



**Environmental  
Product  
Declaration**

According to ISO14025+EN15804 A2 (+indicators A1)

This declaration is for:  
**Calumex® UPC White**

Provided by:  
**Caltra Nederland B.V.**



MRPI® registration  
**1.1.00753.2025**

program operator  
**Stichting MRPI®**  
publisher  
**Stichting MRPI®**  
[www.mrpi.nl](http://www.mrpi.nl)

date of first issue  
**12-12-2024**  
date of this issue  
**12-12-2024**  
expiry date  
**12-12-2029**





### COMPANY INFORMATION

Caltra Nederland B.V.  
Communicatieweg 21, P.O. Box 306  
3640 AH  
Mijdrecht  
Netherlands  
31297289340  
QC@caltra.com  
<https://caltra.com>

### MRPI® REGISTRATION

1.1.00753.2025

### DATE OF THIS ISSUE

12-12-2024

### EXPIRY DATE

12-12-2029

### SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Gert-Jan Vroege, Eco-Intelligence. The LCA study has been done by Max Molhuizen, SGS Search. The certificate is based on an LCA-dossier according to ISO14025+EN15804 A2 (+indicators A1). It is verified according to the 'MRPI®-EPD verification protocol November 2020.v4.0'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2. Declaration of SVHC that are listed on the 'Candidate list of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

### PROGRAM OPERATOR

Stichting MRPI®  
Kingsfordweg 151  
1043 GR  
Amsterdam

### PRODUCT

Calumex® UPC White

### DECLARED UNIT / FUNCTIONAL UNIT

1000 Weight per piece (kg)

### DESCRIPTION OF PRODUCT

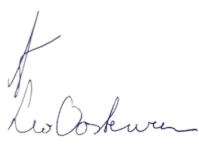

Calumex® UPC White is an advanced amorphous calcium aluminate (ACA)-baes white cement designed to deliver superior performance and aesthetics in both decorative and structural applications. Its pristine white color and enhanced durability make it ideal for architectural precast elements, terrazzo flooring, glass fiber-reinforced concrete (GRC), and self-leveling mortars.

### VISUAL PRODUCT



### MORE INFORMATION

<https://caltra.com>

<p>Ing. L. L. Oosterveen MSc. MBA Managing Director MRPI</p>	<p>DEMONSTRATION OF VERIFICATION</p>
	<p>CEN standard EN15804 serves as the core PCR [1]</p>
	<p>Independent verification of the declaration an data according to ISO14025+EN15804 A2 (+indicators A1) internal: external: X</p>
	<p>Third party verifier: Gert-Jan Vroege, Eco-Intelligence</p> 
	<p>[1] PCR = Product Category Rules</p>





## DETAILED PRODUCT DESCRIPTION (PART 1)

### Production

Calumex® UPC White uses lower kiln temperatures in its calcination process that tend to be lower than traditional cements, this way Calumex® UPC White is actively reducing their energy consumption during manufacturing. Its softer clinker further optimizes energy use by reducing grinding requirements. Calumex® UPC White strives to achieve a lower environmental footprint by combining these factors in the production phase.

## DETAILED PRODUCT DESCRIPTION (PART 2)

### Application

Calumex® UPC White is an advanced amorphous calcium aluminate (ACA)-baes white cement designed to deliver superior performance and aesthetics in both decorative and structural applications. Its pristine white color and durability make it ideal for architectural precast elements, terrazzo flooring, glass fiber-reinforced concrete (GRC), and self-leveling mortars. With rapid setting times, high early strength, and minimized shrinkage, Calumex® UPC White is suitable for innovative and demanding construction projects. The ACA-based composition ensures rapid hydration and the complete formation of ettringite, resulting in volumetric stability and a dense, closed-pore structure. This minimizes water permeability, reduces efflorescence, and prevents alkali-silica reactions, enhancing both the structural and visual longevity of the material. Its low alkalinity makes it compatible with pigments and natural stone, ensuring vibrant and consistent aesthetics over time.

Calumex® UPC White strives to reduce their environmental impact by minimizing the energy needed in the production where possible and by using materials with lower environmental footprints where it is technically possible and there is enough demand. Its unique properties align with the growing need for innovative, sustainable construction materials that maintain exceptional performance and reliability.

Component (> 1%)	%
XT-20	1-40%
Binder	1-90%

## SCOPE AND TYPE

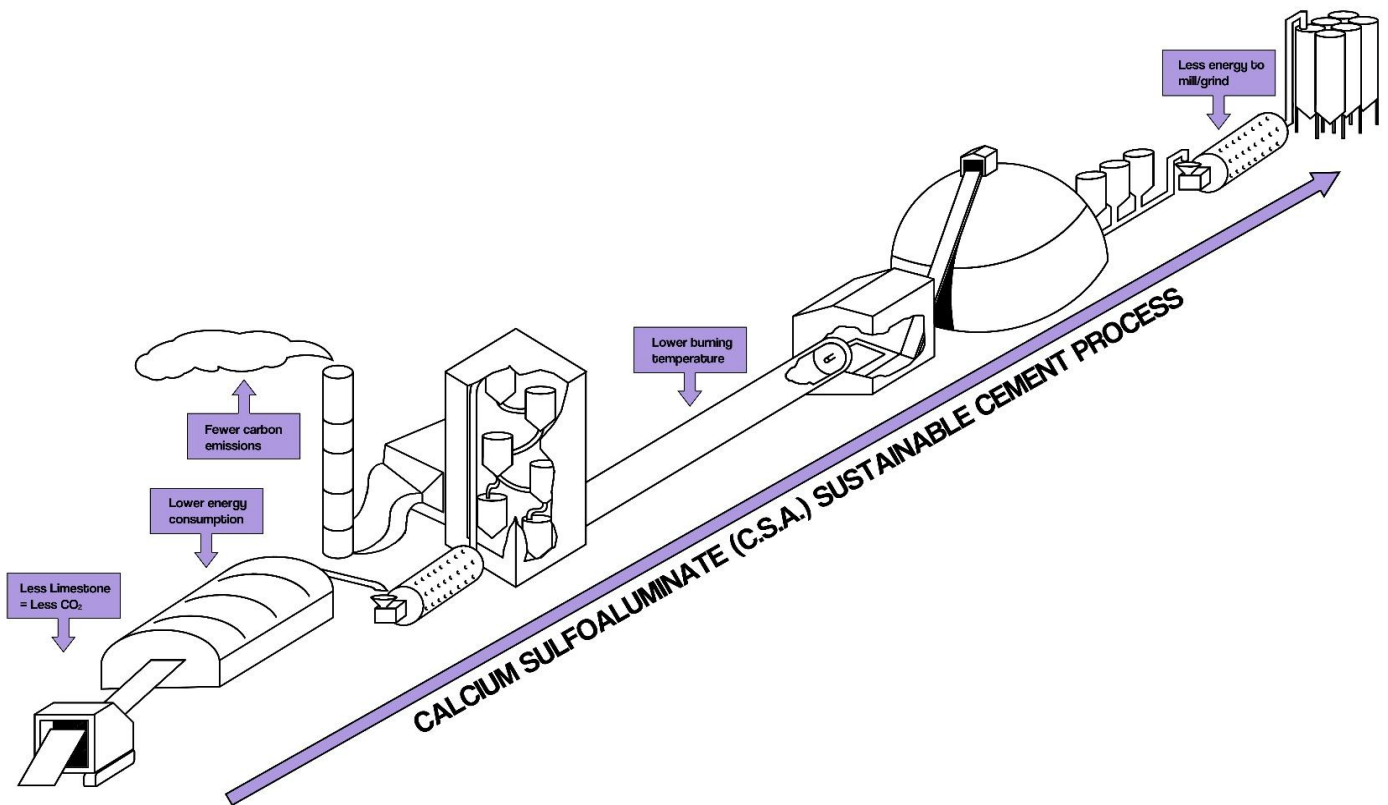
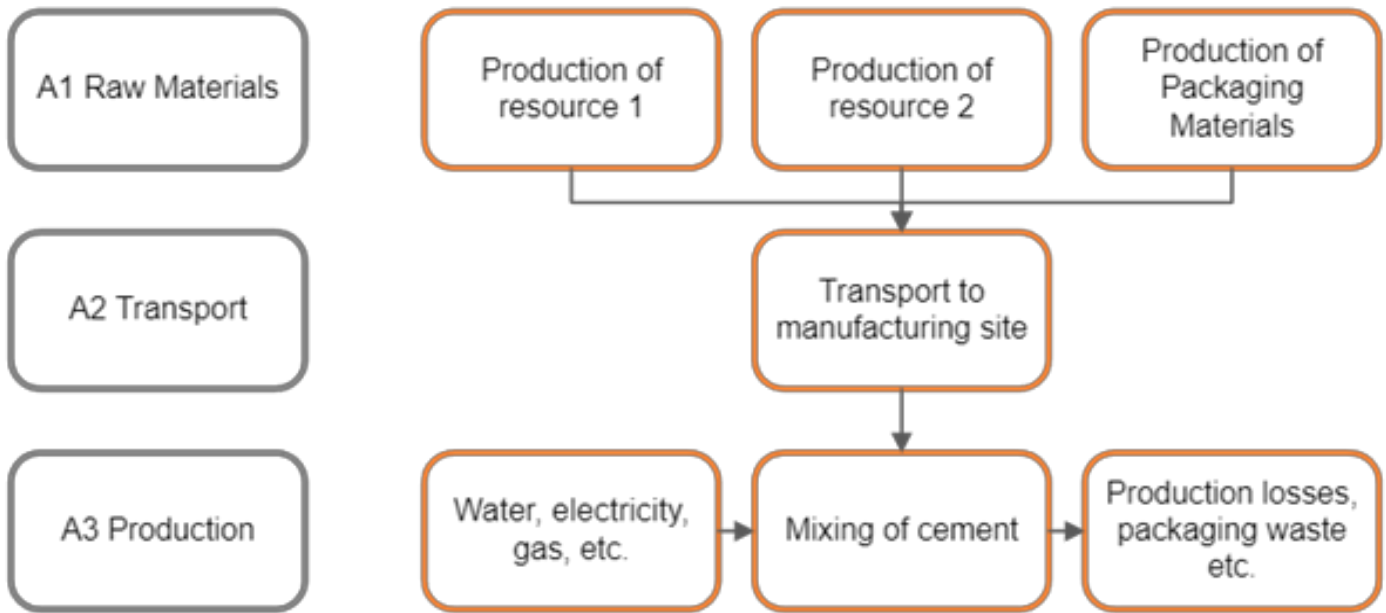
This EPD is a specific EPD made for Calumex® UPC White produced in facility Mijdrecht, The Netherlands. The material input are from suppliers across the globe. The data collection is done in production year 2023. The results are calculated with SimaPro 9.5.0.0, using the databases ecoinvent 3.6 and the NMD process database 3.9 (cut-off method system model).

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USER STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse - Recovery - Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

X = Modules Assessed

ND = Not Declared





**REPRESENTATIVENESS**

This EPD is representative for Calumex® UPC White, which is produced by Caltra Nederland B.V. at one (1) production site located in Mijdrecht, the Netherlands.

**ENVIRONMENTAL IMPACT per functional unit or declared unit (indicators A1)**

Eenheid		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADPE	kg Sb eq.	1,60E-03	6,16E-04	2,73E-04	2,48E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADPF	MJ	3,28E+03	5,09E+02	4,62E+02	4,26E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP	kg CO2 eq.	7,13E+02	3,29E+01	2,38E+01	7,70E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ODP	kg CFC11 eq.	2,14E-05	6,21E-06	9,32E-07	2,85E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POCP	kg ethene eq.	1,47E-01	2,05E-02	1,79E-02	1,86E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AP	kg SO2 eq.	1,10E+00	1,14E-01	7,42E-02	1,29E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP	kg (PO4)3- eq.	2,26E-01	2,14E-02	9,65E-03	2,57E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Toxicity indicators and ECI (Dutch market)**

HTP	kg DCB eq.	6,98E+01	1,54E+01	5,37E+00	9,06E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FAETP	kg DCB eq.	1,60E+00	4,23E-01	1,25E-01	2,15E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAETP	kg DCB eq.	8,92E+03	1,64E+03	4,92E+02	1,11E+04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TETP	kg DCB eq.	9,73E-01	5,03E-02	3,16E-02	1,06E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ECI	euro	4,99E+01	3,94E+00	2,19E+00	5,60E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADPF	kg Sn eq.	1,58E+00	2,45E-01	2,22E-01	2,05E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- ADPE = Abiotic Depletion Potential for non-fossil resources
- ADPF = Abiotic Depletion Potential for fossil resources
- GWP = Global Warming Potential
- ODP = Depletion potential of the stratospheric ozone layer
- POCP = Formation potential of tropospheric ozone photochemical oxidants
- AP = Acidification Potential of land and water
- EP = Eutrophication Potential
- HTP = Human Toxicity Potential
- FAETP = Fresh water aquatic ecotoxicity potential
- MAETP = Marine aquatic ecotoxicity potential
- TETP = Terrestrial ecotoxicity potential
- ECI = Environmental Cost Indicator
- ADPF = Abiotic Depletion Potential for fossil resources

**ENVIRONMENTAL IMPACT per functional unit or declared unit (core indicators A2)**

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	7,25E+02	3,33E+01	2,41E+01	7,82E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-fossil	kg CO2 eq	7,18E+02	3,32E+01	2,44E+01	7,76E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-biogenic	kg CO2 eq	7,32E+00	2,35E-02	-2,62E-01	7,08E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GWP-luluc	kg CO2 eq	1,61E-01	1,00E-02	1,48E-02	1,86E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ODP	kg CFC11 eq	2,20E-05	7,79E-06	9,83E-07	3,08E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AP	mol H+ eq.	1,42E+00	1,48E-01	9,10E-02	1,66E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-fresh water	kg PO4 eq.	2,24E-02	2,57E-04	8,01E-04	2,34E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-marine	kg N eq.	3,16E-01	4,63E-02	1,77E-02	3,80E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EP-terrestrial	mol N eq.	4,06E+00	5,11E-01	2,03E-01	4,78E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
POCP	kg NMVOC eq.	1,02E+00	1,60E-01	7,74E-02	1,26E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-minerals & metals	kg Sb eq.	1,60E-03	6,16E-04	2,73E-04	2,48E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ADP-fossil	MJ, net calorific value	3,40E+03	5,16E+02	4,50E+02	4,36E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
WDP	m3 world eq. Deprived	3,08E+01	1,66E+00	1,17E+01	4,41E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- GWP-total = Global Warming Potential total
- GWP-fossil = Global Warming Potential fossil fuels
- GWP-biogenic = Global Warming Potential biogenictotal
- GWP-luluc = Global Warming Potential land use and land use change
- ODP = Depletion potential of the stratospheric ozone layer
- AP = Acidification Potential, Accumulated Exceedence
- 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 Exceedence
- POCP = Formation potential of tropospheric ozone photochemical oxidants
- ADP-minerals & metals = Abiotic Depletion Potential for non-fossil resources [1]
- ADP-fossil = Abiotic Depletion for fossil resources potential [1]
- WDP = Water (user) deprivation potential, deprivation-weighted water consumption [1]

Disclaimer [1]:

- 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 experience with the indicator.

### ENVIRONMENTAL IMPACT per functional unit or declared unit (additional indicators A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	8,71E-06	3,00E-06	7,50E-07	1,25E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
IRP	kBq U235 eq.	2,13E+01	2,25E+00	7,64E-01	2,43E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETP-fw	CTUe	8,39E+03	4,12E+02	3,37E+02	9,14E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HTP-c	CTUh	1,06E-06	1,09E-08	1,80E-08	1,09E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HTP-nc	CTUh	3,76E-06	4,72E-07	2,22E-07	4,46E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SQP	-	8,10E+02	5,66E+02	8,95E+01	1,47E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- PM = Potential incidence of disease due to PM emissions
- IRP = Potential Human exposure efficiency relative to U235 [1]
- ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
- HTP-c = Potential Comparative Toxic Unit for humans [2]
- HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
- SQP = Potential soil quality index [2]

#### Disclaimer [1]:

- 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.

#### Disclaimer [2]:

- 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 experience with the indicator.

**OUTPUT FLOWS AND WASTE CATEGORIES per functional unit or declared unit (A1 en A2)**

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	2,43E-03	1,26E-03	5,74E-04	4,26E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NHWD	kg	3,29E+01	4,27E+01	1,41E+01	8,98E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RWD	kg	1,83E-02	3,52E-03	6,85E-04	2,25E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MFR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MER	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EEE	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETE	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- HWD = Hazardous Waste Disposed
- NHWD = Non Hazardous Waste Disposed
- RWD = Radioactive Waste Disposed
- CRU = Components for reuse
- MFR = Materials for recycling
- MER = Materials for energy recovery
- EEE = Exported Electrical Energy
- ETE = Exported Thermal Energy



### RESOURCE USE per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	6,06E+02	6,64E+00	5,85E+01	6,71E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PERT	MJ	6,06E+02	6,64E+00	5,85E+01	6,71E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRE	MJ	3,63E+03	5,48E+02	4,81E+02	4,66E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PENRT	MJ	3,63E+03	5,48E+02	4,81E+02	4,66E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NSRF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FW	m3	2,46E+00	5,87E-02	3,01E-01	2,82E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- PERE = Use of renewable energy excluding renewable primary energy resources  
 PERM = Use of renewable energy resources used as raw materials  
 PERT = Total use of renewable primary energy resources  
 PENRE = Use of non-renewable primary energy resources excluding non-renewable 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 resources  
 SM = Use of secondary materials  
 RSF = Use of renewable secondary fuels  
 NSRF = Use of non-renewable secondary fuels  
 FW = Use of net fresh water

### BIOGENIC CARBON CONTENT per functional unit or declared unit (A1 and A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
BCCpr	kg C	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BCCpa	kg C	0,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

- BCCpr = Biogenic carbon content in product  
 BCCpa = Biogenic carbon content in packaging



## CALCULATION RULES (PART 1)

### Declared unit

The declared unit for the life cycle assessment is 1000 kg of Calumex® UPC White.

### Data collection

Input- and output data has been provided by Caltra of the production year 2023 for the following inventory categories:

- Materials (raw materials and auxiliary materials);
- Energy (electricity and heat);
- Emissions to air, water and soil;
- Treatment and disposal of production wastes.

### Data quality

Data was validated by SGS at the process level. This means that not only the mass balance was verified, but that in the case of major deviations from the average (for all type of in- and output) the suppliers were asked for further explanation.

### Allocations

Allocation of environmental interventions can apply to multi-input, multi-output, recycling and reuse processes. No allocation of multi output processes is applied in this study. For other allocations, the provisions from the EN 15804 are followed.

### Cut-off criteria

This LCA contains all relevant data. The following processes are not included in this LCA:

- Assumed is that the maintenance and use of auxiliary equipment have a negligible contribution to the total (<1%). Because of this, these processes are not taken in account in this LCA, except such processes that are included in the Ecoinvent background data.
- Assumed is that the capital goods and infrastructure processes have a negligible contribution. These processes are not taken in account in this LCA, except such processes that are included in the Ecoinvent background data.

There is no reason to believe that relevant in- or outputs are excluded from this study.

## SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (PART 1)

### Applications

Calumex UPC White is especially developed for decorative concrete such as:

- Terrazzo
- Dry-mixed mortars
- Decorative flooring
- Architectural precast
- Glass fibre reinforced concrete (GRC)

The specially selected high purity raw materials combined with optimized calcination and carefully monitored grinding guarantees a stable quality and a consistent white colour. Besides the high whiteness the Calumex UPC White achieves very high (early) strengths, and has a high abrasion resistance. These qualities make it also suitable for:

- Concrete runway / roadway repair
- Tunneling
- Bridge deck repair
- Concrete repair mortars
- Non-shrink grouts
- Manhole repair

## SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (PART 2)

### Properties

Calumex UPC White is based on A.C.A. technology, which increases (early) strength development, reduces setting times, and compensates the shrinkage of traditional Portland cement. The Calumex UPC White can be used as a straight binder or blended with (white) Portland cement resulting in a highly durable concrete or mortar. Concrete or mortars based on a UPC-system will achieve strengths of a CEM I 52,5 within 6 hours instead of 28 days. Conventional retarders can be used in UPC formulations however, we advise using the Delta 20, which was specifically developed for these rapid setting systems. The Delta 20 will increase the workability/pot life by delaying the setting time without diminishing the rapid set. Depending on the dosage the Delta 20 will have little to no effect on the strength development. The A.C.A. technology uses nearly 100% of the water needed during the hydration process, leaving very little water to contribute towards shrinkage as occurs in traditional systems. Due to the high initial strength development, negligible shrinkage occurs after the initial set.



### SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (PART 3)

Technical data

In the table below, the compressive strength of the products is presented. The Vicat-time (min) from the beginning >5:00 to end <15:00 is tested.

	Temperature (°C)	Tim (min)	Compressive strength - 1 (avg)	Compressive strength - 2 (avg)	Compressive strength - 3 (avg)
Compressive Strength development (MPa)	> 55	≤ 40:00	18 (± 4)	56 (± 4)	70 (± 5)

### SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (PART 4)

Product stage (A1-A3)

This stage consists of the extraction of raw materials, energy which occurs upstream to the manufacturing process, transportation of raw materials, processing of the raw materials into the final product with all processes and energy required for production as well as packaging materials.

Data collection was performed by Caltra in cooperation with their suppliers. The manufacturer compiled mass and energy balances based on average production in year 2023. The production facility in Mijdrecht uses renewable electricity from photovoltaic panels (own production) in their production process.

### DECLARATION OF SVHC

No substances of very high concern are present in concentrations greater than 0,1% by weight in the product.

### REFERENCES

NMD Bepalingsmethode Milieuprestatie Bouwwerken 1.1, NMD March 2022.

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

ISO, 2006. "Environmental management. Life cycle assessment - Principles and framework". ISO 14040:2006.

ISO, 2006. "Environmental management. Life cycle assessment – Requirements and Guidelines". ISO 14044:2006.

ISO, 2000. "Environmental labels and declarations – Type III environmental declarations", ISO/TR 14025:2000.

