



Environmental Product Declaration

according to ISO 14025



EGGER EUROLIGHT[®] Raw and Laminated Lightweight Board

Declaration number
EPD-EHW-2008411-E

Institut Bauen und Umwelt e.V.
www.bau-umwelt.com



Institut Bauen
und Umwelt e.V.

	<p style="text-align: center;">Summary Umwelt- Produktdeklaration <i>Environmental Product-Declaration</i></p>
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<p>Institut Bauen und Umwelt e.V. www.bau-umwelt.com</p> 	<p style="text-align: right;">Program holder</p>
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<p>Fritz EGGER GmbH & Co. Company Head Office Weiberndorf 20 A – 6380 St. Johann in Tyrol</p> 	<p style="text-align: right;">Declaration holder</p>
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<p>EPD-EHW-2008411-E</p>	<p style="text-align: right;">Declaration number</p>
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<p>Egger raw / laminated EUROLIGHT® lightweight building board</p> <p>This declaration is an environmental product declaration according to ISO 14025 and describes the environmental rating of the building products listed herein. It is intended to further the development of environmentally compatible and sustainable construction methods. All relevant environmental data is disclosed in this validated declaration. The declaration is based on the PCR document "Wood-based materials", year 2009-01.</p>	<p style="text-align: right;">Declared building products</p>
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<p>This validated declaration authorises the holder to bear the official stamp of the Institut Bauen und Umwelt. It only applies to the listed products for one year from the date of issue. The declaration holder is liable for the information and evidence on which the declaration is based.</p>	<p style="text-align: right;">Validity</p>
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<p>The declaration is complete and contains in its full form:</p> <ul style="list-style-type: none"> - Product definition and physical building-related data - details of raw materials and material origin - description of how the product is manufactured - instructions on how to process the product - data on usage condition, unusual effects and end of life phase - life cycle assessment results - evidence and tests 	<p style="text-align: right;">Content of the declaration</p>
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<p>25. February 2009</p>	<p style="text-align: right;">Date of issue</p>
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<div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 1; text-align: right;"> <p>Signatures</p> </div> </div> <p>Prof. Dr.-Ing. Horst J. Bossenmayer (President of the Institut Bauen und Umwelt)</p>	
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<p>This declaration and the rules on which it is based have been examined by an independent expert committee (SVA) in accordance with ISO 14025.</p>	<p style="text-align: right;">Verification of the declaration</p>
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**Summary
Umwelt-
Produktdeklaration
Environmental
Product-Declaration**

Raw / laminated lightweight building boards are board-shaped wood-based materials according to EN 312 and EN 14322. Raw or laminated thin chipboard boards are coated on one side with an adhesive and glued together with an expanded honeycomb cardboard intermediate layer.

Product description

Applications for raw / melamine resin coated lightweight building board include decorative interior finishing, furniture, and door construction. They are found in applications in the kitchen area as worktops and in interior doors. Lightweight building boards are popular for use in applications where a massive appearance is desired.

Application

Low weight, optimal stability and maximum design flexibility are requirements which a modern wood-based material must fulfil. Without also losing load bearing capacity, rigidity and other structural functions, a maximal weight reduction is only possible through the use of a sandwich board with a honeycomb core.

The **Life Cycle Assessment (LCA)** was performed according to DIN ISO 14040 following the requirements of the IBU guideline for type III declarations. Both specific data from the reviewed products and data from the "GaBi 4" database were used. The life cycle assessment encompasses the raw material and energy production, raw material transport, the actual manufacturing phase and the end of life in a biomass generating plant with energy recovery. 1 m² of EUROLIGHT® with a thickness of 38 mm and surface layer thicknesses of 3, 4, and 8 mm as well as the corresponding cardboard honeycomb in the intermediate layer are declared.

Scope of the LCA

EUROLIGHT raw board m²							
Evaluation variable	Unit per m ²	3mm		4mm		8mm	
		Manuf.	EOl	Manuf.	EOl	Manuf.	EOl
Primary energy, non renew able	[MJ]	121,97	-85,05	129,04	-104,05	157,00	-178,29
Primary energy, renew able	[MJ]	73,77	-7,59	97,80	-9,26	193,94	-15,90
Global warming potential (GWP 100)	[kg CO ₂ eqv.]	1,30	3,94	0,28	4,39	-3,83	8,22
Ozone depletion potential (ODP)	[kg R11 eqv.]	2,22E-07	-2,66E-09	2,33E-07	-3,61E-09	2,75E-07	-5,75E-09
Acidification potential (AP)	[kg SO ₂ eqv.]	1,48E-02	7,41E-03	1,69E-02	8,73E-03	2,51E-02	1,64E-02
Eutrophication potential (EP)	kg Phosphate eqv.	2,93E-03	1,42E-03	3,41E-03	1,63E-03	5,32E-03	2,93E-03
Photochemical oxidant formation potential (POFP)	[kg ethylene eqv.]	1,86E-03	-1,03E-04	2,03E-03	-1,34E-04	2,69E-03	-1,71E-04
EUROLIGHT Melamine faced board [m²]							
Evaluation variable	Unit per m ²	3mm		4mm		8mm	
		Manuf.	EOl	Manuf.	EOl	Manuf.	EOl
Primary energy, non renew able	[MJ]	139,14	-92,33	146,21	-111,32	174,17	-185,56
Primary energy, renew able	[MJ]	75,01	-7,68	99,04	-9,36	195,18	-15,99
Global warming potential (GWP 100)	[kg CO ₂ eqv.]	2,07	4,16	1,05	4,60	-3,06	8,43
Ozone depletion potential (ODP)	[kg R11 eqv.]	2,65E-07	-2,23E-08	2,75E-07	-2,33E-08	3,18E-07	-2,54E-08
Acidification potential (AP)	[kg SO ₂ eqv.]	1,67E-02	7,04E-03	1,88E-02	8,36E-03	2,70E-02	1,60E-02
Eutrophication potential (EP)	kg Phosphate eqv.	3,42E-03	1,38E-03	3,90E-03	1,59E-03	5,81E-03	2,90E-03
Photochemical oxidant formation potential (POFP)	[kg ethylene eqv.]	2,24E-03	-1,40E-04	2,40E-03	-1,71E-04	3,06E-03	-2,08E-04

Results of the LCA

Prepared by: PE INTERNATIONAL, Leinfelden-Echterdingen
in cooperation with Fritz EGGER GmbH & Co.



In addition, the results of the following tests are shown in the environmental product declaration:

- Formaldehyde according to EN 120
Testing institute: WKI Fraunhofer Wilhelm-Klauditz-Institut
- MDI (diphenylmethane-4,4'-diisocyanate) according to BIA 7670
Testing institute: Wessling Beratende Ingenieure GmbH
- Eluate analysis according to EN 71-3
Testing institute: MFPA Leipzig GmbH
- EOX (extractable organic halogen compounds) according to DIN 38414-S17
Testing institute: MFPA Leipzig GmbH
- Toxicity of the fire gases according to DIN 53436
Testing institute: MFPA Leipzig GmbH

**Evidence and
verifications**



Institut Bauen
und Umwelt e.V.

Publisher:

Institut Bauen und Umwelt e.V.

(formerly Arbeitsgemeinschaft Umweltverträgliches Bauprodukt
e.V., AUB)

Rheinufer 108

53639 Königswinter

Phone: 02223 296679 0

Fax: 02223 296679 1

E-mail: info@bau-umwelt.com

Internet: www.bau-umwelt.com

Layout:

Fritz EGGER GmbH & Co.

Illustration credits:

Fritz EGGER GmbH & Co.

Company Head Office

Weiberndorf 20

A – 6380 St. Johann in Tyrol

In the case of a doubt is the original EPD “EPD-EHW-2008411-D”
applicable.