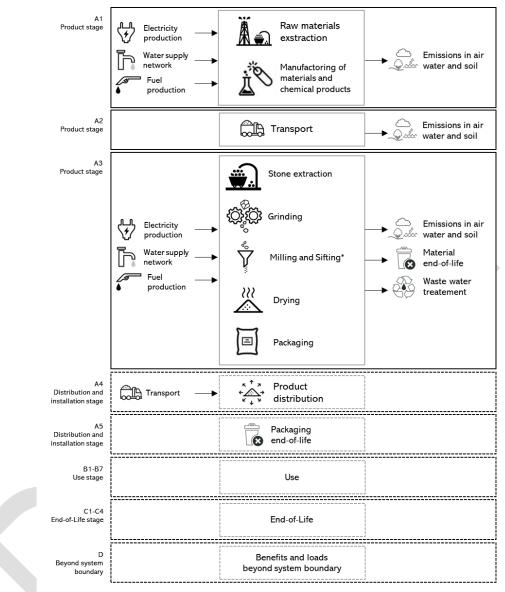
4.3.2 OTHER BOUNDARY SETTING RULES

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.



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4.4 PROCESS FLOW DIAGRAM



*It includes series of different milling and sifting processes until the size of 2 mm is obtained ------ Indicates optional processes

Figure 2. Process flow diagram illustrating the processes that shall be included in the product system, divided into the lifecycle stages. The illustration of processes to include may not be exhaustive. If the primary stone extraction is not carried out by the same company that mills the product in granulated or micronized stone, the quarrying activity should be included in the module A1.

4.5 CUT-OFF RULES

See Section A.3.3 of the GPI.



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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

No specific databases are recommended for generic data. All commercial or publicly available databases that meet the data quality requirements maybe used. The specifications and the version of the database(s) used shall be reported in the EPD.

4.8 OTHER LCA RULES

See Section A.6 of the GPI.

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

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.

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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

See section A.7.1 of the GPI and the following specific descriptions related to this PCR.

The following requirements apply to the product stage in addition to section A.7.1 of the GPI.

A1) Raw materials extraction and processing:

- If the primary stone extraction is carried out by the same company that mills the product in granulated or micronized stone, the quarrying activity should be included in the module A3 (i.e. is part of the manufacturing of the product), as specific as possible. Module A1 includes the production of raw materials (e.g. explosives). Production, distribution and consumption of electricity and fuels necessary for quarrying activity shall be included in A3.
- If the primary stone extraction is not carried out by the same company that mills the product in granulated or micronized stone (e.g. the stone is purchased), the quarrying activity (i.e. materials and energy and direct emissions) should be included in the module A1, as specific as possible.
- Routine maintenance of machineries <3 years (e.g. parts that ordinary must be changed due to wear) shall be included.
- Occasional maintenance (i.e. > 3 years frequency) of machineries and occasional consumptions shall be excluded.

A2) Transport:

 Transport from the final delivery point of raw materials, chemicals, main parts, and components (see above regarding A1 processes) to the manufacturing plant should be based on the actual transportation mode, distance from the supplier, and vehicle load, if available, and shall be included in module A2.

A3) Manufacturing:

- Stone extraction when it is carried out by the same company that mills the product in granulated or micronized stone include: production, distribution and consumption of electricity and fuels necessary for quarrying activity.
- The end of life of materials used during the production process (excluding the materials that constitutes the final packaging, if any) shall be considered in the module A3. These include the packaging of materials or components (e.g. filters, bags). Transport of waste to the waste plant shall be also considered. If the distance to the waste collection plant is unknown, 50km as average distance should be used.

4.9.2 DISTRIBUTION AND INSTALLATION STAGE, MODULES A4-A5

See section A.7.2 of the GPI and the following specific descriptions related to this PCR.

A4) Transport:

The transport of the product to the processing/blending company or retailer should be described, which should reflect the actual situation to the best extent possible. The following priority should be used:

- Actual transportation distances and types.
- Calculated as the average distance of a product of that product type transported by different means of transport modes.



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 Calculated as a fixed long transport, such as 1000 km transport by lorry or 10000 km by airplane, according to product type. A transportation by railway (1 000 km distance) should be considered as average distribution scenario, if no specific data are available.

A5) Installation:

Installation is not relevant for this product category.

This module shall include the end of life of packaging (if any):

 Scenarios for the end-of-life stage that 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.

Transport of waste to the waste plant should be also considered. If specific data regarding the distance to waste collection plant are not available, 50 km as average distance should be used.

4.9.3 USE STAGE, MODULES B1-B7 AND END-OF-LIFE STAGE, MODULES C1-C4

See A.7.3 of the GPI.

The use stage and the end of life of the granulated or micronized stone (optional) depend on the characteristics of the preparation in which the product is included. These stages should be modelled according to the PCR that is applicable to the final product (e.g., PCR 2016:03 Preparations used in animal feeding for food-producing animals CPC 2331, 2332 and PCR 2010:20 Mineral or chemical fertilizers CPC 3461, 3462, 3463, 3464 & 3465).

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 A.7.4 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 A.7.5. on the modelling of module D.

4.10 ENVIRONMENTAL PERFORMANCE INDICATORS

See Section A.8 of the GPI.

An additional requirement in this PCR, is that the results of modules A1-A3 shall be declared separately and in aggregated form (i.e. total A1-A3) in the EPD and LCA report.

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.

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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.



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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.



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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 and module D (if included in the scope of the EPD).



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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.



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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

R

EPD

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9 VERSION HISTORY OF PCR

VERSION 1.0.0, 2020-01-08

Original version of PCR.

VERSION 1.0.1, 2023-10-06

Updated version with prolonged validity period with 1 year, due to the initiation of an updating process.

VERSION 2.0.0, 20XX-XX-XX

Changes in this update concern:

- Compliance with the General Programme Instructions, Version 5.0.0.
- Use of the latest PCR template.
- PCR scope expansion, including UN CPC code 161, 162, 163, 376 and 379, see Section 2.2.
- Editorial changes.
- Modified the mandatory requirement for transport processes in downstream phase, now optional in module A4.
- The additional environmental impacts indicators are deleted.

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