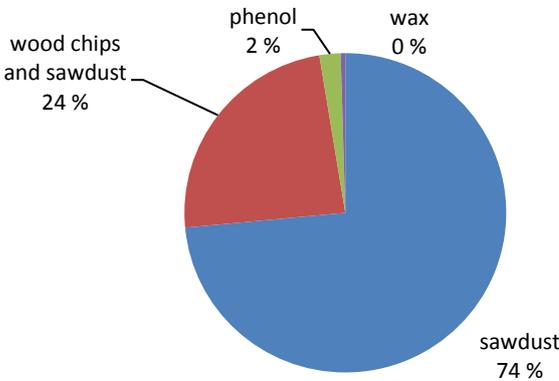
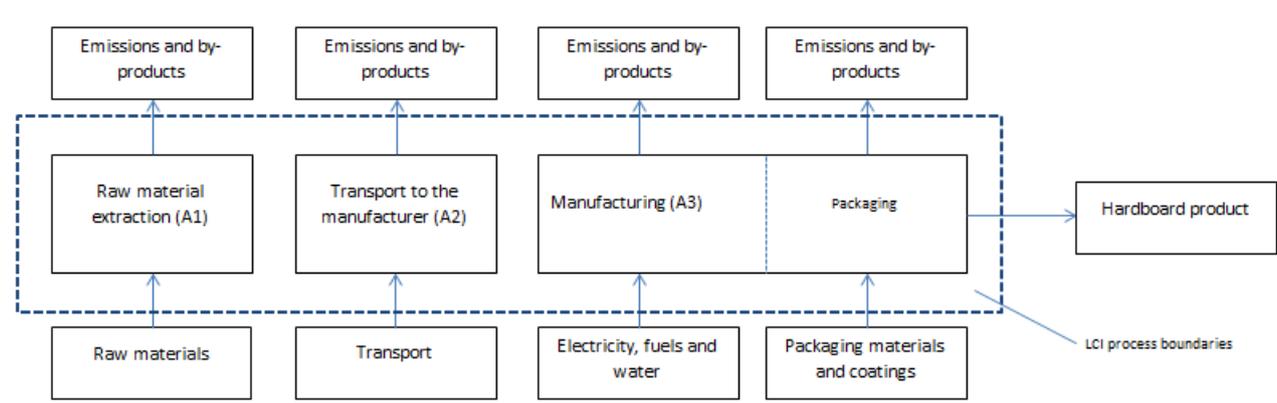




Environmental product declaration (EN-SFS 15804)	Finnish Fibreboard Ltd / hardboard										
General information											
Manufacturer	Finnish Fibreboard Ltd										
Address	PL 4, 18101 Heinola										
Product use	The hardboard product is manufactured by Finnish Fibreboard Ltd using wet process. The product is mainly used for building, covering and packaging.										
Declared unit	1 cubic meter of hardboard										
Product identification	Hardboard produced by Finnish Fibreboard Ltd at the factory in Heinola. 										
Main product components	Wood chips, sawdust										
Program	Excel 2010 Microsoft Corporation One Microsoft Way, Redmond, WA 98052-7329, USA www.microsoftstore.com										
Date issued	22.4.2014										
Validity											
Stages	This EPD covers life cycle stages A1-A3 (Cradle-to-gate). It does not examine stages A4-A5 (building stage), B1-B7 (use stage) and C1-C4 (demolition stage).										
Statement	EPD of construction products may not be comparable if they do not comply with the standard SFS-EN 15804.										
General description Material content	This EPD represents the average environmental impacts of a hardboard product manufactured by Finnish Fibreboard Ltd in Heinola.  <table border="1" data-bbox="671 1514 1230 1895"> <caption>Material Content</caption> <thead> <tr> <th>Material</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>sawdust</td> <td>74 %</td> </tr> <tr> <td>wood chips and sawdust</td> <td>24 %</td> </tr> <tr> <td>phenol</td> <td>2 %</td> </tr> <tr> <td>wax</td> <td>0 %</td> </tr> </tbody> </table>	Material	Percentage	sawdust	74 %	wood chips and sawdust	24 %	phenol	2 %	wax	0 %
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Verification
CEN standard FprEN 15804 serves as the core PCR*
Independent verification of the declaration, according to EN ISO 14025:2010
<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
* Product category rules

Environmental Impacts	
The Product System Flow Chart	The Flowchart of the examined Product System
 <p>The flowchart illustrates the Life Cycle Inventory (LCI) process boundaries for the product system. It starts with 'Raw materials' and 'Transport' leading to 'Raw material extraction (A1)'. 'Raw material extraction (A1)' leads to 'Emissions and by-products'. 'Raw material extraction (A1)' and 'Transport' lead to 'Transport to the manufacturer (A2)'. 'Transport to the manufacturer (A2)' leads to 'Emissions and by-products'. 'Transport to the manufacturer (A2)' and 'Electricity, fuels and water' lead to 'Manufacturing (A3)'. 'Manufacturing (A3)' leads to 'Emissions and by-products'. 'Manufacturing (A3)' and 'Packaging materials and coatings' lead to 'Packaging'. 'Packaging' leads to 'Emissions and by-products'. 'Packaging' leads to 'Hardboard product'. A dashed blue box encloses the processes from 'Raw material extraction (A1)' to 'Packaging', labeled as 'LCI process boundaries'.</p>	
Modules	Cradle-to-Gate A1; raw material extraction and processing, processing of secondary material input A2; transport to the manufacturer A3; manufacturing

Impact Category (parameter)	Amount	Unit
Global Warming	188,0	kg CO ₂ equiv
Ozone Depletion	0,00002	kg CFC11 equiv
Acidification of soil and water	1,4	kg SO ₂ equiv
Eutrophication	0,036	kg (PO ₄) ³⁻ equiv
Photochemical ozone creation	0,023	kg C ₂ H ₄ equiv
Depletion of abiotic resources - elements	-	kg Sb equiv
Depletion of abiotic resources - fossil fuels	2377,5	MJ

Resource use (parameter)	Amount	Unit
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	592,8	MJ
Use of renewable primary energy resources used as raw materials	-	MJ
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	592,8	MJ
Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials	1389,3	MJ
Use of non renewable primary energy resources used as raw materials	-	MJ
Total use of non renewable primary energy resources (primary energy and primary energy resources used as raw materials)	1389,3	MJ
Use of secondary material	833,2	kg
Use of renewable secondary fuels	6461,4	MJ
Use of non renewable secondary fuels	-	MJ
Net use of fresh water	14,3	m ³



Waste categories (parameter)	Amount	Unit
Hazardous waste disposed	1,1	kg
Non hazardous waste disposed	13,3	kg
Radioactive waste disposed	-	kg

Other output flows (parameter)	Amount	Unit
Components for re-use	-	kg
Materials for recycling	2,4	kg
Materials for energy recovery	140,5	kg
Exported energy	-	MJ

Additional information	
Use stage	B1-B7
Hardboard is a durable and versatile product. It can be used for construction, covering, packaging and temporary constructs. This product has been granted the M1 rating. The product has no health risks. The product has no Material Safety Data Sheet.	
Wood products act as natural carbon storages.	
Purkuvaihe	C1-C4
Intact and clean products can be re-used. Products unsuitable for re-use can be composted, incinerated or disposed of at landfills. Uncoated products can be incinerated in a household furnace.	

Sources	
EN-SFS 15804:2012	Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products.
LCA 04/2014	EcoMill Environmental Efficiency Project / Finnish Fibreboard Ltd. Hardboard. LCA ISO 14040 ja EN-SFS 15804
Additional information	www.finnishfibreboard.com Kaija Ahonen, kaija.ahonen@finfib.fi