




Imagined plaster SL 600, SL 601, SL 602, SL 603, SL 604, SL 605



Program operator, publisher:	Rakennustietosäätiö RTS Building Information Foundation RTS Malminkatu 16 A 00100 Helsinki http://cer.rts.fi
Owner of the declaration:	Name of the company
Name of the product:	Imagined plaster
Declaration number:	RTSEPD-20-1
Registration number:	RTSEPD-20-1
ECO Platform reference number:	
Issue date:	1.09.2020
Valid to:	26.08.2025
Scope of the declaration	This environmental product declaration covers the environmental impacts of Imagined Plaster. The declaration has been prepared in accordance with EN 15804:2019 and ISO 14025 standards and the additional requirements stated in the RTS PCR (English version, 26.8.2020). This declaration covers the life cycle stages from cradle-to-gate
	 Laura Sariola Secretary of certification group
	 Markku Hedman General Manager

Verified according to the requirements of EN 15804:2019 (product group rules)	
Independent verification of the declaration and data, according to ISO14025:2010	
<input type="checkbox"/> Internal	<input type="checkbox"/> External
Third party verifier:	
25.8.2020	
< Name of the third party verifier >	

GENERAL INFORMATION, PURPOSE OF THE ENVIRONMENTAL DECLARATION , VERIFICATION (Standard 7.1)

1. Owner of the declaration, manufacturer

Yritys Oy
Yritystie 1
00100 Helsinki
Etunimi Sukunimi
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2. Product name and number

Imagined plaster SL 600, SL 600, SL 601, SL 602, SL 603, SL 604, SL 605

3. Place of production

Produced in Helsinki, Finland

4. Additional information

Additional Information from Firstname Lastname.

5. Product Category Rules and the scope of the declaration

The declaration has been prepared in accordance with EN 15804:2019 and ISO 14025 standards and the additional requirements stated in the RTS PCR (English version, 26.8.2020)

6. Author of the life-cycle assessment and declaration

Engineer Oy, EPDkatu 4 D 00100 Helsinki, puh +358
(0)20 123 456, www.insinööritoimisto.fi. Compiler Kaisa Engineer.

7. Verification

The declaration has been prepared in accordance with EN 15804:2019 and ISO 14025 standards and the additional requirements stated in the RTS PCR (English version, 26.8.2020). The declaration was verified by Insinööritsto Environment Oy, DI Liisa Ympäristö according to abovementioned standards and PCR rules Ympäristökatu 2, FI-33100 Tampere, +358 456 123, www.environment.com.

Third party verification on 26.8.2020. Verification is valid 26.8.2020-25.8.2025.

8. Declaration issue date and validity

Declaration issue date 1.9.2020. The declaration is valid 5 years, 26.8.2020-25.8.2025.

TUOTTEEN TIEDOT
9. Product description

The declaration has been conducted for one Imagined plaster in the group, LCA- calculations does not derogate from each other. Product names: Imagined plaster SL 600, SL 601, SL 602, SL 603, SL 604, SL 605.

10. Results of environmental information reported per kilogram*

Data content	Unit	A1-A3	A3	A4	A5	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO ₂ ekv/kg	7,50E+00		1,65E+00	1,00E-02	9,00E-02	1,10E-01	0,00E+00	5,74E+01	7,50E+00
Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	kg Sb eq./kg	4,00E-05		8,00E-08	2,92E-06	1,46E-05	2,23E-05	8,06E-05	-4,87E-04	4,00E-05
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ. Net calorific value/kg	2,00E+01		50	1,60E-01	1,30E+00	1,50E+00	0,00E+00	7,80E+02	2,00E+01
Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	M3world eq. deprived/kg	1,35E+04		3,71E+01	2,20E+00	8,67E+00	9,17E+00	8,07E-01	7,80E+01	1,35E+04
Biogenic carbon content in product	kg C/kg									
Use of secondary material	kg/kg	7,80E+00	2,44E-02	4,05E-01	1,43E-02	4,32E-02	8,69E-02	5,20E-03	2,54E+00	7,80E+00

* Compulsory table

11. Description of product and its use (It is possible to attach a conversion factor table)

Imagined plaster produced from cement with grain size of 3-7mm. Casein free product, layer thickness 5-50 mm. Consumption average 1,8 kg/m²/mm. The plaster shall be spread and compressed carefully.

12. Product standards

SFS-EN 998-1, plaster specifications. Part 1.

13. Physical properties

Compression resistance 30, Bending tenacity F3, Fireclass A1 standard EN 13813:2002

14. Raw-materials of the product and product information (used in production)

Compulsory: material, quantity, origin

Product structure / composition / raw-material	quantity p%*	Usability			Origin of the raw materials
		Renewable	Non-renewable	Recycled	
Portlandcement	10-25		x		EU
Granulated blast-furnace cinder	5-15				EU
Natural Sand	80		x		EU

*Order of magnitude, not exact composition

Product main composition, at least metals, stone materials, fossil materials, bio-based materials

Tuotteen pääkoostumus	Määrä p%*	Origin of the raw materials
Metals	2	Finland
Stone-based materials (minerals)	98	Finland
Fossil materials	0	Finland
Bio-based materials	0	Finland

*Order of magnitude, not exact composition

15. Substances under European Chemicals Agency’s REACH, SVHC restrictions

<http://echa.europa.eu/web/guest/candidate-list-table> . Compulsory: CAS-number

Name	EC Number	CAS Number
Chrome(VI)- compound	-	-

SCOPE OF LIFE CYCLE ASSESMENT (Standard 7.2.1-2)

Mark all the covered modules of the EPD with X. Mandatory modules are marked with blue in the table below. This declaration covers “cradle-to-gate with options”. Please fulfil relevant stages “R” (relevant) and non-relevant stages “NR”.

Product stage			Construction process stage		Use stage							End of life stage				Supplementary information beyond the life cycle		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Raw material supply	Transport	Manufacturing	Transport	Construction-Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Mandatory modules
Mandatory as per the RTS PCR section 6.2.1 rules and terms
Optional modules based on scenarios

16. Functional / declared unit

Indicators for one kg. The values can be converted to m2 by using conversion factor, product 1,8 kg/m2/mm.

17. System boundary

This EPD covers the following modules; A1 (Raw material supply), A2 (Transport) and A3 (Manufacturing). The construction stage includes module A4 (Transport to the site). In addition, in the end of life stage is included information from C1- C4 and beyond the life cycle information from D module.

18. Cut-off criteria

A1 raw material supply, A2 transportation, A3 manufacturing. All used materials, energy, packing and transportation until the end-of-waste state have been included. The information related to wooden pallets are not reported in the modules A1 and A5. The information from transportation A4 is included to LCA-calculation, the distance is 600 km and utilization boundary 70%. Information from B -module has not been calculated nor included in the LCA-calculations. Module C1 to C4 has been included. The waste quality will depend on the waste production process EWC 10 13 11 other than 10 13 09 and 1 0 13 10 waste mentioned originated from production. The module D is included.

19. Production process

The clinker is very finely ground to produce portland cement. The final product will include calciumsilicate minerals, water, blast-furnace cinder and additives.

SCOPE OF THE LIFE-CYCLE ASSESSMENT (Standard 7.2.3–7.2.4)

20. Environmental impacts (7.2.3, table 3) (possible to include modules A5, B1-B7. Unit (expressed per declared unit) The results of the impact assessment are relative. They do not predict the effects on the weighted values of the categories, the exceedance limits, safety margins and risks. The unit is expressed per functional or declared unit (e.g. kg/kg). Environmental impact data for A4 and C2 shall be reported per kilometer.

Indikaattori	Unit	A1-A3	A4	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO ₂ ekv	7,50E+00	1,65E+00	1,00E-02	9,00E-02	1,10E-01	0,00E+00	-5,74E+01
Global Warming Potential fossil fuels (GWP-fossil)	kg CO ₂ ekv	7,50E+00	1,65E+00	1,00E-02	9,00E-02	1,10E-01	0,00E+00	-5,74E+01
Global Warming Potential biogenic (GWP-biogenic)	kg CO ₂ ekv	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Global Warming Potential land use and land use change (GWP-luluc)	kg CO ₂ ekv	1,10E-01	5,00E-04	5,00E-03	4,50E-02	5,50E-02	0,00E+00	-2,87E+01
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC 11 ekv	2,00E-05	2,00E-07	1,90E-09	1,50E-09	1,20E-09	0,00E+00	-1,19E-02
Acidification potential, Accumulated Exceedance (AP)	mol H ⁺ eqv	3,40E-02	2,00E-04	7,50E-05	7,50E-04	7,50E-04	0,00E+00	-2,75E-01
Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-freshwater)	kg PO ₄ - ekv	5,00E-03	4,00E-05	2,50E-05	8,25E-04	2,50E-04	0,00E+00	-9,17E-02
Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-marine)	kg N ekv.	4,00E-02	3,91E-03	8,33E-06	2,75E-04	8,33E-05	0,00E+00	-3,06E-02
Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	mol N ekv.	3,00E-03	1,19E-04	5,83E-06	1,93E-04	5,83E-05	0,00E+00	-2,14E-02
Formation potential of tropospheric ozone (POCP)	kg NMVOC eq.	1,20E-03	-2,00E-05	2,92E-06	9,63E-05	2,92E-05	0,00E+00	-1,07E-02
Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	kg Sb eq.	4,00E-05	8,00E-08	2,09E-09	1,65E-09	1,32E-09	0,00E+00	-1,31E-02
Abiotic depletion for fossil resources potential (ADP-fossil)	MJ. Net calorific value	2,00E+01	50	1,60E-01	1,30E+00	1,50E+00	0,00E+00	-7,80E+02
Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	M3world eq. deprived	1,35E+04	3,71E+01	2,20E+00	8,67E+00	9,17E+00	8,07E-01	-7,80E+01

21. Standard 7.2.3.2 Additional environmental impact indicators (voluntary information). Possible to include modules A5, B1-B7. Unit (expressed per declared unit).

Indikaattori	Unit	A1-A3	A4	C1	C2	C3	C4	D
Potential incidence of disease due to PM emissions (PM)	Incidence of disease	2,41E-6	1,5E-7	3,89E-8	1,8E-8	3,79E-8	1,58E-8	-1,76E-6
Potential Human exposure efficiency relative to U235 (IRP)	kBq U235 eq.	7,09E+00	1,38E-1	9,48E-3	1,66E-2	8,4E-3	4,23E-3	-1,21E0
Potential Comparative Toxic Unit for ecosystems (ETP-fw)	CTUh	1,10E+01	1,14E+00	1,14E-2	1,37E-1	6,08E-2	5,06E-3	-3,03E0
Potential Comparative Toxic Unit for humans (HTP-c)	CTUh	7,04E-8	4,89E-10	4,03E-11	5,88E-11	7,32E-10	2,21E-11	-1,29E-8
Potential Comparative Toxic Unit for humans (HTP-nc)	CTUh	8,58E-7	3,27E-8	8,5E-10	3,93E-9	2,08E-7	6,9E-10	-1,11E-7
Potential soil quality index (SQP)	Dimensionless	6,35E+01	3,98E+01	3,23E-2	4,78E+00	4,93E-1	-5E0	-3,18E0

22. Standard 7.2.4 Use of natural resources. Possible to include modules A5, B1-B7. Unit (expressed per declared unit).

Use of natural resources	Unit	A1-A3	A4	C1	C2	C3	C4	D
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	4,50E+00	3,26E-01	9,57E-03	3,47E-02	0,00E+00	0,00E+00	-7,33E-01
Renewable primary energy resources used as raw materials	MJ	2,20E+01	0,00E+00	0,00E+00	0,00E+00	8,92E-02	6,90E-03	-3,49E-01
Total use of renewable primary energy resources	MJ	2,65E+01	3,26E-01	9,57E-03	3,47E-02	8,92E-02	6,90E-03	-1,08E+00
Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials	MJ	1,10E+02	2,61E+01	1,76E+00	2,78E+00	0,00E+00	0,00E+00	-2,55E+02
Nonrenewable primary energy resources used as raw materials	MJ	8,00E-01	0,00E+00	0,00E+00	0,00E+00	3,35E+00	7,28E-01	-1,26E+01
Total use of non renewable primary energy resources	MJ	1,11E+02	2,61E+01	1,76E+00	2,78E+00	3,35E+00	7,28E-01	-2,68E+02
Use of renewable secondary fuels	MJ	2,07E+01	8,93E-03	8,69E-04	9,52E-04	5,08E-01	4,32E-04	-1,27E-01
Use of non-renewable secondary fuels	MJ	6,00E-01	1,14E-02	2,35E-04	1,21E-03	1,76E-03	7,46E-03	-4,12E-02
Net use of fresh water (7.2.3)	m ³	6,00E-02	3,82E-02	3,46E-03	4,07E-03	3,89E-02	1,18E-03	-1,03E+00
Use of secondary material	kg	7,80E+00	4,05E-01	1,43E-02	4,32E-02	8,69E-02	5,20E-03	-2,54E+00

OTHER INDICATORS (Standard 7.2.5)
23. Biogenic carbon content table 9, standard 7.2.5. Unit (expressed per declared unit).

Biogenic carbon content	Yksikkö	A3
Biogenic carbon content in product	kg C	-
Biogenic carbon content in packaging	kg	2,44E-02

24. End of life - Waste Possible to include modules A5, B1-B7. Unit (expressed per declared unit).

Waste categories	Unit	A1-A3	A4	C1	C2	C3	C4	D
Hazardous waste disposed	kg	5,36E-01	2,63E-02	2,25E-03	3,16E-03	1,20E-01	2,38E+01	-2,35E-01
Non hazardous waste disposed	kg	1,51E+01	2,91E+00	2,40E-02	3,50E-01	2,19E+01	3,56E-02	-2,87E+00
Radioactive waste disposed	kg	9,96E-03	1,86E-04	1,46E-05	2,24E-05	7,14E-06	6,01E-06	-1,90E-03

25. Other environmental indicators. Possible to include modules A4, A5, B1-B7. Unit (expressed per declared unit).

Other environmental indicators	Unit	A1-A3	C1	C2	C3	C4	D
Components for reuse	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	3,00E-03	8,53E-04	8,24E-04	1,01E+00	3,01E-04	2,00E-04
Materials for energy recovery	kg	0,00E+00	2,65E-06	1,33E-05	2,03E-05	7,33E-05	-4,43E-04
Exported energy	MJ/energy source	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION (Standard 7.3)
26. Energy in the manufacturing phase (Standard 7.3. A3)

Muuttuja	Määrä	Tiedon laatu
A3 Electricity information and CO ₂ emission kg CO ₂ ekv. /kWh		

27. Additional technical information, transport to the building site (Standard 7.3.2, A4)

Technical information of transportation (A4) from production plant to the site.

Parameter	quantity	Data quality
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat etc. Litre of fuel type per distance or vehicle type, Commission Directive 2007/37/EC (European Emission Standard)	0,0035	Trailer-lorry, diesel 55 dm ³ /100km
Distance (average distance of the transportation) km	600	Average distance of transportation in Finland.
Capacity utilisation % (including empty returns)	70	
Bulk density of transported products kg/m³	800	
Volume capacity utilisation factor (factor = 1 or <1 tai ≥ 1 for compressed or nested packaged products)	1	

28. End-of-life process description (7.3.4), module C

Process flow	Unit (expressed per functional unit or per declared unit of components products or materials and by type of material)	Amount kg/kg Data quality
Collection process specified by type	kg collected separately	1
	kg collected with mixed construction waste	-
Recovery system specified by type	kg for re-use	-
	kg for recycling	0,6
	kg for energy recovery	-
Disposal specified by type	kg product or material for final deposition	0,4
Assumptions for scenario development, e.g. transportation	units as appropriate	transportation distance 50km, utilization 50%

*These values are based on current estimation on end-of-life processes

29. Other technical information

Technical information	
Consumption	1,8 kg/m ² 1 mm:n layer thickness
water needed	2,5 - 3,4 l / 25 kg (3 mm) 2,2 - 2,5 l / 25 kg (7 mm)
Ready product	12-13 l / 25 kg bag
State of matter, Colour	powder, grey
Exposure class	XF 4, XC 4, XS 2, XD 3 (50v), XF 3, XC 4, XS 2, XD 3 (100v)

30. Additional information (Standard 7.4)

Emissions to soil

The information is not available

Emissions to water

The information is not available

Emissions to indoor air

The product has emission class M1

31. Product declaration:

The information is available at the web pages, please see link.

32. Reference of the common information

The Building Information Foundation RTS (RTS EPD Product Category Rules). Rakennustietosäätiö RTS sr (RTS EPD PCR menetelmäohje 15804:2019)

ISO 14025

ISO 14025:2011-10 Environmental labels and declarations. Type III environmental declarations. Principles and procedures

SFS-EN 15804

EN15804:2019 Sustainability of construction works. Environmental Product Declarations. Core rules for the product category of construction products

33. Product information (volunteer, verified information)