





# ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

# **MAPEFLOOR CPU+/MF**



Global program operatør

Publisher: The Norwegian EPD Foundation Registration number: NEPD-47-46-MRA

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."

Programme:	Programme operator:	EPD registration number:	Publication date:	Valid until:	Geographical scope:
The International EPD® System; www.environdec.com		EPD-IES-0018128	2024-11-28	2029-11-27	Europe



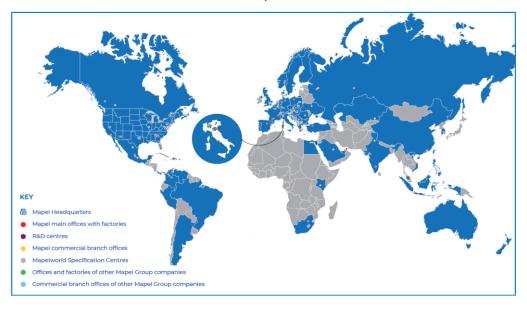
#### 1 COMPANY DESCRIPTION / GOAL & SCOPE

Founded in 1937 in Milan, Italy, Mapei produces adhesives and complementary products for laying all types of floor, wall and coating materials, and also specializes in other chemical products used in the building industry, such as waterproofing products, specialty mortars, admixtures for concrete, cement additives, products for underground constructions and for the restoration of concrete and historical buildings. There are currently 100 subsidiaries in the Mapei Group, with a total of 86 production facilities located around the world in 36 different countries and in 5 different continents. Mapei also has 32 central laboratories. Most locations are ISO 9001 and ISO 14001.

Mapei invests 12% in its company's total work-force and 5% of its turnover in Research & Development; in particular, 70% of its R&D efforts are directed to develop eco-sustainable and environmentally friendly products, which give important contribution to all major green rating systems for eco-sustainable buildings such as LEED and BREEAM. Furthermore, Mapei has developed a sales and technical service network with offices all over the world and offers an efficient Technical Assistance Service that is valued by architects, engineers, contractors and owners.

The goal of the study is to provide necessary data and documentation to produce an EPD according to the requirements of PCR Environdec (Version 1.3.4, 2024-04-30) under EN 15804:2012+A2:2019/AC:2021 and to have more comprehension about the environmental impacts related to Mapefloor CPU+ /MF manufactured in Mapei SpA located in Robbiano di Mediglia (Italy), including packaging of the finished products.

Target audiences of the study are customers and other parties with an interest in the environmental impacts of Mapefloor CPU+/MF. This analysis shall not support comparative assertions intended to be disclosed to the public.







#### **2 PRODUCT DESCRIPTION**

Mapefloor CPU+ /MF is a four components, polyurethane-cement self-smoothing mortar, trowel-applied in 3 to 6 mm thickness, developed by MAPEI's Research Laboratories, microbe-resistant and easy to sanitize for the protection of industrial floors, featuring high chemical and mechanical performance and thermal shock resistance up to +80°C, with operating temperatures range from -20°C to +70°C, depending on the thickness. Mixing ratio is: 2xA / 2xB / 1xC / 2xMapecolor CPU+.

UN CPC code: 375 - Articles of concrete, cement and plaster.

Mapefloor CPU+ /MF is available in:

• Component A: 2 kg pack

• Component B: 2.16 kg pack

• Component C: 20 kg bag

• Mapecolor CPU+: 0.23 kg pack

For more information see the TDS (Technical Data Sheet) on Mapei website (www.mapei.com).

#### **3 CONTENT DECLARATION**

The main components and ancillary materials of the products included in this EPD are the following:

Table 1: Composition referred to 1 kg of product packaged in with packaging.

Materials	Percentage (%) by mass	Post-consumer recycled material weight-% of product	Biogenic Material, weight-% of product	Biogenic Material, kgC/product
Blend of polyols	< 10%	0	5%	5,36E-02
Curing agents	< 25%	0	0	0
Inorganic binders	< 25%	0	0	0
Fillers	< 70%	0	0	0
Additives	< 8%	0	0	0
Water	< 5%	0	0	0

Packaging Materials	Weight-% (versus the product)	Weight biogenic carbon, kg C/product
HDPE	0,022	0
Wood	0,066	0,0284
Cardboard	0,01	0,004

The product does not contain a concentration higher than 0,1% (by unit weight) of either carcinogenic substances or substances of very high concern (SVHC) on the REACH Candidate List published by the European Chemicals Agency.





#### **4 DECLARED UNIT AND REFERENCE SERVICE LIFE**

#### The declared unit is 1 kg of product plus its related packaging.

Due to the selected system boundary, the reference service life of the products is not specified.

#### 5 SYSTEM BOUNDARIES AND ADDITIONAL TECHNICAL INFORMATION

The approach is "cradle to grave" (A1-A3) with modules C1-C4 and module D and optional modules (A1-A3 + A4-A5 +C + D):

- Al, A2, A3 (Product stage): extraction and processing of raw materials (Al), transportation up to the factory gate (A2), manufacturing of the finished product and packaging (A3).
- A4-A5 (Construction process stage): transport of the finished product to final customers is assumed to be 1000km (A4). The installation phase (A5) includes the electricity consumption for the mixing. The packaging is collected and sent to treatment.
- C1, C2, C3, C4 (End of Life stage): The demolition phase (C1) includes the electricity for demolition. With a collection rate of 100% as C&D waste, the transports are carried out by lorry over 100 km (C2). A recycling ratio (C3) of 70% is considered in accordance with the European Directive 2008/98/CE. The remaining 30% is landfilled (C4).
- D (Resource recovery stage): contains credits from the incineration of a fraction of packaging waste (A5) and the credit from the recycling of the product in module C3. At the end of life, the product can be collected and recycled for use in substitution of virgin raw aggregates.





Table 2: System boundaries

	Proc	duct stag	е		uction s stage		Use stage End of life					ife stage	9	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	Αl	A2	А3	A4	A5	B1	B2	В3	В4	B5	В6	В7	C1	C2	C3	C4	D
Modules declared	Х	X	Х	Х	Х	MND	MND	MND	MND	MND	MND	MND	Х	X	X	Х	X
Geography	IT, EU	IT, EU	IT	EU	EU	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Specific data			11%			-	-	-	-	-	-	-	-	-	-	-	-
Variation – products			0%			-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites			0%			-	-	-	-	-	-	-	-	-	-	-	-

MND: Module Not Declare

A brief description of production process is the following:

The production process starts from raw materials, that are purchased from external and intercompany suppliers and stored in the plant. Bulk raw materials are stored in specific silos and added automatically in the production mixer, according to the formula of the product. Other raw materials, supplied in bags, big bags or tanks, are stored in the warehouse and added automatically or manually in the mixer. The production is a discontinuous process, in which all the components are mechanically mixed in batches. The semi-finished product is then packaged, put on wooden pallets and stored in the finished products warehouse. The quality of final products is controlled before the sale.





Figure 1: production process detail.



Table 3: Transport to the building site (A4)

Scenario information	Value	Unit
Means of transport: truck-trailer euro 5, gross weight 34-40 t, payload capacity 2	27 t	
Litres of fuel (diesel for truck)	0,0169	l/100km
Transport distance - truck	1000	km
Capacity utilisation (including empty runs) - truck	85	%
Gross density of products transported	1700	kg/m3
Capacity utilisation volume factor	1	-





Table 4: Installation into the building site (A5)

Scenario information	Value	Unit
Ancillary materials for installation	0	kg
Water use	0	m³
Other resources use	0	kg
Electricity and other energy consumption for the installation	0,00261	kWh
Waste materials on building site before waste processing, generated by the product's installation (specified by type)	0,066 (Wood) 0,01 (Cardboard) 0,022 (HDPE)	kg
Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery, disposal (specified by route)	0,0411 (Incineration) 0,0011 (Landfill) 0,0558 (Recycling)	kg
Direct emission to ambient air, soil and water	0	kg

#### Table 5: End of Life (C1-C4) per DU

Scenario information	Value	Unit
Collected separately	0	kg
Collected with mixed construction waste	1	kg
Reuse	0	kg
Recycling	0,7	kg
Energy recovery	0	kg
Landfill	0,3	kg
Transport to recycling	100	km
Transport to landfill	100	km





#### **6 CUT-OFF RULES AND ALLOCATION**

Criteria for the exclusion of inputs and outputs (cut-off rules) in the LCA, information modules and any additional information are intended to support an efficient calculation procedure. They are not applied in order to hide data. Cut-off criteria, where applied, are described in Table 3.

Input flows are covered for the whole formula.

Table 3: Cut-off criteria

Process excluded from study	Cut-off criteria	Quantified contribution from process
A3: production (auxiliary materials)	Less than 10 <sup>-5</sup> kg/kg of finished product	Sensitivity study demonstrates a relative contribution lower than 0,5%

For the allocation procedure and principles consider the following table (Table 4):

Table 4: Allocation procedure and principles

Module	Allocation Principle
Al	All data are referred to 1 kg of product Al: electricity is allocated to the specific production line
A3	All data are referred to 1 kg of packaged product A3-wastes: all data are allocated to the whole production plant





#### 7 ENVIRONMENTAL PERFORMANCE AND INTERPRETATION

The following tables show the environmental impacts for the products considered according to the requirements of EN15804:2012+A2:2019/AC:2021. The Characterization Factors are based on EF 3.1 package. The results are referred to the declared unit (see § 4). The additional environmental indicators are not declared. 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. We discourage the use of the outcomes from modules A1-A3 without considering the results obtained from modules C.

## **Mapefloor CPU+/MF**

#### (1 kg of product plus packaging)

Table 5: Mapefloor CPU+/MF: Potential environmental impact - mandatory indicators according to EN 15804 referred to 1 kg of product plus packaging.

Indicator	Unit	A1 – A3	A4	A5	C1	C2	C3	C4	D
GWP <sub>TOTAL</sub>	(kg CO <sub>2</sub> eq.)	8,42E-01	7,33E-02	1,30E-01	1,45E-03	8,62E-03	1,87E-03	1,52E-01	-2,37E-02
GWP <sub>FOSSIL</sub>	(kg CO <sub>2</sub> eq.)	1,04E+00	6,91E-02	5,41E-02	1,43E-03	8,12E-03	1,88E-03	4,49E-03	-2,37E-02
GWPBIOGENIC	(kg CO <sub>2</sub> eq.)	-2,09E-01	3,07E-03	7,63E-02	1,29E-05	3,61E-04	-3,56E-05	1,48E-01	-4,92E-05
GWPLULUC	(kg CO <sub>2</sub> eq.)	1,49E-02	1,13E-03	2,63E-05	2,18E-07	1,33E-04	2,54E-05	2,69E-05	-2,11E-05
ODP	(kg CFC 11 eq.)	1,15E-06	9,91E-15	2,76E-14	3,25E-14	1,16E-15	3,39E-15	1,21E-14	-1,20E-13
AP	(mol H⁺ eq.)	7,44E-03	2,18E-04	3,09E-05	2,76E-06	1,07E-05	9,39E-06	3,19E-05	-2,44E-05
EPFRESHWATER	(kg P eq.)	1,48E-04	2,87E-07	1,43E-08	5,97E-09	3,38E-08	7,30E-09	1,02E-08	-2,68E-08
EP <sub>MARINE</sub>	(kg N eq.)	2,29E-03	9,99E-05	1,18E-05	6,90E-07	3,86E-06	4,32E-06	8,21E-06	-9,01E-06
EPTERRESTRIAL	(mol N eq.)	2,44E-02	1,12E-03	1,34E-04	7,22E-06	4,60E-05	4,78E-05	9,04E-05	-9,84E-05
POCP	(kg NMVOC eq.)	3,28E-03	2,09E-04	3,10E-05	1,82E-06	1,06E-05	1,20E-05	2,51E-05	-2,43E-05
ADP <sub>MINERALS&amp;METALS</sub> *	(kg Sb eq.)	4,00E-06	5,86E-09	3,74E-10	2,68E-10	6,89E-10	1,97E-09	2,91E-10	-1,52E-09
ADP <sub>FOSSIL</sub> *	(MJ)	2,03E+01	8,86E-01	5,84E-02	3,00E-02	1,04E-01	3,51E-02	5,92E-02	-3,95E-01
WDP*	(m³ world eq.)	7,35E+00	1,04E-03	6,72E-03	3,90E-04	1,22E-04	3,59E-04	5,14E-04	-1,34E-03

**GWP**<sub>TOTAL</sub>: Global Warming Potential total; **GWP**<sub>FOSSIL</sub>: Global Warming Potential fossil fuels; **GWP**<sub>BIOGENIC</sub>: Global Warming Potential biogenic; **GWP**<sub>LULUC</sub>: Global Warming Potential land use and land use change; **ODP**: Depletion Potential of the stratospheric Ozone layer; **AP**: Acidification Potential; **EP**<sub>FRESHWATER</sub>: Eutrophication Potential, freshwater; **EP**<sub>MARINE</sub>: Eutrophication Potential, marine; **EP**<sub>TERRESTRIAL</sub>: Eutrophication Potential, terrestrial; **POCP**: Formation potential of tropospheric ozone; **ADP**<sub>MINERALS&METALS</sub>: Abiotic Depletion Potential for non-fossil resources; **ADP**<sub>FOSSIL</sub>: Abiotic Depletion Potential for fossil resources; **WDP**: Water Deprivation Potential.

Table 6: Mapefloor CPU+/MF: Potential environmental impact – additional mandatory and voluntary indicators referred to 1 kg of product plus packaging.





<sup>\*</sup>The results of this environmental impact indicator shall be used with care as the uncertainties of the results are high and as there is limited experience with the indicator.

Indicator	Unit	A1 – A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG	(kg CO <sub>2</sub> eq.)	1,05E+00	7,04E-02	5,41E-02	1,45E-03	8,28E-03	1,91E-03	4,53E-03	-2,38E-02

**GWP-GHG**: 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. This new indicator cannot be compared with the GWP-GHG of the EPD according to the old PCR 1.2 (and earlier versions).

Table 7: Mapefloor CPU+/MF: Use of resources referred to 1 kg of product plus packaging.

Indicator	Unit	A1 – A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	2,90E+00	7,63E-02	1,44E+00	2,17E-02	8,97E-03	3,75E-03	1,03E-02	-7,87E-02
PERM	MJ	1,42E+00	0,00E+00	-1,42E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	4,33E+00	7,63E-02	1,92E-02	2,17E-02	8,97E-03	3,75E-03	1,03E-02	-7,87E-02
PENRE	MJ	1,93E+01	8,86E-01	1,02E+00	3,00E-02	1,04E-01	3,51E-02	5,92E-02	-3,95E-01
PENRM	MJ	1,01E+00	0,00E+00	-9,61E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,03E+01	8,86E-01	5,84E-02	3,00E-02	1,04E-01	3,51E-02	5,92E-02	-3,95E-01
SM	kg	0,00E+00	0,00E+00	0,00E+00	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	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	$m^3$	2,50E-01	8,51E-05	1,64E-04	1,65E-05	9,99E-06	1,05E-05	1,57E-05	-7,54E-05

**PERE**: Use of renewable primary energy excluding renewable primary energy resources used as raw materials; **PERM**: Use of renewable primary energy resources (primary energy and primary energy resources used as raw materials); **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 (primary energy and primary energy resources used as raw materials); **SM**: Use of secondary material; **RSF**: Use of renewable secondary fuels; **NRSF**: Use of non-renewable secondary fuels; **FW**: Net use of fresh water.

According to Annex 3 of PCR 1.3.4, the option B for the calculation of primary energy use indicators has been used.





Table 8: Mapefloor CPU+/MF: Waste production and output flows referred to 1 kg of product plus packaging.

Indicator	Unit	A1 – A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	4,32E-02	3,39E-11	3,64E-11	4,33E-11	3,99E-12	5,08E-12	1,48E-11	-1,61E-10
NHWD	kg	1,05E-02	1,45E-04	8,22E-03	2,48E-05	1,70E-05	9,66E-06	3,00E-01	-1,43E-02
RWD	kg	1,48E-04	1,61E-06	3,54E-06	4,79E-06	1,90E-07	4,42E-07	6,22E-07	-1,61E-05
Components for re-use	kg	0,00E+00							
Materials for recycling	kg	6,00E-03	0,00E+00	5,58E-02	0,00E+00	0,00E+00	7,00E-01	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	4,11E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	0,00E+00	0,00E+00	5,77E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	1,08E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

**HWD**: Hazardous waste disposed; **NHWD**: Non-Hazardous waste disposed; **RWD**: Radioactive waste disposed

Table 9: Mapefloor CPU+/MF: Information on biogenic carbon content at the factory gate referred to 1 kg of product plus packaging.

Biogenic Carbon Content	Unit	Quantity
Biogenic carbon content in product	kg C	5,36E-02
Biogenic carbon content in packaging	kg C	3,24E-02

More details about electrical mix used in this EPD, is shown below:

	Data source	GWP-GHG	Unit
Residual electricity grid mix (IT) – 2022	Ecoinvent 3.10	0,647	kg CO2-eqv/kWh





## **8 DATA QUALITY**

Table 10: Data quality

Dataset & Geographical reference	Database (source)	Temporary reference
	A1; A3	
Blend of polyols	Sphera Database	2022
Curing agents	Sphera Database	2022
Inorganic binders	Sphera Database; EPD from suppliers	2023
Fillers	Sphera Database	2022
Additives	Sphera Database; Ecoinvent 3.10	2022
Water	Sphera Database	2022
Residual electricity mix (IT)	Ecoinvent 3.10	2022
Packaging components (EU)	Sphera Database; Ecoinvent 3.10	2023
	A2	
Truck, Euro 5, 27t payload (GLO)	Sphera Database	2023
Oceanic ship (27500 DWT – GLO)	Sphera Database	2023
Diesel for transport (EU)	Sphera Database	2020
Heavy Fuel Oil (EU)	Sphera Database	2020
	A4	
Truck, Euro 5, 27t payload (GLO)	Sphera Database	2023
Diesel for transport (EU)	Sphera Database	2020
	A5	
Commercial waste in municipal waste incineration plant	Sphera Database	2023
Inert matter on landfill	Sphera Database	2023
Electricity grid mix (NO)	Sphera Database	2020
	C1-C4	
Truck (EURO 6 - 9,3 ton payload – GLO)	Sphera Database	2023
Electricity grid mix (EU)	Sphera Database	2020
Diesel for transport (EU)	Sphera Database	2020
Construction waste dumping (EU)	Sphera Database	2023
Construction waste treatment (EU)	Sphera Database	2023





All data included in table above refer to a period between 2020-2023; the most relevant ones are specific from supplier, while the others (i.e. transport and minor contribution dataset), come from European and global databases. All datasets are not more than 10 years old according to EN 15804 §6.3.8.2 "Data quality requirements".

The Quality level concerning datasets used in the EPD can be considered as "very good" or "good" according to Annex E of the EN 15804 (current version).

Primary data concern the year 2023 and represent the whole annual production.

#### 9 ADDITIONAL INFORMATION

#### 9.1 9.2 Biogenic carbon content

Mapefloor CPU+/MF contains 5% of biogenic carbon in the final product.

#### 9.2 VOC emission

Mapefloor CPU+/MF is "Indoor Air Comfort Gold" certified.







#### 9.3 Indication for the calculation of different scenario of module A4 (Transport from the factory to the jobsite)

To calculate the impact of transporting 1 kg of product from the factory gate (Mediglia, Italy) to the jobsite, use the following formula:

Transport Impact = EF (kg/DU) \* distance (km)

EF: Emission Factor; DU: declared Unit

Table 11: The EFs are related to 1 kg of product transported with truck EURO 5 and EURO 6

Impact Category	Unit	EF (EURO 5)	EF (EURO 6)	
GWP <sub>TOTAL</sub>	(kg CO₂ eq.)/km	6,68E-05	6,57E-05	
GWP <sub>FOSSIL</sub>	(kg CO₂ eq.) /km	6,29E-05	6,19E-05	
GWPBIOGENIC	(kg CO₂ eq.) /km	2,80E-06	2,76E-06	
GWPLULUC	(kg CO₂ eq.) /km	1,03E-06	1,01E-06	
ODP	(kg CFC 11 eq.) /km	9,03E-18	8,89E-18	
AP	(mol H⁺ eq.) /km	1,99E-07	7,97E-08	
EP <sub>FRESHWATER</sub>	(kg P eq.) /km	2,62E-10	2,58E-10	
EPMARINE	(kg N eq.) /km	9,10E-08	2,86E-08	
EPTERRESTRIAL	(mol N eq.) /km	1,02E-06	3,40E-07	
POCP	(kg NMVOC eq.)/km	1,90E-07	7,96E-08	
ADP <sub>MINERALS</sub> &METALS	(kg Sb eq.) /km	5,34E-12	5,25E-12	
ADP <sub>FOSSIL</sub>	(MJ) /km	8,07E-04	7,95E-04	
WDP	(m³ world eq.) /km	9,49E-07	9,34E-07	

#### Example:

If the product is transported by truck (EURO 6) from Mediglia, Italy (production plant) to Geneva, Switzerland (Jobsite) for approximately 400 km; the GWP impact will be:

 $GWPtotal = 6,57E-05(kg CO_2 eq./km) * 400(km) = 2,63E-02 kg CO_2 eq./km)$ 





#### 10 VERIFICATION AND REGISTRATION

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

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 characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

CEN standard EN15804 served as the Core Product Category Rules (PCR)				
PCR:	PCR 2019:14 Construction products (EN 15804:A2), Version 1.3.4, 2024-04-30			
	The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members.			
PCR review was conducted by:	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	☑ EPD Process Certification			
declaration and data, according to ISO 14025:2006:	□ EPD Verification			
Third party verifier:	Certiquality S.r.l.			
mind party verifier.	Number of accreditations: 0013VV rev.000			
Accredited or approved by:	Accredia			
Procedure for follow-up of data during EPD validity involves third-party verifier	⊠ Yes □ No			





#### 11 REFERENCES

- EN 15804: SUSTAINABILITY OF CONSTRUCTION WORKS ENVIRONMENTAL PRODUCT DECLARATIONS CORE RULES FOR THE PRODUCT CATEGORY OF CONSTRUCTION PRODUCTS
- EUROPEAN DIRECTIVE 2008/98/EC
- EUROSTAT TREATMENT OF WASTE-BY-WASTE CATEGORY, HAZARDOUSNESS AND WASTE MANAGEMENT OPERATIONS
- GENERAL PROGRAMME INSTRUCTIONS OF THE INTERNATIONAL EPD® SYSTEM, VERSION 4.0
- ISO 14025 ENVIRONMENTAL LABELS AND DECLARATIONS TYPE III ENVIRONMENTAL DECLARATIONS PRINCIPLES AND PROCEDURES
- ISO 14044 ENVIRONMENTAL MANAGEMENT LIFE CYCLE ASSESSMENT REQUIREMENTS AND GUIDELINES
- PCR 2019:14 CONSTRUCTION PRODUCTS (EN 15804: A2), UN CPC CODE 54; VERSION 1.3.4





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# **ANNEX 1**

# ANNEX 1: Self declaration from EPD owner Specific requirements

### 1 Applied electricity data set used in the manufacturing phase

The electricity mix for the electricity used in manufacturing (A3) is the electricity grid mix  $<0.647 \text{ kg CO}_2 \text{ eqv/kWh}>$ 

### 2 Transport from the place of manufacture to a central warehouse

Transport distance, and  $CO_2$ -eqv./DU from transport of the product from factory gate to central warehouse in Oslo shall be given. The following table shall be included in the EPD:

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy use	Unit	Value (I/t)	kg CO2- eqv./DU
Boat							
Truck	<85>	<truck 27<br="">tonn, EURO6&gt;</truck>	<95>	<0,0199>	l/tkm	<1,89>	6,24E-03
Railway							
Rail							
Air							
Total	<85>	<truck 27<br="">tonn, EURO6&gt;</truck>	<95>	<0,0199>	l/tkm	<1,89>	6,24E-03





# 3 Impact on the indoor environment

X	Indoor air emission testing has been performed: the product is "Indoor Air Comfort" GOLD certified
	No test has being performed
	Not relevant; specify