EPD
INTERNATIONAL EPD SYSTEM

aalborgportland
CEMENTIR HOLDING

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

AALBORG RAPID® CEMENT – CEM I 52.5 N

AALBORG PORTLAND A/S, CEMENTIR HOLDING

Programme: *International EPD System, www.environdec.com*	*Programme operator:* ***EPD International AB***	*EPD registration number:* *EPD-IES-0020927*	*Publication date:* *20-03-2025*	*Valid until:* *20-03-2030*	*Geographical scope:* ***Europe***

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com.

Global Cement and Concrete Association

ECO PLATFORM EPD VERIFIED

GENERAL INFORMATION

MANUFACTURER INFORMATION

Manufacturer	Aalborg Portland A/S, Cementir Holding
Address	Aalborg Portland A/S, Rørdalsvej 44, 9220 Aalborg, Denmark
Contact details	cement@aalborgportland.dk
Website	www.aalborgportland.dk

PRODUCT IDENTIFICATION

Product name	Aalborg RAPID® cement
Additional label(s)	CEM I 52,5 N
Product number / reference	0615-CPR-9806.1
Place(s) of production	Aalborg, Denmark
CPC code	3744

The International EPD System

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterization factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

EPD INFORMATION

The EPD owner has the sole ownership, liability, and responsibility for the EPD. Construction products EPDs may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context

EPD program operator	The International EPD System
EPD standards	This EPD is in accordance with EN 15804+A2 and ISO 14025 standards.
Product category rules	EN 15804 +A2 serves as the core PCR. In addition, the Int'l EPD System PCR 2019:14 Construction products, version 1.3.4 (2024-04-30) and c-PCR 001 Cement & building lime (2024-04-30) is used.
EN 15804 reference package	LCIA characterisation factors using EF 3.1 for CFs used in the PEF framework
EPD author	Morten Frederiksen, Aalborg Portland A/S
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal certification ☑ External verification
Verification date	20.03.2025
EPD verifier	Stefan Emil Danielsson, SDG Consulting
EPD number	EPD-IES-0020927
ECO Platform nr.	
Publishing date	20.03.2025
EPD valid until	20.03.2030

PRODUCT INFORMATION

PRODUCT DESCRIPTION

The Aalborg RAPID® is Portland cement type CEM I 52,5 N (LA) characterized by a normal early strength and very high late strength. RAPID® is produced by co-milling a cement clinker with gypsum.

PRODUCT APPLICATION

Cement products are intended for preparation of concrete, mortar, grout and other mixes for construction and manufacture of construction products. Aalborg RAPID® cement can be used in most environmental classes according to national concrete regulations but is especially recommended for:

- Reinforced concrete structures
- Concreting in cold weather
- Precast concrete blocks
- Heavy precast concrete elements

TECHNICAL SPECIFICATIONS AND PHYSICAL PROPERTIES OF THE PRODUCT

Product sheet for the cement can be retrieved here:
https://www.aalborgportland.dk/downloads/ydeevnedeklarationer/

Further information can be found at www.aalborgportland.dk

PRODUCT STANDARDS

The Aalborg RAPID® cement is manufactured according to the requirements in the European standard EN 197-1

PRODUCT RAW MATERIAL COMPOSITION

Product and Packaging Material	Weight, kg	Post-consumer %	Renewable %	Country Region of origin
Clinker	950 - 1000	0	0	Denmark, Europe
Other constituents	0 - 50	0	0	Denmark

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	<0,1	Europe, World
Minerals	97	Denmark
Fossil materials	3	Denmark, Europe
Bio-based materials	0	-

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1% (1000 ppm).

PRODUCT LIFE-CYCLE

MANUFACTURING AND PACKAGING (A1-A3)

Portland-composite cement is made by heating, in a cement kiln, a mixture of raw materials (mainly limestone or chalk) to a calcining temperature of above 600°C and then a fusion temperature, which is about 1450°C to sinter the materials into grey clinker. The clinker production process is a so-called semi-wet process due to the wet limestone used. To achieve the desired propertied in the finished cement, gypsum or anhydrite is added to the clinker and the mixture is finely ground with limestone filler.

TRANSPORT AND INSTALLATION (A4-A5)

Cement is an intermediate product – typically used in construction of buildings or infrastructure. Distribution is done by ship from plant harbour to silo terminals and then by truck to local customers. Transportation burden will vary significantly depending on the point of delivery and should be modelled separately for each cement consumer. Consequently, burdens from transportation are not declared in this EPD.

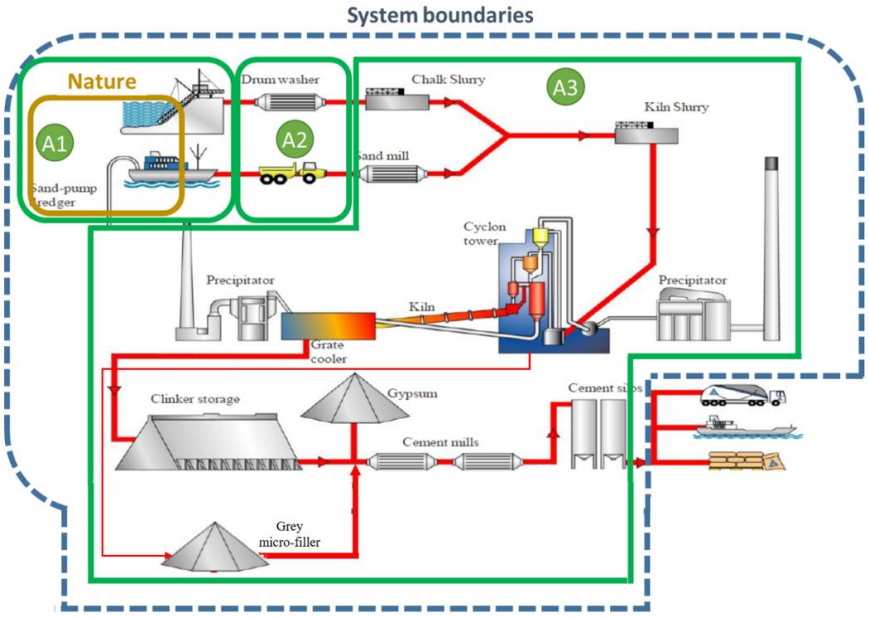
PRODUCT USE AND MAINTENANCE (B1-B7)

As it is unknown which application cement is eventually used for, no other lifecycle phases are relevant to cover, and they are marked as “Modules Not Relevant”.

PRODUCT END OF LIFE (C1-C4, D)

The end-of-life modules (C1-C4, and D) are omitted as the material fulfils the exemption criteria based on EN 15804+A2.

PRODUCT SYSTEM



LIFE-CYCLE ASSESSMENT

LIFE-CYCLE ASSESSMENT INFORMATION

Period for data	2024
Declared unit	1000 kg Aalborg RAPID® cement
Mass per declared unit	1000 kg
Database and LCA software	GCCA EPD Tool for Cement and Concrete (v5.0), International Version EcoInvent 3.10.1

BIOGENIC CARBON CONTENT

The product does not have biogenic carbon content.

SYSTEM BOUNDARY

This EPD covers cradle-to-gate scope with following modules; A1 (Raw material supply), A2 (Transport) and A3 (Manufacturing). As cement is an intermediate product, no other lifecycle phases are relevant to cover.

Not declared = ND

A1 Global	A2 Global	A3 DK	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Raw materials	**Transport**	**Manufacturing**	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

CUT-OFF CRITERIA

The data quality is generally high as most are retrieved directly from the Manufacturer data systems. All major raw materials and essential energy flows are included. The 1% cut-off rule does not apply for hazardous materials and substances: as such, all flows with environmental significance are included. All solid waste emissions, including those that weight less than 1% of the sum of the masses of the inputs, are reported in the end-results.

LCA APPROACH APPLIED

Aalborg Portland is utilizing waste fuels to reduce consumption of virgin primary fuels. Since the waste fuels are «legally defined as waste when used» and «the use is permitted national waste legislation» the burdens from combustion are excluded. This «Net approach» is according to the “polluters pay” principle and EN16908 Annex D. For transparency and to comply with users preferring «Gross approach» the GWP results including burdens from waste is provided in foot note.

Waste and secondary materials are utilized by mineral recovery in the clinker and cement production, whereby the need for virgin resources is reduced and deposit burdens avoided. The inbound transport of secondary materials is reflected, but the Production of materials is considered Zero-burden due to waste status or neglectable economic value compared to primary output generated. This is aligned with guidelines in EN16908 chapter 6.4.3.3. Co-products in cement.

LCA is based on primary data from manufacturer and external partners. When primary data is not available, recent generic data from EcoInvent 3.10.1 (2024) is used.

AVERAGES AND VARIABILITY

EPD is based on plant specific data covering a full calendar year to eliminate risk of seasonality impact and random fluctuations. Burdens from internal clinker production is assigned to cement according to clinker factor.

Minor inputs such as waste handling and internal transport is averaged over all clinker production, since no specific data was available.

The International EPD System additional data requirements

Data specificity and GWP-GHG variability for GWP-GHG for A1-A3.

Supply-chain specific data for GWP-GHG	95 %
Variation in GWP-GHG between products	n/a
Variation in GWP-GHG between sites	n/a

ENVIRONMENTAL IMPACT DATA

Note: The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Potential, total (net)*	kg $CO_{2\text{-eq}}$	6,46E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Global Warming Potential, fossil (net)*	kg $CO_{2\text{-eq}}$	6,46E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Global Warming Potential, biogenic (net)*	kg $CO_{2\text{-eq}}$	8,45E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Global Warming Potential, land use and land use change	kg $CO_{2\text{-eq}}$	2,97E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Depletion potential of the stratospheric ozone layer	kg $CFC11_{\text{-eq}}$	1,21E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acidification potential, Accumulated Exceedance	mol $H^{+}_{\text{-eq}}$	3,20E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Eutrophication potential, fraction of nutrients reaching freshwater end compartment	kg $PO_{4\text{-eq}}$	1,46E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Eutrophication potential, fraction of nutrients reaching marine end compartment	kg $N_{\text{-eq}}$	1,57E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Eutrophication potential, Accumulated Exceedance	mol $N_{\text{-eq}}$	8,17E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Formation potential of tropospheric ozone	kg $NMVOC_{\text{-eq}}$	1,99E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Abiotic depletion potential for non- fossil resources**	kg $Sb_{\text{-eq}}$	2,48E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Abiotic depletion potential for fossil resources potential**	MJ	3,33E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Water (user) deprivation potential, deprivation-weighted water consumption**	$m^{3}_{\text{-eq}}$ depr.	3,26E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

* The indicated values (net values) do not include the greenhouse gas emissions from the incineration of secondary fuels at clinker production. The gross GWP-tot (including the emissions from the incineration of secondary fuels at clinker production) is 742.6 kg CO_2–eq. The gross GWP-fos is 742.2 kg CO_2-eq. The gross GWP-bio is 0.4102 kg CO_2-eq.

**EN 15804+A2 disclaimer for Abiotic depletion and Water use indicators and all optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Potential incidence of disease due to PM emissions	Incidence	2,77E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potential Human exposure efficiency relative to U235	kBq $U235_{-eq}$	1,01E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potential Comparative Toxic Unit for ecosystems	CTU_{-eq}	5,00E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potential Comparative Toxic Unit for humans - cancer	CTUh	1,21E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potential Comparative Toxic Unit for humans - non-cancer	CTUh	6,07E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potential soil quality index	dimensionless	5,13E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EN 15804+A2 disclaimer for Ionizing radiation, human health. 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.

USE OF NATURAL RESOURCES

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Use of renewable primary energy excl. renewable primary energy resources used as raw materials	MJ	6,00E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of renewable primary energy resources used as raw materials	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total use of renewable primary energy resources	MJ	6,00E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of non-renewable primary energy excl. non-renewable primary energy res. used as raw mat.	MJ	3,33E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of non-renewable primary energy resources used as raw materials	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total use of non-renewable primary energy resources	MJ	3,33E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of secondary materials	kg	1,89E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of renewable secondary fuels	MJ	1,66E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Use of non-renewable secondary fuels	MJ	1,35E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Net use of fresh water	m^3	8,10E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

END OF LIFE – WASTE

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	8,22E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Non-hazardous waste	kg	1,45E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Radioactive waste	kg	2,25E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for reuse	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Materials for recycling	kg	3,51E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Materials for energy recovery	kg	1,31E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Exported energy	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

Impact category	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG (net)*	kg $CO_{2\text{-eq}}$	6,46E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

* The indicated values (net values) do not include the greenhouse gas emissions from the incineration of secondary fuels at clinker production. The gross GWP-GHG (including the emissions from the incineration of secondary fuels at clinker production) is 742.6 kg CO_2–eq.

GWP-GHG indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	100% GoO certified electricity (Wind + Nuclear). Modelled using emission factors in GCCA EPD tool
Electricity gram $CO_{2\text{-}eq}$ / kWh	22 g/kWh
District heating data source and quality	n/a
District heating $CO_{2\text{-}eq}$ / kWh	n/a

Transport scenario documentation

Scenario parameter	Value
Transport, freight, lorry 16-32 tonnes, EURO 6,kg $CO_{2\text{-}eq}$ / t-km	n/a
Transport, freight, sea, bulk carrier for dry goods, kg $CO_{2\text{-}eq}$ / t-km	n/a
A4 average transport $CO_{2\text{-}eq}$ emissions, kg $CO_{2\text{-}eq}$ / t-km	n/a
A4 average transport distance, km	n/a
Transport capacity utilization, %	n/a
Bulk density of transported products, kg/m^3	n/a
Volume capacity utilization factor for nested package products, %	n/a

End of life scenario documentation

Scenario parameter	Value
Collection process – kg collected separately	n/a
Collection process – kg collected with mixed waste	n/a
Recovery process – kg for re-use	n/a
Recovery process – kg for recycling	n/a
Recovery process – kg for energy recovery	n/a
Disposal (total) – kg for final deposition	n/a
Scenario assumptions e.g. transportation	n/a

BIBLIOGRAPHY

ISO 14025:2010 Environmental labels and declarations – Type III environmental declarations. Principles and procedures.

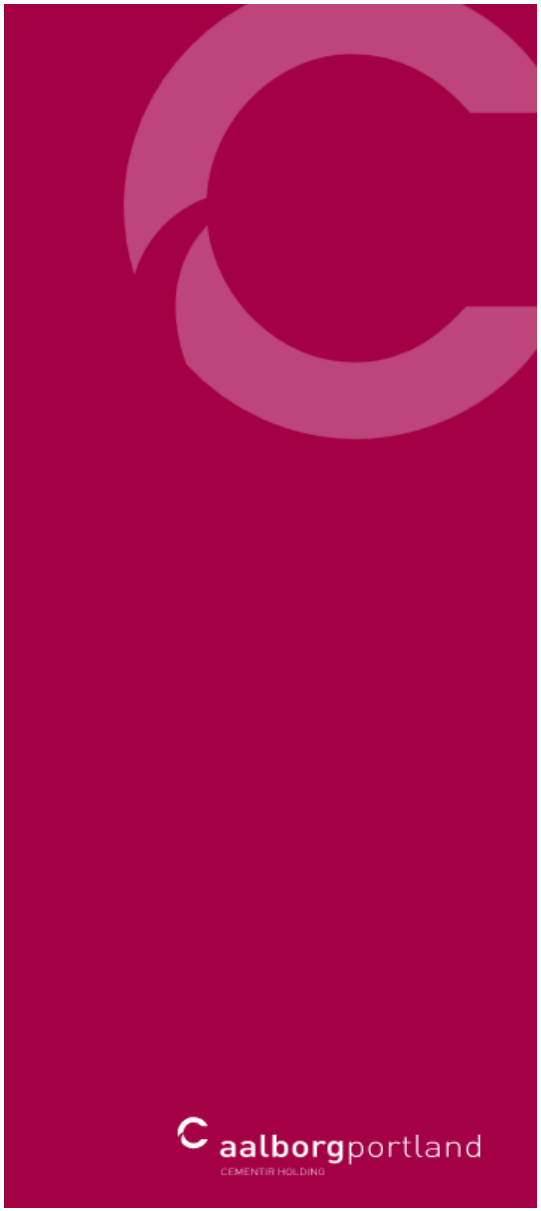
ISO 14040:2006 Environmental management. Life cycle assessment. Principles and frameworks.

ISO 14044:2006 Environmental management. Life cycle assessment. Requirements and guidelines.

GCCA EPD tool database incl. Ecoinvent database v3.10.1.

EN 15804:2012+A2:2019 Sustainability in construction works – Environmental product declarations – Core rules for the product category of construction products.

IES PCR 2019:14 Construction products, version 1.3.4 (2024-04-30) is used. c-PCR 001 Cement & building lime



DIFFERENCES VERSUS PREVIOUS VERSIONS

This current version replaces the previous EPD issued in 2022 and reflect the following changes:

- Increased use of waste fuels and biomass-ratio in fuel mix
- GoO certified electricity for all electricity consumed in 2024
- Change of methodology from “Gross” to “Net” to align with common practice in Europe

The development on fuel mix and electricity generates a 11% reduction of A1-A3 GWP total (net) from 726 to 646 kg CO_{2eq} per ton.

ABOUT THE MANUFACTURER

Aalborg Portland is the only cement factory in Denmark. The past 135 years it has been producing high quality grey and white cement from multiple kilns, where the main clinker raw material, limestone and sand, is sourced locally. Since 2004 it is owned by Cementir Group along with 10 other cement factories globally. The annual cement production exceeds 2 million tons sold in domestic and regional markets. The distribution is based on silo terminal across Denmark and Europe. Aalborg Portland proactively pursuing decarbonisation of cements, while maintaining a high performance in target applications. The latest examples are FutureCEM® (2020), SOLID (2021) and White D-Carb® (2024).

EPD AUTHOR AND CONTRIBUTORS

Manufacturer	Aalborg Portland, Cementir Holding
EPD author	Morten Frederiksen, Aalborg Portland A/S, Denmark
EPD verifier	Stefan Emil Danielsson, SDG Consulting
EPD program operator	The International EPD System
Background data	This EPD is based GCCA EPD tool v 5.0 incl. Ecoinvent v.3.10.1
LCA software	The LCA and EPD have been created using GCCA Industry EPD Tool for Cement and Concrete (v5.0), International Version - Pre-Verified for International EPD System

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with EN 15804, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The background report (project report) for this EPD

VERIFICATION OVERVIEW

Following independent third party has verified this specific EPD:

EPD verification information	Answer
Independent EPD verifier	Stefan Emil Danielsson, SDG Consulting
EPD verification started on	17.03.2025
EPD verification completed on	20.03.2025
Supply-chain specific data %	95%
Approver of the EPD verifier	The International EPD System

Author & tool verification	Answer
EPD author	Morten Frederiksen
EPD author training completion	31.05.2023
EPD Generator module	GCCA EPD Tool for Cement and Concrete (v5.0), International Version
Independent software verifier	Rillo & Pretato, Studio Fieschi & soci Srl.
Software verification date	11.11.2024

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of

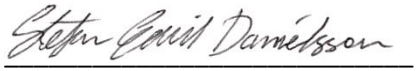
- the data collected and used in the LCA calculations,
- the way the LCA-based calculations have been carried out,
- the presentation of environmental data in the EPD, and
- other additional environmental information, as present

with respect to the procedural and methodological requirements in ISO 14025:2010 and EN 15804:2012+A2:2019.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.



Stefan Emil Danielsson, SDG Consulting

VERIFICATION AND REGISTRATION (ENVIRONDEC)

ISO standard ISO 21930 and CEN standard EN 15804 serves as the core Product Category Rules (PCR)	
PCR	PCR 2019:14 Construction products, version 1.34
PCR review was conducted by:	The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.
Independent third-party verification of the declaration and data, according to ISO 14025:2006:	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal certification ☑ External verification
Third party verifier	Stefan Emil Danielsson, SDG Consulting
	Approved by: The International EPD® System Technical Committee, supported by the Secretariat
Procedure for follow-up during EPD validity involves third party verifier	☐ yes ☑ no

EPD INTERNATIONAL EPD SYSTEM

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