

Environmental product declaration

In accordance with 14025 and EN15804+A2

Dalapro Edge



Dalapro[®]

The Norwegian EPD Foundation

Owner of the declaration:

Saint-Gobain Sweden AB, Scanspac

Product:

Dalapro Edge

Declared unit:

1 kg

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR

NPCR 009:2018 Part B for Technical - Chemical products in the building and construction industry

Program operator:

The Norwegian EPD Foundation

Declaration number:

NEPD-4868-3774-EN

Registration number:

NEPD-4868-3774-EN

Issue date: 31.08.2023

Valid to: 31.08.2028

EPD Software:

LCA.no EPD generator ID: 62962

General information

Product

Dalapro Edge

Program operator:

Post Box 5250 Majorstuen, 0303 Oslo, Norway
The Norwegian EPD Foundation
Phone: +47 23 08 80 00
web: post@epd-norge.no

Declaration number: NEPD-4868-3774-EN

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 009:2018 Part B for Technical - Chemical products in the
building and construction industry

Statement of liability:

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

Declared unit:

1 kg Dalapro Edge

Declared unit with option:

A1,A2,A3,A4,A5,C1,C2,C3,C4,D

Functional unit:

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.
Individual third party verification of each EPD is not required when the
EPD tool is i integrated into the company's environmental
management system, ii the procedures for use of the EPD tool are
approved by EPD Norway, and iii the process is reviewed annually. See
Appendix G of EPD-Norway's General Programme Instructions for
further information on EPD tools.

Verification of EPD tool:

Independent third party verification of the EPD tool, background data
and test-EPD in accordance with EPD Norway's procedures and
guidelines for verification and approval of EPD tools.

Third party verifier:

Anne Rønning, Norsus AS
(no signature required)

Owner of the declaration:

Saint-Gobain Sweden AB, Scanspac
Contact person: Christian Borgenfalk
Phone: +46 (019-46 34 00
e-mail: ehs.scanspac@dalapro.com

Manufacturer:

Saint-Gobain Sweden AB, Scanspac

Place of production:

Saint-Gobain Sweden AB, Scanspac
Kemivägen 7
SE-705 97 Glanshammar, Sweden

Management system:

ISO 9001, ISO 14001

Organisation no:

556241-2592

Issue date: 31.08.2023

Valid to: 31.08.2028

Year of study:

2022

Comparability:

EPD of construction products may not be comparable if they not
comply with EN 15804 and seen in a building context.

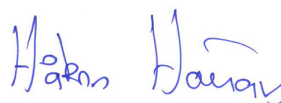
Development and verification of EPD:

The declaration is created using EPD tool lca.tools ver EPD2022.03,
developed by LCA.no. The EPD tool is integrated in the company's
management system, and has been approved by EPD Norway.

Developer of EPD: Ellinor Johansson

Reviewer of company-specific input data and EPD: Christian
Borgenfalk

Approved:



Håkon Hauan
Managing Director of EPD-Norway

Product

Product description:

Dalapro Edge is a ready-mix filler that works equally well on both concrete and plaster. The unique filling properties mean that you save up to one treatment on plasterboard joints and corner protection. Product shrinks minimally over time. Edge is approved for paper tape and corner protection Habito and LevelLine.

Product specification

Packaging: Dalapro Edge 10 litre is packaged in a bucket manufactured in 100 % recyclable plastic and consists of at least 90 % recycled plastic.

Materials	Value	Unit
Filler dolomite	20-50	%
Water	20-50	%
Binder	2,5-10	%
Additives	2,5-10	%
Packaging		
Pallet		
Filler pumice	10-20	%
Filler expanded alumina silicate	10-20	%

Technical data:

TECHNICAL DATA

Binding agent: Latex co-polymer

Solvent: Water

Grain size: Max. 0,2 mm

pH: Approx. 9

Colour: White

Market:

Europe

Reference service life, product

Filler has a limited shelf life and is date-marked. Unopened packaging can be kept in a dark place, free from frost, for up to 12 months. Containers that have been opened must be sealed well.

Reference service life, building

LCA: Calculation rules

Declared unit:

1 kg Dalapro Edge

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Incoming energy and water and waste production in-house is allocated equally among all products through mass allocation. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

Specific data for the product composition are provided by the manufacturer. The data represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on EPDs according to EN 15804 and different LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Aggregate	ecoinvent 3.6	Database	2019
Cellulose Ether	ecoinvent 3.6	Database	2019
Filler	ecoinvent 3.6	Database	2019
Packaging	ecoinvent 3.6	Database	2019
Water	ecoinvent 3.6	Database	2019
Chemical	LCA.no	Database	2021
Packaging	Modified ecoinvent 3.6	Database	2019
Packaging	Modified ecoinvent 3.6	Database	2019

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

Product stage			Construction installation stage		Use stage							End of life stage				Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	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	X	X	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X

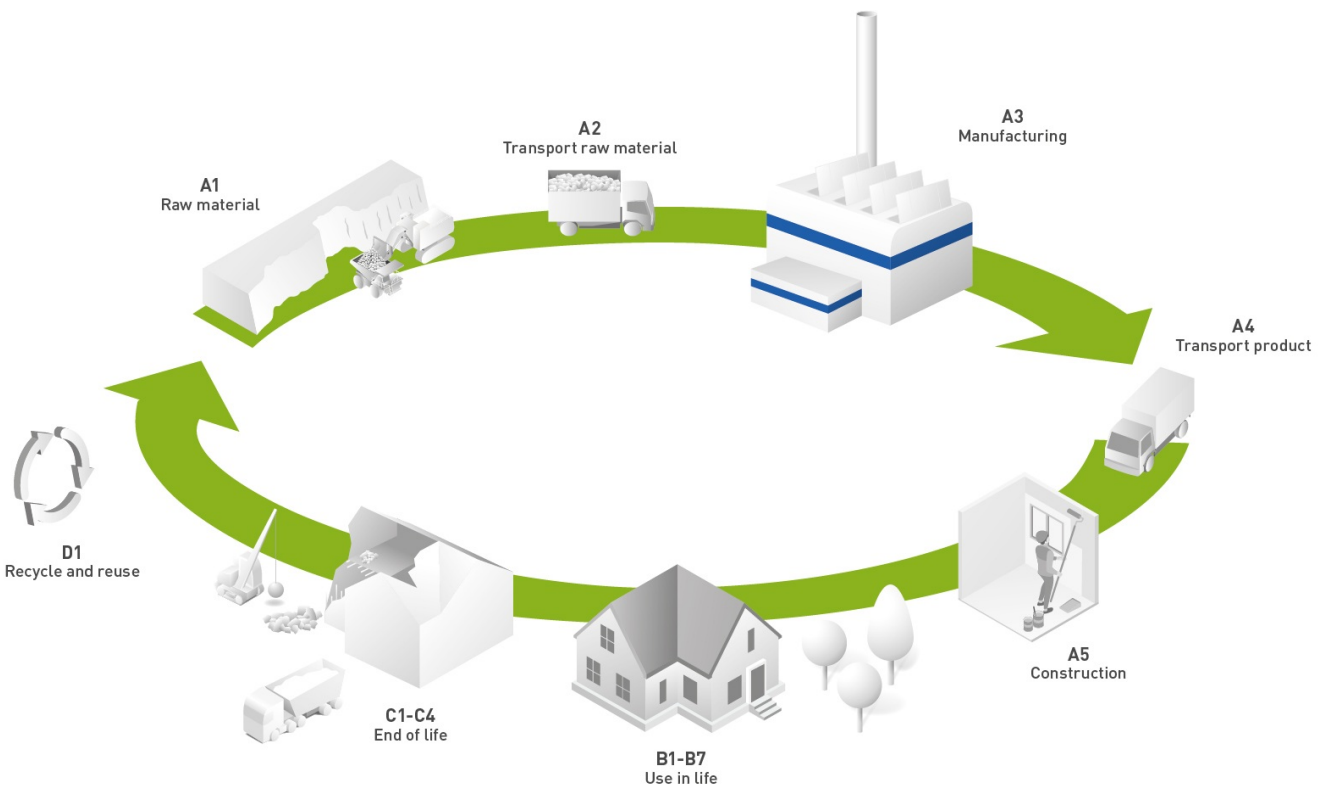
System boundary:

A1-A5: All processes from raw material extraction, transport of raw material to production site, production, transport to the construction site and assembly are included in the analysis.

B1-B5: The user stage is not considered in this EPD.

C1-C4 and D: End of life stage and phases beyond the system boundary is part of the EPD.

System boundaries shows in the picture below.



Additional technical information:

The product meets CE-marking requirements in accordance with EN 13963











LCA: Scenarios and additional technical information

The following information describe the scenarios in the different modules of the EPD.

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, over 32 tonnes, EURO 6	53,3 %	300	0,023	l/tkm	6,90
Assembly (A5)					
Unit	Value				
Waste, packaging, pallet, EUR wooden pallet, reusable, to average treatment (kg)	kg	0,05			
Waste, packaging, plastic (LDPE), to average treatment (kg)	kg	0,00			
Waste, packaging, Polypropylene (PP), to average treatment (kg)	kg	0,04			
Transport to waste processing (C2)					
Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)	
Truck, over 32 tonnes, EURO 5	53,3 %	50	0,023	l/tkm	1,15
Waste processing (C3)					
Unit	Value				
Waste treatment of product after demolition (kg)	kg	0,90			
Disposal (C4)					
Unit	Value				
Disposal of product in landfill (kg)	kg	0,10			
Benefits and loads beyond the system boundaries (D)					
Unit	Value				
Substitution of primary aggregates with crushed recycled products (kg)	kg	0,90			

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

Environmental impact											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
 GWP-total	kg CO ₂ -eq	2,28E-01	5,94E-02	1,33E-02	2,61E-02	7,35E-02	0	4,55E-03	6,48E-04	8,21E-04	-2,10E-03
 GWP-fossil	kg CO ₂ -eq	2,89E-01	5,94E-02	1,18E-02	2,61E-02	3,35E-03	0	4,54E-03	6,39E-04	8,20E-04	-2,06E-03
 GWP-biogenic	kg CO ₂ -eq	-6,25E-02	2,53E-05	1,45E-03	1,12E-05	7,02E-02	0	1,86E-06	5,52E-06	9,58E-07	-4,11E-05
 GWP-luluc	kg CO ₂ -eq	5,87E-04	1,80E-05	6,77E-06	7,96E-06	2,68E-07	0	1,33E-06	8,84E-07	2,02E-07	-1,39E-06
 ODP	kg CFC11-eq	3,32E-08	1,43E-08	6,28E-10	6,30E-09	2,07E-10	0	1,05E-09	1,25E-10	3,11E-10	-3,75E-10
 AP	mol H ⁺ -eq	3,01E-03	1,98E-04	8,57E-05	8,41E-05	4,55E-06	0	1,91E-05	5,17E-06	7,30E-06	-1,85E-05
 EP-FreshWater	kg P -eq	1,44E-05	4,70E-07	4,34E-07	2,08E-07	7,51E-09	0	3,47E-08	4,04E-08	9,30E-09	-5,48E-08
 EP-Marine	kg N -eq	2,84E-04	4,55E-05	5,92E-05	1,84E-05	3,92E-06	0	5,74E-06	1,52E-06	2,71E-06	-6,43E-06
 EP-Terrestrial	mol N -eq	3,02E-03	5,07E-04	3,89E-04	2,05E-04	1,68E-05	0	6,35E-05	1,75E-05	2,99E-05	-7,56E-05
 POCP	kg NMVOC-eq	1,06E-03	1,93E-04	6,76E-05	8,07E-05	5,37E-06	0	2,04E-05	4,68E-06	8,56E-06	-2,00E-05
 ADP-minerals&metals ¹	kg Sb -eq	5,30E-06	1,05E-06	8,25E-08	4,66E-07	1,85E-08	0	7,76E-08	8,11E-09	7,39E-09	-1,83E-07
 ADP-fossil ¹	MJ	5,50E+00	9,60E-01	4,39E-02	4,24E-01	1,43E-02	0	7,07E-02	1,98E-02	2,26E-02	-3,49E-02
 WDP ¹	m ³	8,08E+01	7,36E-01	-9,29E-01	3,25E-01	4,90E-02	0	5,42E-02	2,19E+00	1,39E-01	-1,63E+00







GWP total Global Warming Potential total; GWP fossil Global Warming Potential fossil fuels ; GWP biogenic Global Warming Potential biogenic; GWP luluc Global Warming Potential land use change; ODP Ozone Depletion; AP Acidification; EP freshwater Eutrophication aquatic freshwater; EP marine Eutrophication aquatic marine; EP terrestrial Eutrophication terrestrial ;POCP Photochemical zone formation; ADPE Abiotic Depletion Potential minerals and metals; ADPf Abiotic Depletion Potential fossil fuels;

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

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 experienced with the indicator

Remarks to environmental impacts











Additional environmental impact indicators												
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
 PM	Disease incidence	1,57E-08	5,43E-09	1,45E-09	2,40E-09	7,90E-11	0	4,00E-10	8,30E-11	1,56E-10	-3,95E-10	
 IRP ²	kgBq U235 -eq	3,70E-02	4,20E-03	1,57E-04	1,85E-03	6,39E-05	0	3,09E-04	3,33E-04	1,03E-04	-3,20E-04	
 ETP-fw ¹	CTUe	7,40E+00	7,02E-01	1,35E-01	3,10E-01	1,38E-02	0	5,17E-02	1,41E-02	1,23E-02	-3,59E-02	
 HTP-c ¹	CTUh	6,35E-10	0,00E+00	1,00E-11	0,00E+00	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	-1,00E-12	
 HTP-nc ¹	CTUh	5,80E-09	6,79E-10	3,12E-10	3,00E-10	1,60E-11	0	5,00E-11	1,20E-11	9,00E-12	-4,30E-11	
 SQP ¹	dimensionless	4,38E+00	1,10E+00	1,50E+00	4,87E-01	2,41E-02	0	8,11E-02	1,12E-02	8,69E-02	7,91E-02	

PM Particulate Matter emissions; IRP Ionizing radiation – human health; ETP-fw Eco toxicity – freshwater; HTP-c Human toxicity – cancer effects; HTP-nc Human toxicity – non cancer effects; SQP Soil Quality (dimensionless)

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed




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 experienced with the indicator
2. 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.

Resource use												
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
 PERE	MJ	1,12E+00	1,21E-02	1,35E-01	5,34E-03	3,57E-04	0	8,90E-04	1,02E-02	8,08E-04	-8,16E-03	
 PERM	MJ	6,43E-01	0,00E+00	0,00E+00	0,00E+00	-6,43E-01	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	
 PERT	MJ	1,77E+00	1,21E-02	1,35E-01	5,34E-03	-3,18E-02	0	8,90E-04	1,02E-02	8,08E-04	-8,16E-03	
 PENRE	MJ	4,78E+00	9,60E-01	4,39E-02	4,24E-01	1,43E-02	0	7,07E-02	1,99E-02	2,26E-02	-3,68E-02	
 PENRM	MJ	1,37E+00	0,00E+00	0,00E+00	0,00E+00	-1,37E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	
 PENRT	MJ	6,15E+00	9,60E-01	4,39E-02	4,24E-01	-1,35E+00	0	7,07E-02	1,99E-02	2,26E-02	-3,68E-02	
 SM	kg	3,65E-02	0,00E+00	5,00E-04	0,00E+00	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	
 RSF	MJ	2,04E-02	4,23E-04	9,51E-05	1,87E-04	9,42E-06	0	3,11E-05	0,00E+00	1,68E-05	-1,67E-04	
 NRSF	MJ	8,00E-03	1,42E-03	6,02E-04	6,26E-04	2,85E-05	0	1,04E-04	0,00E+00	3,62E-05	-1,71E-04	
 FW	m ³	7,56E-03	1,09E-04	4,85E-04	4,83E-05	7,70E-06	0	8,05E-06	3,40E-05	2,78E-05	-1,28E-03	

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 resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; FW Use of net fresh water

"Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"






*INA Indicator Not Assessed

End of life - Waste												
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
	HWD	kg	2,40E-03	5,26E-05	4,92E-03	2,32E-05	0,00E+00	0	3,87E-06	1,98E-06	0,00E+00	-8,40E-06
	NHWD	kg	1,10E-01	8,35E-02	3,73E-03	3,69E-02	4,38E-02	0	6,15E-03	6,26E-05	1,00E-01	-2,55E-04
	RWD	kg	2,51E-05	6,56E-06	1,88E-07	2,90E-06	0,00E+00	0	4,83E-07	2,10E-07	0,00E+00	-2,76E-07

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed;

*Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

End of life - Output flow												
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
	CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	MFR	kg	2,75E-03	0,00E+00	1,01E-03	0,00E+00	2,20E-02	0	0,00E+00	9,00E-01	0,00E+00	0,00E+00
	MER	kg	2,40E-05	0,00E+00	4,74E-05	0,00E+00	2,08E-06	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	EEE	MJ	4,87E-03	0,00E+00	7,47E-03	0,00E+00	1,01E-03	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00
	EET	MJ	7,37E-02	0,00E+00	1,13E-01	0,00E+00	1,52E-02	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00

CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported energy Thermal

*Reading example: 9,0 E-03 = 9,0*10⁻³ = 0,009"

*INA Indicator Not Assessed

Biogenic Carbon Content		
Indicator	Unit	At the factory gate
Biogenic carbon content in product	kg C	0,00E+00
Biogenic carbon content in accompanying packaging	kg C	1,91E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂

Additional Norwegian requirements

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

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Data source	Amount	Unit
Renewable electricity Saint-Gobain, based on 100% hydro power, with Guarantee of Origin from LOS 2021 (kWh)	ecoinvent 3.6	4,26	g CO2-eq/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

Indoor environment

Nordic Ecolabel
M1 - classified

Additional Environmental Information

Environmental impact indicators EN 15804+A1 and NPCR Part A v2.0											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP	kg CO ₂ -eq	3,10E-01	5,88E-02	1,27E-02	2,59E-02	3,94E-03	0	4,50E-03	6,30E-04	8,04E-04	-2,20E-03
ODP	kg CFC11 -eq	3,47E-08	1,15E-08	5,71E-10	5,10E-09	3,21E-10	0	8,50E-10	1,56E-10	2,50E-10	-3,42E-10
POCP	kg C ₂ H ₄ -eq	1,63E-04	7,32E-06	1,66E-06	3,20E-06	6,79E-07	0	5,87E-07	1,40E-07	1,89E-07	-4,59E-07
AP	kg SO ₂ -eq	2,50E-03	1,23E-04	3,19E-05	5,45E-05	8,06E-06	0	9,07E-06	2,37E-06	2,23E-06	-5,39E-06
EP	kg PO ₄ ³⁻ -eq	1,54E-04	1,34E-05	2,41E-05	5,91E-06	3,18E-06	0	9,90E-07	3,13E-07	2,64E-07	-6,32E-07
ADPM	kg Sb -eq	5,46E-06	1,05E-06	8,25E-08	4,66E-07	3,77E-08	0	7,76E-08	8,11E-09	7,39E-09	-1,83E-07
ADPE	MJ	5,05E+00	9,42E-01	4,07E-02	4,16E-01	2,74E-02	0	6,94E-02	7,62E-03	2,16E-02	-3,49E-02
GWPIOBC	kg CO ₂ -eq	3,14E-01	5,94E-02	2,36E-03	2,61E-02	0,00E+00	0	4,55E-03	1,19E-03	0,00E+00	-2,20E-03

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources; GWP-IOBC/GHG Global warming potential calculated according to the principle of instantaneous oxidation (except emissions and uptake of biogenic carbon)

Bibliography

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NPCR Part A: Construction products and services. Ver. 2.0, 24.03.2021 EPD Norway.

NPCR 009 Part B for technical-chemical products. Ver. 2.0 October 2021, EPD-Norge.

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