

Environmental product declaration

in accordance with ISO 14025 and EN 15804+A2

Mjøsa 90L



Owner of the declaration:

Røros Produkter AS

Product:

Mjøsa 90L

Declared unit:

1 pcs

This declaration is based on Product Category Rules:

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

NPCR 026:2022 Part B for Furniture

Program operator:

EPD-Global

Declaration number:

NEPD-16941-21042

Issue date:

07.07.2026

Valid to:

07.07.2031

EPD software:

LCAno EPD generator ID: 1676878

General information

Product

Mjøsa 90L

Program operator:

EPD-Global
Post Box 5250 Majorstuen, 0303 Oslo, Norway
Phone: +47 977 22 020
web: www.epd-global.com

Declaration number:

NEPD-16941-21042

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A2:2019 serves as core PCR
NPCR 026:2022 Part B for Furniture

Statement of liability:

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

Declared unit:

1 pcs Mjøsa 90L

Declared unit (cradle to gate) with option:

A1-A3, A4, A5, B2, B3, B4, C1, C2, C3, C4, D

Functional unit:

Mjøsa is an indoor waste disposal unit for use in both privat and public places.

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. Verification of each EPD is made according to EPD-Global's guidelines for verification and approval requiring that tools are i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPD-Global, and iii) the process is reviewed annually by an independent third party verifier. See Appendix G of EPD-Global'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-Global's procedures and guidelines for verification and approval of EPD tools.

Third party verifier:

Elisabet Amat, GREENIZE projects

(no signature required)

Owner of the declaration:

Røros Produkter AS
Contact person: Beate Schjølberg
Phone: +47 994 85 684
e-mail: beate.schjolberg@rorosprodukter.no

Manufacturer:

Røros Produkter AS

Place of production:

Røros Produkter AS
Øverhagaen 6
7374 Røros, Norway

Management system:

Miljøfyrtårn

Organisation no:

NO 992169133 MVA

Issue date:

07.07.2026

Valid to:

07.07.2031

Year of study:

2023

Comparability:

EPDs of construction products may not be comparable if they do not comply with EN 15804 and are not viewed 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-Global.

Developer of EPD: Andrea Mortensen

Reviewer of company-specific input data and EPD: Beate Schjølberg

Approved:



Håkon Hauan, CEO EPD-Global

Product

Product description:

Mjøsa is a smart and flexible waste recycling unit that can stand alone or together in modules. The units can be assembled into the different waste disposal stations you need.

Product specification

There are many color options available to create the expression the customer is looking for. Mjøsa is outfitted with wheels for good mobility on the floor.

<https://rorosprodukter.no/produkter/avfallsbeholdere/innendørs-avfallsbeholdere/page/2/>

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Metal	0.40	2.99	0.01605	4.01
Metal - Stainless steel	0.088	0.6582	0.06248	71.00
Metal - Steel	12.60	94.25	0.00	0.00
Plastic - Polypropylene (PP)	0.20	1.50	0.00	0.00
Powder coating	0.081	0.6059	0.00	0.00
Total	13.37	100.00	0.08	

Packaging	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0.581	95.25	0.5729	98.60
Packaging - Plastic	0.009	1.48	0.00	0.00
Packaging - Wood	0.02	3.28	0.00	0.00
Total incl. packaging	13.98	100.00	0.65	

Technical data:

Kg	Hight	Width	Depth	Volume
12,6	80	42 cm	31 cm	102 dm ³

Market:

Norway

Reference service life, product

30 years

Reference service life, building

n/a

LCA: Calculation rules

Declared unit:

1 pcs Mjøsa 90L

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:

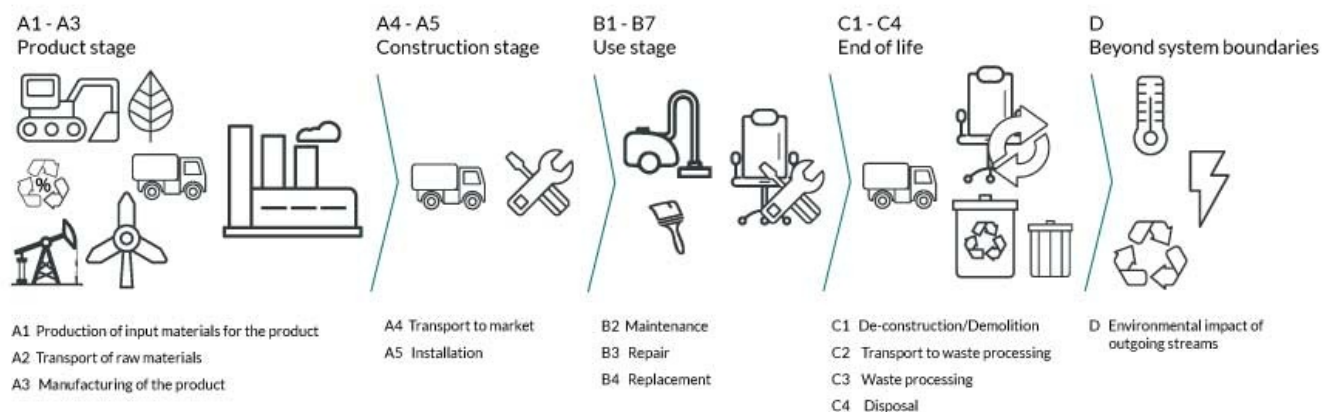
Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other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

Materials	Source	Data quality	Year
Metal	ecoinvent 3.10.1	Database	2023
Metal - Stainless steel	ecoinvent 3.10.1	Database	2023
Metal - Steel	Modified ecoinvent 3.10.1	Database	2023
Packaging - Cardboard	ecoinvent 3.10.1	Database	2023
Packaging - Plastic	ecoinvent 3.10.1	Database	2023
Packaging - Wood	ecoinvent 3.10.1	Database	2023
Plastic - Polypropylene (PP)	Modified ecoinvent 3.10.1	Database	2023
Powder coating	ecoinvent 3.10.1	Database	2023

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	X	X	X	MND	MND	MND	X	X	X	X	X

System boundary:



Additional technical information:

LCA: Scenarios and additional technical information

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

B-senario is 0 as it's not applicable for this product

Transport from production place to user (A4)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	38.8 %	300.00	0.044	l/tkm	13.20
Assembly (A5)	Unit	Value			
Waste, packaging, pallet, EUR wooden pallet, reusable, average treatment (kg)	kg	0.02			
Waste, packaging, plastic film (LDPE), to average treatment - A5 (kg)	kg	0.009			
Waste, packaging, corrugated board box, to average treatment (kg)	kg	0.581			
Transport to waste processing (C2)	Capacity utilisation (incl. return) %	Distance (km)	Fuel/Energy Consumption	Unit	Value (Liter/tonne)
Truck, 16-32 tonnes, EURO 6 (km)	38.8 %	85.00	0.044	l/tkm	3.74
Waste processing (C3)	Unit	Value			
Waste treatment per kg Non-hazardous waste, incineration with fly ash extraction - C3 (kg)	kg	0.481			
Waste, materials to recycling (kg)	kg	4.31			
Waste treatment per kg Scrap steel, incineration with fly ash extraction (kg)	kg	12.69			
Waste treatment per kg Polypropylene (PP), incineration with fly ash extraction - C3 (kg)	kg	0.20			
Benefits and loads beyond the system boundaries (D)	Unit	Value			
Substitution of electricity (MJ)	MJ	4.82			
Substitution of thermal energy, district heating (MJ)	MJ	0.9324			
Substitution of primary steel with net scrap (kg)	kg	4.18			

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-A3	A4	A5	B2	B3	
 GWP-total	kg CO ₂ -eq	5.31E+01	7.75E-01	9.43E-01	0	0	
 GWP-fossil	kg CO ₂ -eq	5.37E+01	7.74E-01	2.33E-02	0	0	
 GWP-biogenic	kg CO ₂ -eq	-7.33E-01	5.98E-04	9.20E-01	0	0	
 GWP-luluc	kg CO ₂ -eq	5.68E-02	2.78E-04	3.71E-06	0	0	
 ODP	kg CFC11 -eq	5.12E-07	1.63E-08	2.20E-10	0	0	
 AP	mol H ⁺ -eq	4.14E-01	1.61E-03	4.35E-05	0	0	
 EP-FreshWater	kg P -eq	2.32E-02	5.21E-05	8.07E-07	0	0	
 EP-Marine	kg N -eq	5.50E-02	3.87E-04	1.95E-05	0	0	
 EP-Terrestrial	mol N -eq	1.38E+00	4.18E-03	1.74E-04	0	0	
 POCP	kg NMVOC -eq	1.83E-01	2.68E-03	6.34E-05	0	0	
 ADP-minerals&metals ¹	kg Sb-eq	1.19E-03	2.58E-06	3.59E-08	0	0	
 ADP-fossil ¹	MJ	6.26E+02	1.09E+01	1.46E-01	0	0	
 WDP ¹	m ³	2.81E+01	5.42E-02	4.48E-03	0	0	

Indicator	Unit	B4	C1	C2	C3	C4	D
 GWP-total	kg CO ₂ -eq	0	0	2.20E-01	9.24E-01	0	-2.19E+00
 GWP-fossil	kg CO ₂ -eq	0	0	2.19E-01	9.24E-01	0	-2.15E+00
 GWP-biogenic	kg CO ₂ -eq	0	0	1.69E-04	2.53E-04	0	-3.31E-02
 GWP-luluc	kg CO ₂ -eq	0	0	7.88E-05	5.57E-05	0	-3.36E-03
 ODP	kg CFC11 -eq	0	0	4.62E-09	3.85E-09	0	-3.94E-04
 AP	mol H ⁺ -eq	0	0	4.57E-04	1.08E-03	0	-9.10E-03
 EP-FreshWater	kg P -eq	0	0	1.48E-05	1.81E-04	0	-1.16E-03
 EP-Marine	kg N -eq	0	0	1.10E-04	4.63E-04	0	-1.91E-03
 EP-Terrestrial	mol N -eq	0	0	1.18E-03	4.84E-03	0	-1.95E-02
 POCP	kg NMVOC -eq	0	0	7.60E-04	1.64E-03	0	-6.32E-03
 ADP-minerals&metals ¹	kg Sb-eq	0	0	7.31E-07	4.81E-07	0	-1.09E-05
 ADP-fossil ¹	MJ	0	0	3.09E+00	2.79E+00	0	-3.07E+01
 WDP ¹	m ³	0	0	1.53E-02	8.01E-02	0	-2.90E+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 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

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

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

The LCA results in the EPD are calculated using a specific methodological approach for accounting energy resources, see the additional requirements section for more information. In this EPD the following approach was used: Location-based approach.

Additional environmental impact indicators

Indicator	Unit	A1-A3	A4	A5	B2	B3
 PM	Disease incidence	5.68E-06	5.71E-08	8.50E-10	0	0
 IRP ²	kgBq U235 -eq	3.08E+00	1.41E-02	2.09E-04	0	0
 ETP-fw ¹	CTUe	3.99E+02	1.45E+00	1.21E-01	0	0
 HTP-c ¹	CTUh	6.47E-08	0.00E+00	3.00E-12	0	0
 HTP-nc ¹	CTUh	6.62E-07	8.16E-09	2.23E-10	0	0
 SQP ¹	dimensionless	2.18E+02	6.58E+00	8.42E-02	0	0

Indicator	Unit	B4	C1	C2	C3	C4	D
 PM	Disease incidence	0	0	1.62E-08	3.58E-08	0	-2.21E-07
 IRP ²	kgBq U235 -eq	0	0	3.98E-03	4.67E-03	0	-5.76E-01
 ETP-fw ¹	CTUe	0	0	4.11E-01	4.18E+00	0	-8.68E+00
 HTP-c ¹	CTUh	0	0	0.00E+00	3.21E-10	0	-1.10E-08
 HTP-nc ¹	CTUh	0	0	2.31E-09	4.21E-09	0	-3.69E-08
 SQP ¹	dimensionless	0	0	1.87E+00	3.54E+00	0	-8.94E+00

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 = $9.0 \cdot 10^{-3}$ = 0.009"

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-A3	A4	A5	B2	B3
	PERE	MJ	9.15E+01	1.91E-01	2.95E-03	0	0
	PERM	MJ	7.73E+00	0.00E+00	-7.73E+00	0	0
	PERT	MJ	9.92E+01	1.91E-01	-7.73E+00	0	0
	PENRE	MJ	6.18E+02	1.09E+01	1.46E-01	0	0
	PENRM	MJ	7.81E+00	0.00E+00	-4.25E-01	0	0
	PENRT	MJ	6.26E+02	1.09E+01	-2.79E-01	0	0
	SM	kg	6.60E-01	0.00E+00	0.00E+00	0	0
	RSF	MJ	6.36E-02	6.40E-05	1.09E-06	0	0
	NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0	0
	FW	m ³	6.61E-01	1.48E-03	7.99E-05	0	0

Indicator		Unit	B4	C1	C2	C3	C4	D
	PERE	MJ	0	0	5.40E-02	9.41E-02	0	-1.11E+01
	PERM	MJ	0	0	0.00E+00	0.00E+00	0	0.00E+00
	PERT	MJ	0	0	5.40E-02	9.41E-02	0	-1.11E+01
	PENRE	MJ	0	0	3.09E+00	2.79E+00	0	-3.07E+01
	PENRM	MJ	0	0	0.00E+00	-7.39E+00	0	0.00E+00
	PENRT	MJ	0	0	3.09E+00	-4.60E+00	0	-3.07E+01
	SM	kg	0	0	0.00E+00	0.00E+00	0	-4.74E+00
	RSF	MJ	0	0	1.81E-05	9.41E-05	0	-4.67E-04
	NRSF	MJ	0	0	0.00E+00	0.00E+00	0	-2.82E-02
	FW	m ³	0	0	4.21E-04	3.14E-03	0	-7.81E-02

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 = Net use of fresh water

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

End of life - Waste

Indicator		Unit	A1-A3	A4	A5	B2	B3
	HWD	kg	1.92E+01	1.58E-02	3.52E-04	0	0
	NHWD	kg	1.29E+02	3.34E-01	5.70E-02	0	0
	RWD	kg	7.75E-04	3.49E-06	4.33E-08	0	0

Indicator		Unit	B4	C1	C2	C3	C4	D
	HWD	kg	0	0	4.49E-03	0.00E+00	0	-1.64E+00
	NHWD	kg	0	0	9.47E-02	1.34E+01	0	-5.10E+00
	RWD	kg	0	0	9.90E-07	0.00E+00	0	-1.47E-04

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

"Reading example: 9.0 E-03 = $9.0 \cdot 10^{-3}$ = 0.009"

End of life - Output flow

Indicator		Unit	A1-A3	A4	A5	B2	B3
	CRU	kg	0.00E+00	0.00E+00	0.00E+00	0	0
	MFR	kg	1.60E+00	0.00E+00	5.44E-01	0	0
	MER	kg	0.00E+00	0.00E+00	1.13E-10	0	0
	EEE	MJ	1.20E-06	0.00E+00	8.94E-06	0	0
	EET	MJ	1.89E-06	0.00E+00	1.04E-05	0	0

Indicator		Unit	B4	C1	C2	C3	C4	D
	CRU	kg	0	0	0.00E+00	0.00E+00	0	0.00E+00
	MFR	kg	0	0	0.00E+00	1.03E+01	0	0.00E+00
	MER	kg	0	0	0.00E+00	2.00E-01	0	0.00E+00
	EEE	MJ	0	0	0.00E+00	4.82E+00	0	0.00E+00
	EET	MJ	0	0	0.00E+00	9.32E-01	0	0.00E+00

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

"Reading example: 9.0 E-03 = $9.0 \cdot 10^{-3}$ = 0.009"

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	2.51E-01

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

Additional requirements

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

The table below presents GWPTotal values for energy resources used in the manufacturing phase (A3), calculated with both the location-based and market-based approach. This information is provided for transparency, allowing EPD users to understand the impact of these methodological choices. When applicable, information about GoOs or biogas certificate like provider, validity date and energy source can be seen in the table below. In this EPD, the following methodology was used in the main results: Location-based approach.

Electricity mix	Source	Amount	Unit	GWPTotal [kg CO ₂ /Unit]	SUM [kg CO ₂]
Location-based approach.					
Electricity, Norway, low voltage	ecoinvent 3.10.1	6.70E+00	kWh	2.46E-02	1.65E-01
Market-based approach.					
Electricity, Norway, low voltage, residual mix	ecoinvent 3.10.1	6.70E+00	kWh	6.23E-01	4.18E+00

"Reading example: 9.0 E-03 = 9.0*10⁻³ = 0.009"

Dangerous substances

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

Indoor environment

The product will not affect the indoor climate

Additional Environmental Information

Key Environmental Indicators

Key environmental performance indicators	Unit	Product stage	Construction stage		Use stage			End-of-life				Net benefits and loads from reuse, recovery, and/or recycling
		A1-A3	A4	A5	B2	B3	B4	C1	C2	C3	C4	D
GWPTotal	kg CO ₂ -eq	53.05	0.78	0.94	0.00	0.00	0.00	0.00	0.22	0.92	0.00	-2.19
Total energy consumption	MJ	709.41	11.09	0.15	0.00	0.00	0.00	0.00	3.14	2.88	0.00	-41.87
Share of recycled materials	%	4.60										

Additional environmental impact indicators required in NPCR Part A for construction products

Indicator		Unit	A1-A3	A4	A5	B2	B3
GWPIOBC		kg CO ₂ -eq	5.39E+01	7.75E-01	2.33E-02	0	0
Indicator	Unit	B4	C1	C2	C3	C4	D
GWPIOBC	kg CO ₂ -eq	0	0	2.20E-01	9.24E-01	0	-2.16E+00

GWPTotal: Global warming potential calculated according to the principle of instantaneous oxidation. In order to increase the transparency of biogenic carbon contribution to climate impact, the indicator GWP-IOBC is required as it declares climate impacts calculated according to the principle of instantaneous oxidation. GWP-IOBC is also referred to as GWP-GHG in context to Swedish public procurement legislation.

Bibliography

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

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

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

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.

ecoinvent v3, Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

Iversen et al., (2021) eEPD v2021.09 Background information for EPD generator tool system verification, LCA.no Report number: 07.21

Ruttenborg et al., (2025) EPD generator for NPCR026 Part B for Furniture - Background information for EPD generator application and LCA data, LCA.no report number 08.25

NPCR Part A: Construction products and services. Ver. 2.0. March 2021, EPD-Norge.

NPCR 026 Part B for Furniture. Ver. 3.0 October 2024, EPD-Norge.

 epd-global Powered by EPD-Norway	Program operator and publisher EPD-Global Postboks 5250 Majorstuen, 0303 Oslo, Norway	Phone: +47 977 22 020 e-mail: post@epd-norge.no web: www.epd-global.com
	Owner of the declaration: Røros Produkter AS Øverhagaen 6, 7374 Røros, Norway	Phone: +47 994 85 684 e-mail: beate.schjolberg@rorosprodukter.no web: www.rorosprodukter.no
	Author of the Life Cycle Assessment LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	Developer of EPD generator LCA.no AS Dokka 6A, 1671 Kråkerøy, Norway	Phone: +47 916 50 916 e-mail: post@lca.no web: www.lca.no
	ECO Platform ECO Portal	web: www.eco-platform.org web: ECO Portal