

Environmental Product Declaration



English Summary

According to ISO 14025 and EN 15804+A1 for:

Radiata pine laminated wood



Programme:

Programme operator:

EPD Registration number:

Product Category Rules (PCR):

Published:

Valid until:

Geographical scope:

The International EPD® System
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EPD International AB

S-P-01345

PCR 2012:01 - Construction products and construction services. Ver 2.2
Sub-PCR Wood and wood-based products for use in construction (EN 16485)

2018-09-26

2023-09-13

International



General Information

EPC owner:	Egoín S.A. For more info visit: https://egoin.com/ http://olatek.es/
Software:	The International EPD® System operated by EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden. Website: www.environdec.com E-mail: info@environdec.com
DAP developer:	Guruzne Carrasson (in collaboration with Baskegur and Fundación Novia Salcedo)
System limits:	Cradle to gate (A1 + A2 + A3) according to EN 15804: 2012 + A1: 2013. Modules (A4 to D) not included.
PCR:	<ul style="list-style-type: none"> • PCR 2012:01 - Construction products and construction services. Ver 2.2 • Sub-PCR Wood and wood-based products for use in construction (EN 16485)
PCR review:	The Technical Committee of the International EPD® System. Chair: Massimo Marino. Contact via info@environdec.com
Independent verification of the declaration and data according to ISO 14025:	<input type="checkbox"/> EPD process certification (Internal) <input checked="" type="checkbox"/> EPD verification (External)
Third party verifier:	Tecnalia R&I Certificación, S.L. www.tecnaliacertificacion.com Auditor: Elisabet Amat (eli.amat@tecnaliacertificacion.com)
Accredited or approved by:	ENAC. Accreditation no.125/C-PR283
EPD registration number:	S-P-01345
Published:	2018-09-26
Valid until:	2023-09-13
UN CPC code:	314 – Wood boards and panels
Geographical scope	International

The company

Owned by Egoín S.A since the end of 2013, Olatek is the market leader in structural laminated wood in south-western Europe. It has the most modern means of production for the transformation of wood from trees into beams and laminated panels.

Located in Goñain Padure Industrial Area in Legutio (Basque Country), Olatek is the most modern laminated wood factory with the highest production capacity in South West Europe (40,000 m³ of finished product), and its vocation is to lead the supply of structural laminated wood products in its surroundings, reducing by three or four the kilometric distances with respect to the supplies of our current competitors, located in the center and north of Europe.

The company promotes the construction with wood from forests subject to chain of custody (FSC-PEFC), with controlled felling and reforestation, applying maximum energy efficiency in manufacturing processes, with a great commitment to the environment.

Product information

The following report describes the results obtained from the Life Cycle Analysis of 1m³ of laminated timber used as beam, manufactured by the company Olatek in Legutio. It includes a detailed description of the scope of the study and the data used. Likewise, due to the similarity in the manufacturing process, the complete EPD (only in Spanish) also included environmental indicators for the CLT panels of radiata pine manufactured in Olatek.

Product name:

Radiata pine laminated wood

Product description:

The laminated wood beam product is a material formed by wooden boards joined in finger joint. These boards, glued together in parallel, become laminated beams.

Laminated wood is a versatile product that allows all types of wood construction, from a traditional structure of pillars and beams for a single-family home to large public buildings up to 40 meters. In addition, it gives freedom of expression to architectural designs because it allows to manufacture laminated beams of curved geometries.



Content declaration

PRODUCT CHARACTERISTICS	
Density	500-550 kg/m ³
Humidity	12%
Length	Up to 40 m
Resistant class	GL24/GL32
Composition	Radiata pine wood (97%) Glue (3%)
Hazardous substances	The product does not contain any substance from the REACH candidate list

LCA information

Declared unit:

1m³ of radiata pine laminated wood used as beam

System limits:

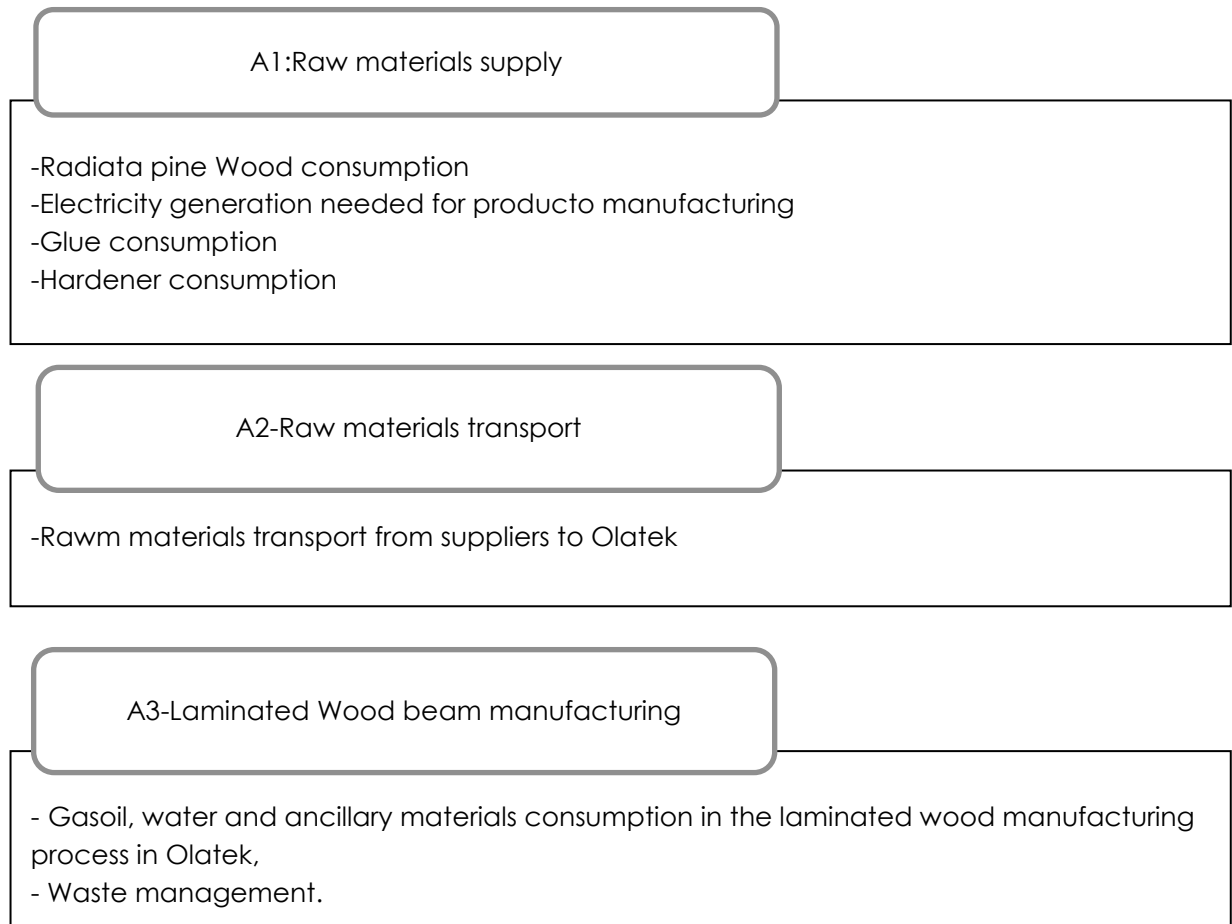
Cradle-to-gate (A1-A3) according to EN 15804:2012 standard.

Product stage			Construction process stage		Use stage								End-of-life stage				Resource recovery stage
Raw material	Transport	Manufacturing	Transport	Installation	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	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	

X: Included in the LCA

MND: module not declared

In the following diagram, the main elements that have been considered in every of the life cycle stages are shown:



Eco-Profile

The environmental impact of 1m³ of Olatek radiata pine laminated wood calculated in accordance with the environmental evaluation methodology CML-IA V4.8 August 2016 is as follows.

Potential environmental impacts

PARAMETERS	UNITS	A1	A2	A3	TOTAL A1-A3
Global warming potential (GWP)	kg CO ₂ eq.	-913,886	11,850	2,682	-899,354
Ozone layer depletion (ODP)	kg CFC 11 eq.	2,92E-05	2,16E-06	4,16E-07	3,18E-05
Acidification potential (AP)	kg SO ₂ eq.	0,923	0,048	0,018	0,989
Eutrophication potential (EP)	kg PO ₄ ³⁻ eq.	0,102	0,008	0,003	0,113
Formation potential of tropospheric ozone (POCP)	kg C ₂ H ₄ eq.	0,106	0,002	0,001	0,108
Abiotic depletion potential – Elements	kg Sb eq.	1,55E-03	4,65E-05	2,17E-05	1,62E-03
Abiotic depletion potential – Fossil resources	MJ, net calorific value	2074,439	189,325	56,380	2320,144
Water scarcity potential	m ³ eq.	3,117	0,035	0,018	3,170

Uso de recursos

PARAMETERS		UNITS	A1	A2	A3	TOTAL A1-A3
Primary energy resources – Renewable	Used as energy carrier	MJ, net calorific value	17296,20	2,35	2,94	17301,49
	Used as raw materials	MJ, net calorific value	12806	0	0	12806
	TOTAL	MJ, net calorific value	30102,20	2,35	2,94	30107,50
Primary energy resources – Non-renewable	Used as energy carrier	MJ, net calorific value	2693,51	192,53	59,50	2945,55
	Used as raw materials	MJ, net calorific value	389,283	0	2,3	391,58
	TOTAL	MJ, net calorific value	3082,79	192,53	61,80	3337,13

Secondary material	kg	0	0	0	0
Renewable secondary fuels	MJ, net calorific value	0	0	22,05	22,05
Non-renewable secondary fuels	MJ, net calorific value	0	0	0	0
Net use of fresh water	m ³	3,12	0,04	0,02	3,17

Waste generation

PARAMETERS	UNITS	A1	A2	A3	TOTAL A1-A3
Hazardous waste disposed	kg	2,82E-03	1,16E-04	3,30E-05	2,97E-03
Non-hazardous waste disposed	kg	26,982	18,533	7,636	0,813
Radioactive waste disposed	kg	1,36E-02	1,22E-03	2,36E-04	1,50E-02

NOTES

- The EPD owner is the sole responsible of the content of this EPD.
- EPDs within the same product category but from different programmes may not be comparable.
- EPD of construction products may not be comparable if they do not comply with EN 15804

