ENVIRONMENTAL PRODUCT DECLARATION

LOMA NEGRA

IN ACCORDANCE WITH ISO 14025:2006 AND EN 15804:2012+A2:2019/AC:2021 FOR:

CPN 50 L'Amalí

FROM LOMA NEGRA

- **PROGRAMME:** The International EPD System, www.environdec.com
- **PROGRAMME OPERATOR:** EPD International AB
- **LICENSEE:** EPD Argentina
- **TYPE OF EPD:** EPD of a single product from manufacturer/service provider
- **EPD REGISTRATION NUMBER:** EPD-IES-0028335
- **VERSION DATE:** 2026-02-24
- **VALIDITY DATE:** 2031-02-22

EPD INTERNATIONAL EPD SYSTEM

Argentina EPD

An EPD may be updated or depublished if conditions change.
To find the latest version of the EPD and to confirm its validity, see www.environdec.com

GENERAL INFORMATION

PROGRAMME INFORMATION

Programme:	The International EPD® System	
Address:	EPD International AB Box 210 60	SE-100 31 Stockholm Sweden
Website:	www.environdec.com	
E-mail:	support@environdec.com	

PRODUCT CATEGORY RULES (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): "Construction products" VERSION 2.0.1. UNC CPC 37440

PCR review was conducted by: Kristian Jelse, Greendesk (on behalf of EPD International AB), kristian@greendesk.se

c-PCR, if applicable: "Cement and building lime" Version 1.0.0

THIRD-PARTY VERIFICATION

Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:

☑ **Individual EPD verification without a pre-verified LCA/EPD tool**

Third-party verifier: Bárbara María Civit - Universidad Tecnológica Nacional Facultad Regional Mendoza
Approved by: International EPD System

Procedure for follow-up of data during EPD validity involves third party verifier:

☑ Yes ☐ No

[Procedure for follow-up the validity of the EPD is at minimum required once a year with the aim of confirming whether the information in the EPD remains valid or if the EPD needs to be updated during its validity period. The follow-up can be organized entirely by the EPD owner or together with the original verifier via an agreement between the two parties. In both approaches, the EPD owner is responsible for the procedure being carried out. If a change that requires an update is identified, the EPD shall be re-verified by a verifier].

The EPD owner has the sole ownership, liability, and responsibility for the EPD.
EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison.
For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Loma Negra C.I.A.S.A.

Address: Cecilia Grierson 355 Piso 4, Capital Federal, Argentina.

Contact: Pamela Rodriguez Cuenca (PRodriguez@lomanegra.com)

Address and contact information of the LCA practitioner commissioned by the EPD owner: Eng. Leticia Tuninetti (ltuninetti@inti.gob.ar) and Eng. María Raquel Cavagnaro (mcavagnaro@inti.gob.ar) – INTI Córdoba

DESCRIPTION OF THE ORGANISATION

Loma Negra Compañía Industrial Argentina S.A. was founded in 1926. It is the leading company in the cement and concrete industry in Argentina, with nearly one hundred years of experience. Its purpose is "to transform people's lives by driving sustainable growth", guided by values of respect for people and the environment, social responsibility, transparency, innovation, and continuous improvement. The company produces and markets cement, lime, concrete, and aggregates for the construction, industrial, and infrastructure sectors. Its industrial operations are distributed across several provinces, with its flagship plant L'Amalí (Olavarría), the LomaSer Super Logistics Center (Cañuelas), and other plants located in Olavarría, Barker, San Juan, Catamarca, Ramallo, and Zapala. Loma Negra is part of a diversified business ecosystem that includes Ferrosur Roca (freight railway transportation), Recycomb (energy recovery from industrial waste), Lomax (ready-mix concrete) and La Preferida (aggregate extraction).

The company has a management system certified under ISO 9001 (Quality) and ISO 14001 (Environmental Management), reinforcing its commitment to operational excellence and environmental protection. In addition, it has certified the carbon footprint according to ISO 14067 for three of its key products: CPN 50 L'Amalí, CPN 40 L'Amalí, and CPC 40 LomaSer, as part of its climate change mitigation strategy and environmental performance improvement.

With a long-term vision and a strong organizational culture, Loma Negra remains committed to sustainability, aligning its management with the United Nations Sustainable Development Goals (SDGs). Its strategy is based on promoting responsible practices in the economic, social, environmental, and governance spheres, driving technological innovation, local development, and environmental preservation in each of the communities where it operates.

Product-related or management system-related certifications:
ISO 9001 – Quality Management System.
ISO 14001 – Environmental Management System.

PRODUCT INFORMATION

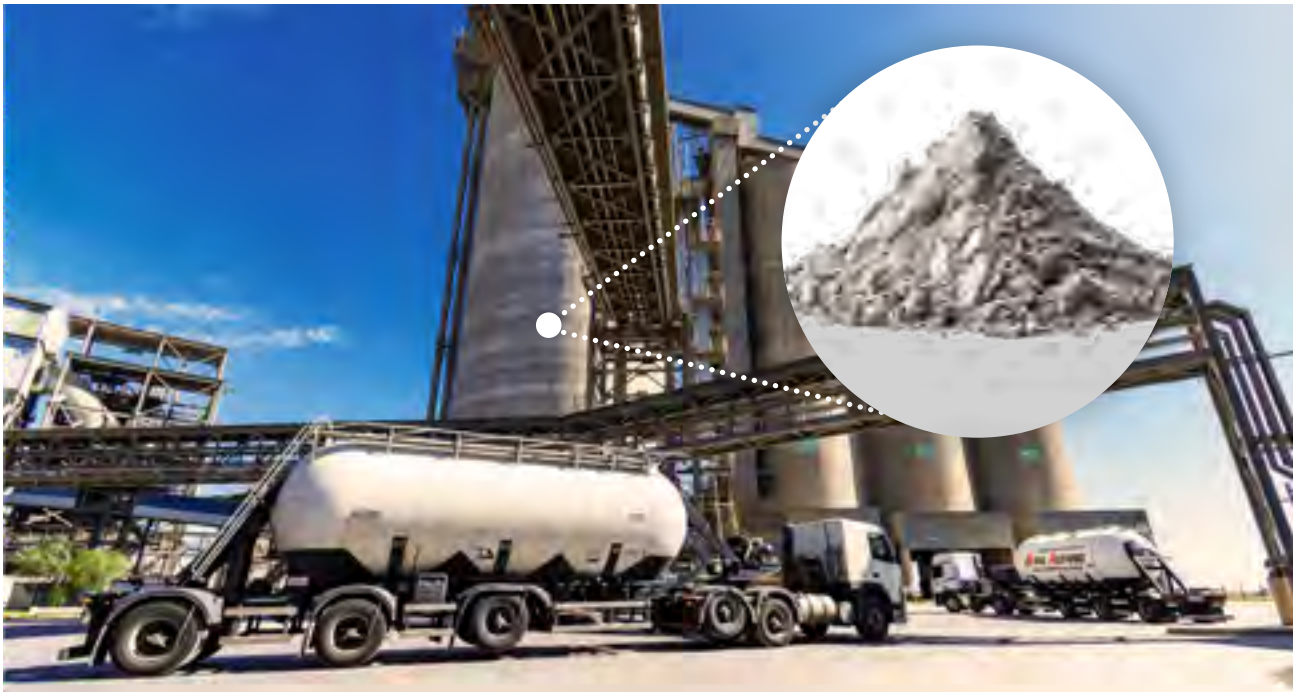
Product name: CPN 50 L'Amalí

Product identification: Portland Cement Natural - 50 compliant with Argentine standard IRAM 50,000, and classified as CEM I according to EN 197-1.

UN CPC code: 37440 Portland cement, aluminous cement, slag cement and similar hydraulic cements, except in the form of clinkers.

Name and location of production site(s): Planta L'Amalí, Olavarría, Buenos Aires, Argentina.

https://www.lomanegra.com/



CONTENT DECLARATION

→ **The mass (weight) of one unit of a product, as purchased or per declared unit:** 1 000 kg

→ **Content of the product in the form of a list of materials and substances, and their mass:**

Product components	Weight, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/ declared unit
Clinker	890.03	0%	0%	0%
Limestone	43.33	0%	0%	0%
Gypsum	63.80	0%	0%	0%
Blast furnace slag	2.48	0%	0%	0%
Aditives	0.36	0%	0%	0%
Total	**1 000.00**	**0%**	**0%**	**0%**

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO_2.

→ **The mass and the content of distribution and/or consumer packaging:** The product is delivered in bulk and does not include consumer packaging.

→ **Information on the environmental and hazardous/toxic properties of a substances contained in the product:** The product does not contain substances with hazardous or toxic properties in amounts that require declaration.

→ **Other information on substances with hazardous and toxic properties:** No additional information on hazardous or toxic substances is applicable.

→ **The declared share of biogenic/recycled materials:** 0%

Hazardous substances from the candidate list of SVHC	EC No.	CAS No.	Mass-% per declared unit
-	-	-	-

LCA INFORMATION

Declared unit: 1 000 kg of cement.

Time representativeness: The study was carried out with data from the production process for the year 2024.

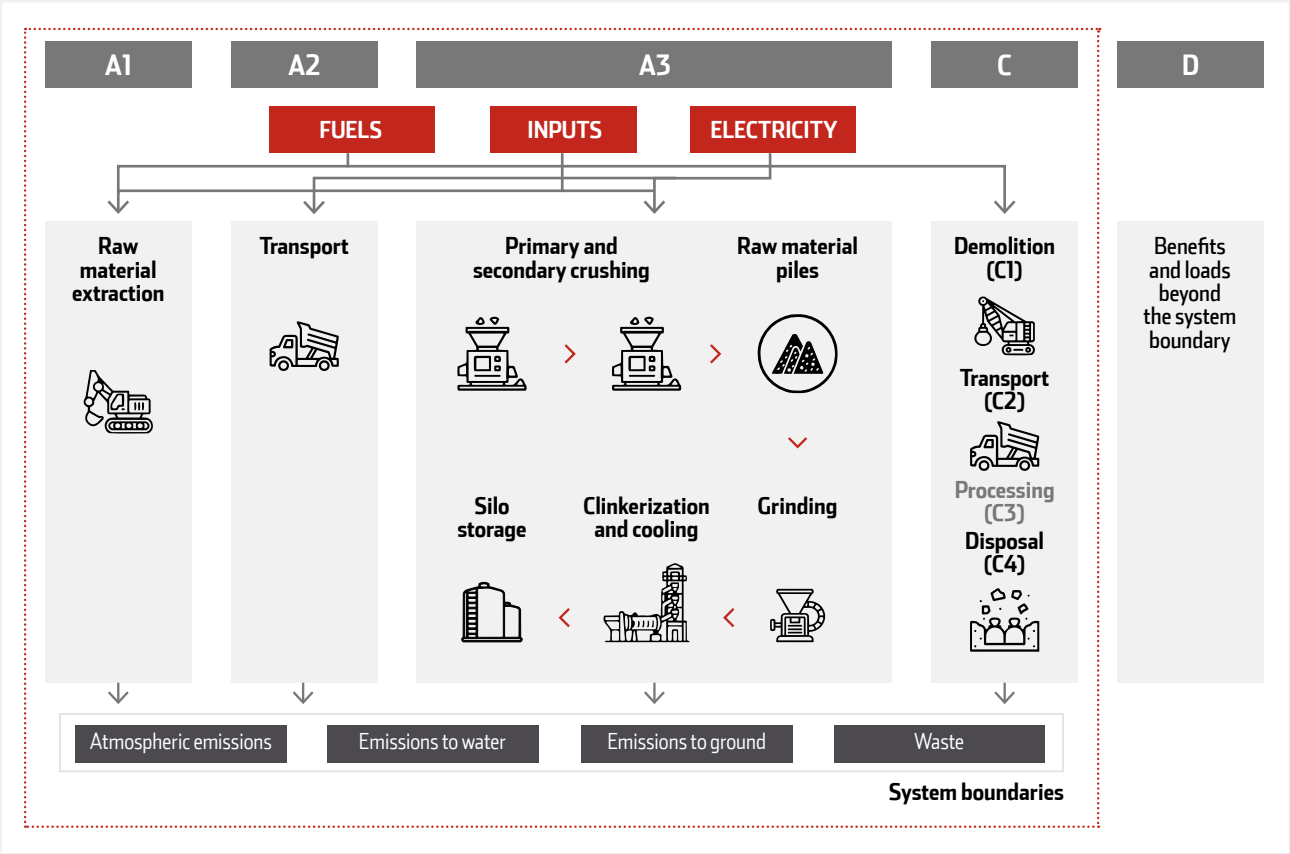
Geographical scope: Argentina.

Database(s) and LCA software used:

→ SimaPro® 9.6.0.1: Dutch software developed by PRé Consultants BV, under the Life Cycle Assessment (LCA) concept, used for over 25 years in more than 80 countries. It is designed to process potential environmental impacts related to each process within a system. The software includes a range of impact calculation methods in accordance with international standards, such as ISO.
→ Microsoft Excel: spreadsheet developed by Microsoft for Windows, used as an advanced data analysis and visualization tool.
→ Ecoinvent V 3.10.1: (database for SimaPro®): a database compatible with studies and assessments based on ISO 14040 and 14044 standards. It contains over 12 800 data sets in the areas of energy supply, agriculture, transportation, biofuels and biomaterials, bulk and specialty chemicals, construction materials, packaging materials, base and precious metals, metal processing, ICT and electronics, dairy, wood, and waste treatment. It is one of the most extensive and consistent international databases.

Description of system boundaries: This EPD report considers the “cradle-to-gate with modules C1-C4 and module D”.

PROCESS FLOW DIAGRAM



Note: The grey colour of the C3 and D modules are related to the absence of impacts.

RAW MATERIAL SUPPLY (A1)

This module accounted for activities associated with limestone quarrying, including generated waste, fuel and input consumption, and emissions. It also considered the production of other inputs and the conditioning of blast furnace slag.

TRANSPORT (A2)

All transportation of raw materials and inputs by truck and ship was included.

MANUFACTURING (A3)

This module integrates all information related to the stages of grinding, homogenization, precalcination, clinkerization, and final cement grinding. It includes energy, fuel, and water used throughout the process, as well as waste generation and the associated direct emissions.

END OF LIFE – DE-CONSTRUCTION DEMOLITION (C1)

A fuel consumption of 1.14 litres per 1 000 kg was considered, in accordance with the technical specifications of the machinery used for demolition.

END OF LIFE – TRANSPORT (C2)

A transport distance of 50 km to the landfill was assumed.

END OF LIFE – WASTE PROCESSING (C3)

In Argentina, recycling initiatives for construction products are still in their infancy. Because of this, it is assumed that cement at the end of its useful life incorporated into a construction project will be sent to a landfill, which is the most unfavourable and therefore conservative scenario for this LCA study.

END OF LIFE – DISPOSAL (C4)

It is assumed that all material is disposed of in a landfill.

RESOURCE RECOVERY (D)

Since final disposal in a landfill was considered for the material at the end of its useful life, no additional benefits for the product are identified.

More information: In the main cement production process, no allocation of environmental burdens was carried out because the processes under study do not generate co-products that would require such distribution. Any excess material or minor losses that may occur are reintroduced into the process and are therefore not considered co-products.

The processes modelled with secondary data, with the exception of blast furnace slag, were used with the allocation defined in the original dataset extracted from the database. For these processes, allocation corresponds to 100%, with no co-products present.

EXCLUSIONS

The following elements and links in the value chain were not included in the impact calculation:

→ The impact of the construction and manufacture of infrastructure, machinery, buildings, vehicles, and common use facilities, is considered negligible since their long service life makes their contribution insignificant relative to the production volume handled.

→ Emissions generated by employee transportation.

ASSUMPTIONS

The following considerations were assumed in the impact calculation:

→ Emissions from land use change were not considered, as the amount of soil removed is considered insignificant in relation to the amount of limestone extracted, according to the Ecoinvent Report: Life Cycle Inventories of Building Products, Part IV: Clay Products and Processes, page 15. (Ecoinvent, 2007).

→ Liquid and solid recyfuel, tires, and other fuels burned in kilns are considered to have no impact in terms of their production/suitability. The impact of their transport to the plant and the emissions from their combustion are taken into account.

→ Refractory bricks were included in the environmental inventory, according to their replacement rate in kilns.

→ The iron correctives used in raw meal production were considered to have no impact, since according to the literature consulted they are still regarded as waste.. (Madías, Reciclado de barros y polvos de acería al oxígeno. Acero Latinoamericano, 2012) (Madías, Reciclado de laminillo de laminación y colada continua. Acero Latinoamericano, 2016).

Modules declared, geographical scope, share of primary data (in GWP-GHG results) and data variation (in GWP-GHG results):

CEMENT CPN 50- IN BULK:

	Product stage			Con-struction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	✓	✓	✓	ND	ND	ND	ND	ND	ND	ND	ND	ND	✓	✓	✓	✓	✓
Geography	AR	AR	AR	-	-	-	-	-	-	-	-	-	AR	AR	AR	AR	AR
Specific data used		>90%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-

✓: Declared. **ND:** Not Declared.

The primary information used in this study corresponds to data specific to the production system under analysis and was collected directly from operational records, on-site measurements, and process mass balances. These data represent the actual operating conditions during the period 2024.

Primary data include inputs of electricity, water, and fuels for each of the unit processes covering the system boundaries from raw material extraction to the production of the finished product at the industrial facility gate. In addition, inputs of raw materials and other process-related inputs were identified at each stage, together with their associated transport to the plant. Some processes that are not part of the main production process, such as lime production and blast furnace slag conditioning, were also modeled using primary data.

The electricity used comes from three sources: the Argentine energy matrix managed by Compañía Administradora del Mercado Mayorista Eléctrico S.A. (CAMMESA), with an emission factor for medium voltage of 4.04E-1 kg CO_2 eq/kWh; electricity generated directly from combined cycle thermal power plants burning natural gas, with a factor of 4.74E-1 kg CO_2 eq/kWh; and electricity generated in solar parks, with an emission factor of 1.14E-4 kg CO_2 eq/kWh.

All waste streams generated throughout the system were quantified. In addition, direct emissions associated with the clinkerization process were accounted for. Mass balances were verified for each stage of the system, as well as compliance with the 5% cut-off criterion applied in the study.

As for secondary information, the production of minor inputs, such as gypsum and iron correctives, was constructed using data from the Ecoinvent database, together with secondary data used to complete missing direct emission information for certain processes.

The end-of-life stage of the product was modelled in accordance with current disposal practices, using estimated energy consumption data for each stage.

Overall data quality is considered good to very good, given the high representativeness and completeness of the primary datasets and the use of recognised secondary sources.

The environmental profiles used to calculate the environmental impacts associated with the consumption of electricity, fuels, inputs, raw materials, packaging, transport, etc. were taken from the international database Ecoinvent V 3.10.1 and the Environmental Footprint (EF) characterization method version 3.1 was used.

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Limestone extraction and processing	Collected data	EPD owner	2024	Primary data	1%
Lime production	Collected data	EPD owner	2024	Primary data	0%
Blast furnace slag conditioning	Collected data / Database	EPD owner / Ecoinvent v3.10	2024	Primary data, secondary data	1%
Clinker production	Collected data	EPD owner	2024	Primary data, secondary data	85%
Electricity generation	Database	Ecoinvent v3.10	<10 years old	Primary data, secondary data	3%
Transport	Collected data	EPD owner	2024	Primary data, secondary data	1%
Minor input production	Database	Ecoinvent v3.10	<10 years old	Primary data, secondary data	0%
Cement production	Collected data	EPD owner	2024	Primary data	1%
Total share of primary data, of GWP-GHG results for A1-A3					**92%**

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that do not capture all relevant aspects of data quality. The indicator is not comparable across product categories.

ENVIRONMENTAL PERFORMANCE

☑ LCA RESULTS OF THE PRODUCT
MAIN ENVIRONMENTAL PERFORMANCE RESULTS

MANDATORY IMPACT CATEGORY INDICATORS ACCORDING TO EN 15804

RESULTS PER DECLARED UNIT

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
GWP - fossil	kg CO_2 eq.	7.33E+02	3.90E+00	7.72E+00	0.00E+00	2.72E+00	0.00E+00
GWP - biogenic	kg CO_2 eq.	2.52E-02	6.03E-04	9.12E-04	0.00E+00	9.18E-04	0.00E+00
GWP - luluc	kg CO_2 eq.	1.90E-02	1.34E-04	2.26E-04	0.00E+00	1.11E-04	0.00E+00
GWP - total	kg CO_2 eq.	7.33E+02	3.90E+00	7.72E+00	0.00E+00	2.72E+00	0.00E+00
ODP	kg CFC 11 eq.	5.48E-06	6.13E-08	1.04E-07	0.00E+00	4.02E-08	0.00E+00
AP	mol H+ eq.	2.13E+00	3.64E-02	2.10E-02	0.00E+00	2.47E-02	0.00E+00
EP - freshwater	kg P eq.	2.75E-03	3.18E-05	1.57E-04	0.00E+00	8.21E-05	0.00E+00
EP - marine	kg N eq.	1.02E+00	1.71E-02	7.64E-03	0.00E+00	1.12E-02	0.00E+00
EP - terrestrial	mol N eq.	1.16E+01	1.88E-01	8.35E-02	0.00E+00	1.23E-01	0.00E+00
POCP	kg NMVOC eq.	3.07E+00	5.58E-02	3.12E-02	0.00E+00	3.72E-02	0.00E+00
ADP - minerals&metals*	kg Sb eq.	8.78E-06	1.63E-07	4.58E-07	0.00E+00	1.07E-07	0.00E+00
ADP - fossil*	MJ	3.83E+03	5.13E+01	1.03E+02	0.00E+00	3.49E+01	0.00E+00
WDP*	m^3	3.62E+00	4.05E-02	9.50E-02	0.00E+00	3.16E-02	0.00E+00

Acronyms

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption.

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

"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."

"The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3)."

ADDITIONAL MANDATORY AND VOLUNTARY IMPACT CATEGORY INDICATORS

RESULTS PER DECLARED UNIT

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
GWP-GHC[1]	kg CO_2 eq.	7.32E+02	3.90E+00	7.72E+00	0.00E+00	2.72E+00	0.00E+00

RESOURCE USE INDICATORS

RESULTS PER DECLARED UNIT

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
PERE	MJ	1.93E+02	1.13E-01	1.65E-01	0.00E+00	1.54E-01	0.00E+00
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	1.93E+02	1.13E-01	1.65E-01	0.00E+00	1.54E-01	0.00E+00
PENRE	MJ	3.83E+03	5.13E+01	1.03E+02	0.00E+00	3.49E+01	0.00E+00
PENRM	MJ	9.41E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	3.84E+03	5.13E+01	1.03E+02	0.00E+00	3.49E+01	0.00E+00
SM	kg	7.56E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	3.01E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	2.66E-01	1.61E-03	3.46E-03	0.00E+00	1.21E-03	0.00E+00

Acronyms

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

[1] This 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 CO_2 is set to zero.

WASTE INDICATORS

RESULTS PER DECLARED UNIT

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0.02	0.00	0.00	0.00	0.00	0.00
Non-hazardous waste disposed	kg	0.04	0.00	0.00	1000.00	0.00	0.00
Radioactive waste disposed	kg	0.00	0.00	0.00	0.00	0.00	0.00

OUTPUT FLOW INDICATORS

RESULTS PER DECLARED UNIT

Indicator	Unit	A1-A3	C1	C2	C3	C4	D
Components for re-use	kg	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	kg	0.10	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	kg	0.06	0.00	0.00	0.00	0.00	0.00
Exported energy, electricity	MJ	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy, thermal	MJ	0.00	0.00	0.00	0.00	0.00	0.00

ABBREVIATIONS

ABBREVIATION	DEFINITION
General Abbreviations	
EN	European Norm (Standard)
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
CEN	European Committee for Standardization
CLC	Co-location centre
CPC	Central product classification
GHS	Globally harmonized system of classification and labelling of chemicals
gGRI	Global Reporting Initiative
SVHC	Substances of Very High Concern
ND	Not Declared
CPN	Natural Portland Cement
CPC	Ordinary Portland Cement

REFERENCES

a) General Programme Instructions of International EPD System. Version 5.0.1.

b) PCR 2019:14. Construction products. Version 2.0.1.

c) C-PCR Cement and building lime. Version 1.0.0.

d) Boulay, A.-M., Bare, J., Benini, L., Berger, M., Lathuilliere, M. J., Manzardo, A., Pfister, S. (2017, June 8). TheWULCA consensus characterization model for water scarcity footprints: assessing impacts of waterconsumption based on available water remaining (AWARE). (S. M. Laren, Ed.) Int. J. Life Cycle Assess, 23(DOI 10.1007/s 11367-017-1333-8), 368 - 378.

e) Comisión Europea. (2010). ILCD handbook: General guide for life cycle assessment - Detailed guidance (1ra ed.).

f) Dirección Nacional de Cambio Climático. (2020). ¿Qué es el Cambio Climático? Obtenido de Secretaría de Cambio Climático y Desarrollo Sustentable de la Secretaría de Gobierno de Ambiente y Desarrollo Sustentable de la Nación (SAyDS): https://www.argentina.gob.ar/ambiente/sustentabilidad/cambioclimatico

g) Ecoinvent. (2007). Life Cycle Inventories of Building Products. Dübendorf.

h) EN 15804. (2021). Sostenibilidad en la Construcción Declaraciones Ambientales de Producto Regla de categoría Básicas para Productos de la Construcción. Errantum Europeo. Madrid.

i) EPD International AB. (2025). PCR 2015:03 Basic iron or steel products and special steels, except construction steel products (Version 3.0.0). Product Category Rules (PCR). EPD International AB.

j) Goedkoop, M., Heijungs, R., Huijbregts, M., Schryver, A. D., Struijs, J., & van Zelm, R. (2008). ReCiPe. Neatherlands.

k) PCC. (2006). Volume 3: Industrial Processes and Product Use, Chapter 2: Mineral Industry Emissions.

l) ISO 14046. (2014, 08 01). ISO 14046 Environmental management - Water footprint - Principles, requeriments and guidelines. Firts Edition, 1-33. Vernier, Ginebra, Switzerland: ISO.

m) IVL Instituto Sueco de Investigación Ambiental, Secretaría del Sistema Internacional de DAP, CTME, Concrete NZ, Monk Spaces, Aquafil SpA. (2024). PCR 2019:14 En proceso de actualización - Productos de construcción (EN 15804+A2) (1.3.4). Obtenido de The EPD Portal: https://environdec.com/pcr-library/with-documents.

n) Madías, J. (2012). Reciclado de barros y polvos de acería al oxígeno. Acero Latinoamericano. Obtenido de https://www.researchgate.net/publication/262565901_Reciclado_de_barros_y_polvos_de_aceria_al_oxigeno.

o) Madías, J. (2016). Reciclado de laminillo de laminación y colada continua. Acero Latinoamericano. Obtenido de https://www.researchgate.net/publication/305000538_Reciclado_de_laminillo_de_laminacion_y_colada_continua.

p) European Committee for Standardization. (2022). EN 16908:2017+A1:2022 Cement and building lime — Environmental product declarations — Product category rules complementary to EN 15804. CEN.

VERSION HISTORY

Original Version of the EPD, 2026-02-24

LOMA NEGRA

EPD
INTERNATIONAL EPD SYSTEM

EPD
Argentina