

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025 and EN 15804+A2 

Secil - Companhia Geral de Cal e Cimento, S.A. **CEM II/B-L 32,5 N PORTLAND LIMESTONE CEMENT**



Owner of the declaration

Secil - Companhia Geral de Cal e Cimento,
S.A.
Estrada do Outão, s/n
2901-864 Setúbal
Portugal

Product

CEM II/B-L 32,5 N PORTLAND LIMESTONE
CEMENT

Declared product / Declared unit

1 t

This declaration is based on Product Category Rules

EN 15804:2012 + A2:2019,
EN 16908:2017+A1:2022,
NPCR Part A:2021

Program operator:

EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway

Declaration number

NEPD-10352-10352-2

Registration number

NEPD-10352-10352-2

Issue date

30.09.2025

Valid to

29.09.2030

EPD Software

Emidat Platform v1.0.0

General Information

Product

CEM II/B-L 32,5 N PORTLAND LIMESTONE CEMENT

Program Operator

EPD Global
Majorstuen P.O. Box 5250
N-0303 Oslo
Norway
Phone: +47 23 08 80 00
Email: post@epd-norge.no

Declaration Number

NEPD-10352-10352-2

This declaration is based on Product Category Rules

EN 15804:2012 + A2:2019,
EN 16908:2017+A1:2022,
NPCR Part A:2021

Statements

The owner of the declaration shall be liable for the underlying information and evidence. The Norwegian EPD Foundation shall not be liable with respect to manufacturer, life cycle assessment data and evidences.

Declared unit

1 t

General information on verification of EPD from EPD tools

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Verification of each EPD is made according to EPD Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD Global's General Programme Instructions for further information on EPD tools.

Verification of EPD tool

Charlotte Merlin, FORCE Technology
(no signature required)

Owner of the declaration

Secil - Companhia Geral de Cal e Cimento, S.A.

Contact person

daniela.faisca@secil.pt

Phone

+351217927100

Email

daniela.faisca@secil.pt

Manufacturer

Secil - Companhia Geral de Cal e Cimento, S.A.
Estrada do Outão, s/n
2901-864 Setúbal, Portugal

Place of production

Setúbal, Portugal

Management system

ISO 9001, ISO 14001, ISO 45001, EMAS

Organisation no

23510

Issue date

30.09.2025

Valid to

29.09.2030

Year of study

2022

Comparability

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not seen in a building context. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database (including primary and secondary data).

Development and verification of EPD

The declaration was created using the Emidat EPD tool v1.0, developed by Emidat GmbH. The EPD tool has been approved by EPD Global.

Developer of EPD: Daniela Faísca

Reviewer of company-specific input data and EPD: Raquel Sofia Venâncio Madeira do Nascimento Paulo

Approved



Håkon Hauan, The Norwegian EPD Foundation

Product

Product description

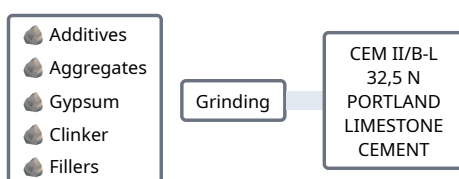
CEM II/B-L 32,5N is a blended Portland cement composed of Portland clinker and limestone. It is one of the most widely used cements in civil construction.

Key Properties:

- Excellent workability — facilitates application and finishing.
- Low heat of hydration — reduces the risk of cracks and deformations in large-scale works.
- Moderate strength — suitable for general construction tasks such as foundations, mortars, and reinforced concrete with moderate strength requirements.

Advantages:

- Versatile for various types of construction works.
- Contributes to sustainable construction by reducing the ecological footprint through lower clinker content.



The main applications of the cement are:

- Mortars
- Foundations.
- Reinforced concrete of moderate strength.
- General construction works.

Product specification

Name of ingredient	Share of total weight	Country of origin
Additives	0 - 6 %	Various
Aggregates	6 - 20 %	Portugal
Clinker	35 - 65 %	Portugal
Fillers	20 - 35 %	Portugal
Gypsum	0 - 6 %	Portugal

Technical data

	Unit	Value
Compressive Strength (Prisms, EN 196-1)	N / mm ²	38.0
Density	kg / m ³	950.0

Market

Portugal

LCA: Calculation rules

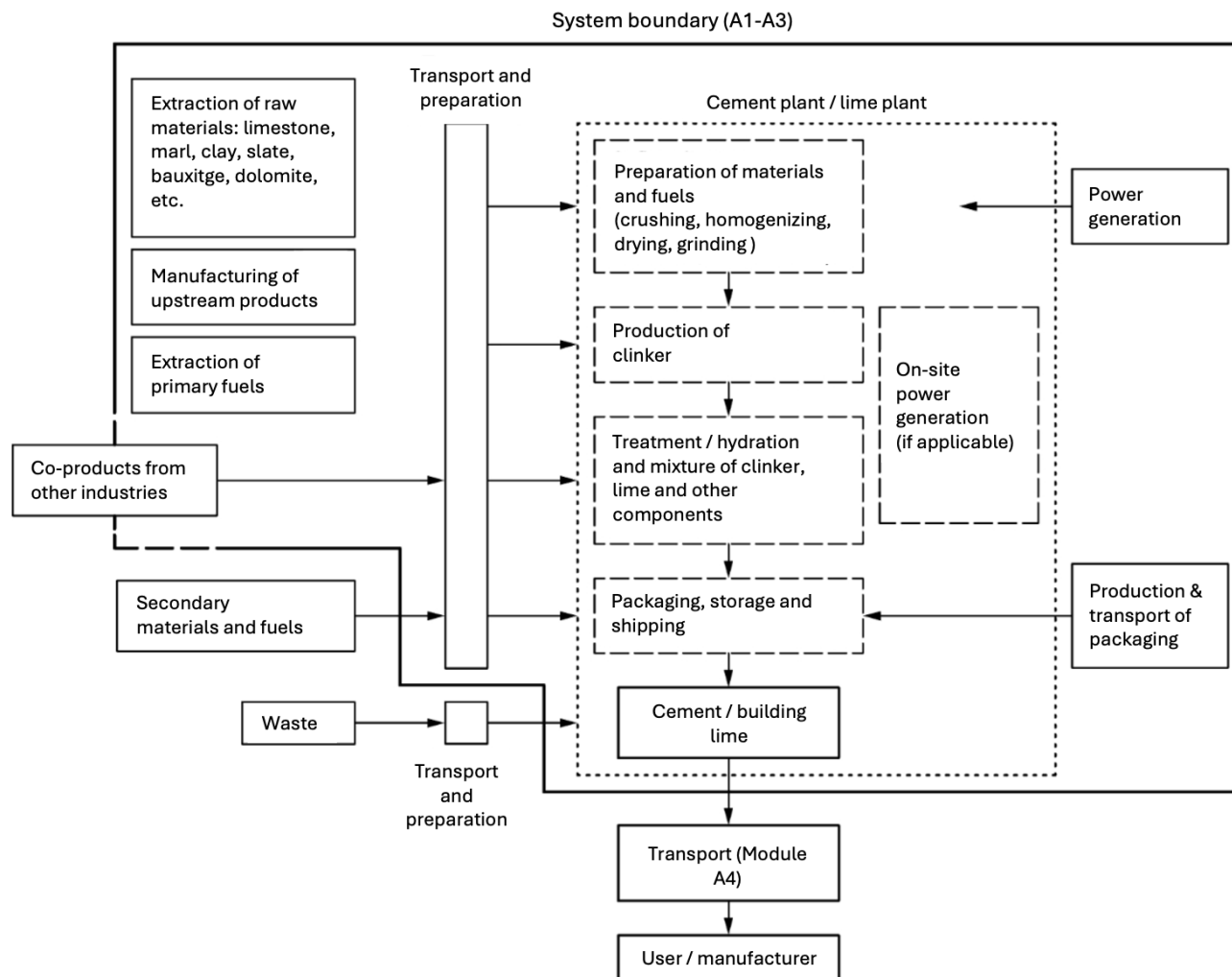
Declared unit

1 t

Reference service life

Not defined

System boundary



Data quality

The foreground data are based on extensive and detailed data collection at the production site of the manufacturer, covering key processes such as raw material sourcing, formulation, and manufacturing. These foreground data are fully linked with corresponding datasets from the background database (ecoinvent 3.10) or with EN15804+A2-compliant EPDs, ensuring consistency, reliability, and maintaining alignment with the latest industry standards.

The overall data representativeness is rated as fair with an overall score of 3.41/5, in accordance with EN 15804+A2 Annex E guidance on data quality assessment, considering geographical, technical, and temporal representativeness.

System boundaries (X=included, MND=module not declared)

	Production			Installation		Use stage							End-of-Life				Next product system
	Raw material supply	Transport	Manufacturing	Transport	Installation Process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	Demolition	Transport	Waste Processing	Disposal	Benefits and loads beyond the system boundary
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Geography			PT	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

For the geographies modeled in A1 and A2, refer to *Product specification*.

Type of EPD: Cradle to gate

Stage of Material Production and Construction

Module A1: Extraction and transport of raw materials and fuels, Clinker production, Production of secondary constituents, Production of additives, Production of consumables

Module A2: Transport of constituents, additives, and consumables

Module A3: Cement production, Preparation of cement for delivery

Cut-off criteria

No cut-offs were applied.

Allocation

Foreground inventory data (energy and fuels, ancillary materials, emissions and waste) was collected at the production-process level. Using the total output of the production process in 2022, these flows are allocated to one declared unit based on mass.

LCA: Results

Core environmental impact indicators

Indicator	Unit	A1-3
GWP-total	kg CO ₂ -eq.	5.75e+02
GWP-fossil	kg CO ₂ -eq.	5.74e+02
GWP-biogenic	kg CO ₂ -eq.	3.57e-02
GWP-luluc	kg CO ₂ -eq.	7.38e-02
ODP	kg CFC-11-Eq	9.42e-06
AP	mol H ⁺ -Eq	9.67e-01
EP-freshwater	kg P-Eq	1.08e-02
EP-marine	kg N-Eq	3.56e-02
EP-terrestrial	mol N-Eq	3.62e+00
POCP	kg NMVOC-Eq	9.94e-01
ADPE	kg Sb-Eq	2.02e-03
ADPF	MJ, net calorific value	2.51e+03
WDP	m ³ world Eq deprived	1.97e+01

GWP-total: Global Warming Potential - total **GWP-fossil:** Global warming potential - fossil **GWP-biogenic:** Global Warming Potential - biogenic **GWP-luluc:** Global Warming Potential - luluc **ODP:** Depletion potential of the stratospheric ozone layer **AP:** Acidification potential, Accumulated Exceedance **EP-freshwater:** Eutrophication potential - freshwater **EP-marine:** Eutrophication potential - marine **EP-terrestrial:** Eutrophication potential - terrestrial **POCP:** Photochemical Ozone Creation Potential **ADPE:** Abiotic depletion potential - non-fossil resources **ADPF:** Abiotic depletion potential - fossil resources **WDP:** Water (user) deprivation potential

Additional indicators

Indicator	Unit	A1-3
PM	disease incidence	1.26e-05
IRP	kBq U235-Eq	6.60e+00
ETP-fw	CTUe	9.27e+01
HTP-c	CTUh	6.95e-07
HTP-nc	CTUh	1.01e-05
SQP	dimensionless	1.06e+03

PM: Potential incidence of disease due to PM emissions **IRP:** Potential Human exposure efficiency relative to U235 **ETP-fw:** Potential Comparative Toxic Unit for ecosystems **HTP-c:** Potential Comparative Toxic Unit for humans - cancer effects **HTP-nc:** Potential Comparative Toxic Unit for humans - non-cancer effects **SQP:** Potential Soil quality index

IRP: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

ETP-fw, HTP-c, HTP-nc and SQP: The results of these environmental impact indicators shall be used with care as the uncertainties on these re high or as there is limited experienced with these indicators.

Use of resources

Indicator	Unit	A1-3
PERE	MJ	5.74e+02
PERM	MJ	0
PERT	MJ	5.74e+02
PENRE	MJ	2.51e+03
PENRM	MJ	5.42e-03
PENRT	MJ	2.51e+03
SM	kg	5.22e+01
RSF	MJ	2.01e+02
NRSF	MJ	5.38e+02
FW	m ³	8.92e-01

PERE: Primary energy resources - renewable: use as energy carrier **PERM:** Primary energy resources - renewable: used as raw materials **PERT:** Primary energy resources - renewable: total **PENRE:** Primary energy resources - non-renewable: use as energy carrier **PENRM:** Primary energy resources - non-renewable: used as raw materials **PENRT:** Primary energy resources - non-renewable: total **SM:** Use of secondary material **RSF:** Renewable secondary fuels **NRSF:** Non-renewable secondary fuels **FW:** Net use of fresh water

Waste flows

Indicator	Unit	A1-3
HWD	kg	2.05e+00
NHWD	kg	3.36e+01
RWD	kg	9.27e-04

HWD: Hazardous waste disposed **NHWD:** Non hazardous waste disposed **RWD:** Radioactive waste disposed

Output flows

Indicator	Unit	A1-3
CRU	kg	0
MFR	kg	0
MER	kg	0
EEE	MJ	0
EET	MJ	0

CRU: Components for re-use **MFR:** Materials for recycling **MER:** Materials for energy recovery **EEE:** Exported electrical energy **EET:** Exported thermal energy

Name	Value	Unit
Biogenic carbon content in product	0	kg C
Biogenic carbon content in accompanying packaging	0	kg C

Additional requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

Electricity consumption in the manufacturing phase is composed from the source below. Electricity is represented by data in ecoinvent 3.10 regionalised for Portugal.

Electricity	Unit	Value
Electricity from grid	kg CO ₂ -eq. / kWh	0.60

Dangerous substances

The product contains no hazardous substances given by the REACH Candidate List or the Norwegian Priority List.

Additional environmental information

Additional environmental impact indicators required in NPCR Part A for construction products

Indicator	Unit	A1-3
GWP-IOBC	kg CO ₂ -eq.	ND

GWP-IOBC: Global Warming Potential - Instantaneous oxidation of biogenic carbon

Bibliography

CEN/TR 15941:2010	Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data
EN 15804:2012+A2:2019	Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
EN 15942:2022-04	Sustainability of construction works - Environmental product declarations - Communication format business-to-business
ISO 14025:2011-10	Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14040:2021-02	Environmental management - Life cycle assessment - Principles and framework
ISO 14044:2021-02	Environmental management - Life cycle assessment - Requirements and guidelines
ecoinvent v3.10	ecoinvent, Zurich, Switzerland, database version 3.10
EN 16908:2017+A1:2022	Cement and building lime – Environmental product declarations – Product category rules complementary to EN 15804.
NPCR Part A:2021	Construction products and services, Version 2.0. Issue date: 24.03.2021; validity extended to 24.03.2026.

 epd-global Powered by EPD-Norway	Program Operator	Phone	+47 23 08 80 00
	EPD Global	Email	post@epd-norge.no
	P.O. Box 5250 Majorstuen, N-0303 Oslo Norway	Web	www.epd-global.no
 epd-global Powered by EPD-Norway	Publisher	Phone	+47 23 08 80 00
	EPD Global	Email	post@epd-norge.no
	P.O. Box 5250 Majorstuen, N-0303 Oslo Norway	Web	www.epd-global.no
	Owner of the declaration	Phone	+351217927100
	Secil - Companhia Geral de Cal e Cimento, S.A.	Email	daniela.faisca@secil.pt
	Estrada do Outão, s/n, 2901-864 Setúbal Portugal	Web	https://www.secil.pt/pt/Home
	Author of the life cycle assesment	Phone	+351217927100
	Secil - Companhia Geral de Cal e Cimento, S.A.	Email	daniela.faisca@secil.pt
	Estrada do Outão, s/n, 2901-864 Setúbal Portugal	Web	https://www.secil.pt/pt/Home
	ECO Platform	Web	www.eco-platform.org
	ECO Portal	Web	ECO Portal
 EMIDAT	Developer of EPD generator	Phone	+49 176 56 96 77 91
	Emidat GmbH	Email	epd@emidat.com
	Sandstraße 33, 80335 München Germany	Web	www.emidat.com