ENVIRONMENTAL PRODUCT DECLARATION

ISO 14025

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The Norwegian EPD Foundation

Owner of the declaration	Svenheim Møbelindustri AS
Program holder and publisher	The Norwegian EPD Foundation
Declaration number	NEPD-373-259-EN
Issue date	19.10.2015
Valid to	19.10.2020

Office furniture, Factor Table 3600x1200x26mm HPL, 6 legs.

Product

Svenheim Møbelindustri AS

Manufacturer





The table top is made of MDF. Table tops are delivered with straight or bevelled edges and is coated with high pressure laminate in white, gray or black. Also available in lacquered, white-pigmented or dark stained oak.

Legs delivered in metal or wood, and in different heights.

General information

Product
Office furniture, Factor Table 3600x1200x26mm
Prod no. FAC360120500

Owner of the declaration:
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General Information
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Manufacturer
UAB Baldeka og Svenheim Møbelindustri AS

Declaration number:
NEPD-373-259-EN

Place of production:
Alytus, Lithuania

This declaration is based on Product Category Rules:
PCR for furniture, NPCR 021, Norwegian EPD Foundation

Management system:
ISO 14001, Certificate No. 81858-2010-AE-LUT-FINAS
ISO 9001, Certificate No. 81860-2010-AQ-LTU-FINAS
Accredited unit: DNV Certification OY/AB, Finland

Declared unit:
Factor Table 3600x1200x26mm w/6 legs

Org. No:
No. 950740213

Declared unit with option:
This table is MDF with white high pressure laminate and 6 black metal legs. (devided)

Issue date:
19.10.2015

Functional unit:
Production of one table (4,32m2) provided and mainatined for a periode of 15 years.

Valid to:
19.10.2020

This EPD has been worked out by:
The declaration has been developed using Furniture EPD Tool Version 1.1, Approval: NEPDTO4
Company specific data collected and registered by:
Data Collector Agne Raulonyte
Company specific data audited by:
Data Auditor : Mette Wedul Gulbrandsen

Comparability:
EPDs from programmes other than the Norwegian EPD Foundation may not be comparable

Year of study:
2015

Verification:
Independent verification of data, other environmental information and EPD has been carried out in accordance with ISO14024, 8.1.3. and 8.1.4.

externally

Approved

Mie Vold, Senior Research Scientist
(Independent verifier approved by EPD Norway)

Håkon Hauan
Managing Director of EPD-Norway

Key environmental indicators	Unit	Cradle to Gate A1-A3
Global warming	kg CO_2	119
Total energy use	MJ	17966
Amount of recycled materials	%	29 %

Product

Product Description and Application

The table top is made of 26 mm MDF. Table tops are delivered with straight or bevelled edges and is coated with high pressure laminate in white, gray or black. Also available in lacquered, white-pigmented or dark stained oak. Legs delivered in metal or wood, and in different heights. The declaired unit is in white high pressure laminate and 6 black metal legs.

Technical Data

Total Weight: 103,5 kg (106,2 kg with packaging)

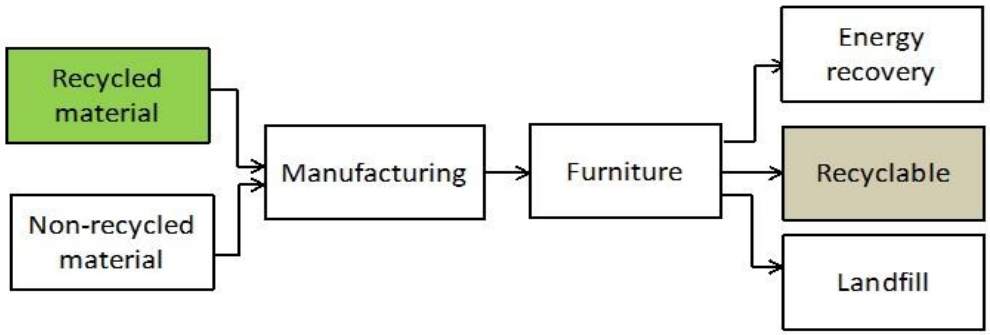
Market

Europe

Reference Service Life

15 years

Materials	kg	%
Other	2,8	2,7
Melamine	0,0	0,0
Packaging	2,7	2,6
PVC	0,1	0,1
Steel	28,5	26,8
Textiles	0,6	0,5
Wood	71,5	67,3
Total	106,2	



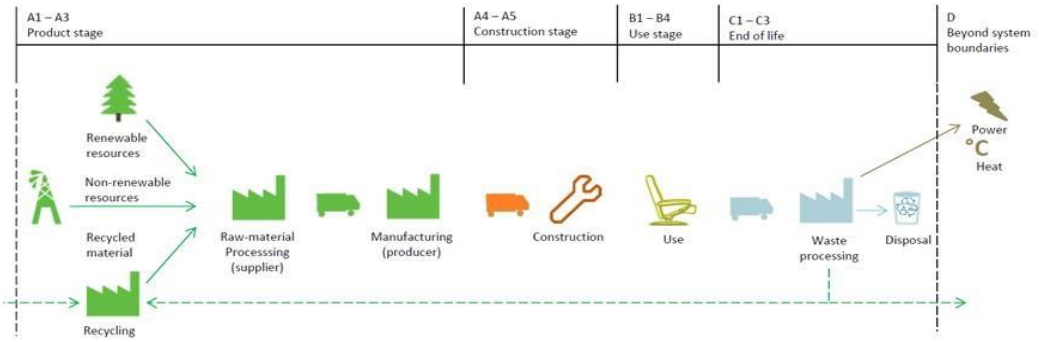
Materials	Recycled	Recycled amount	Recycled materials	Recyclable	Recyclable amount	Recyclable materials
Unit	%	kg	%	%	kg	%
Other	0 %	0,0		5 %	0,2	
Melamine	0 %	0,0		0 %	0,0	
Packaging	68 %	1,8		100 %	2,7	
PVC	0 %	0,0		100 %	0,1	
Steel	100 %	28,5		100 %	28,5	
Textiles	0 %	0,0		0 %	0,0	
Wood	0 %	0,0		0 %	0,0	
Total		30	29 %		31,4	30 %

Product manufactured from 28% recycled material
At end of life product contains 29% recyclable material

LCA: Calculation rules

Declared unit:
Production of one Factor table 3600x1200x26mm ,HP-laminate w/ 6 black metal legs 70x40, provided and maintained for a periode of 15 years.

System boundary:
Life cycle stages included are described in figure and through the corresponding letter and number designations in the declaration (see figure below)



Data quality:
Specific manufacturing data from 2014 are used. Data from Ecoinvent 3.0.1. and Østfoldforskning databases are used as the basis for raw materials and energy carrier production. See [6].

Cut-off criteria:
All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows that are included with very small amounts (<1%) are not included. This cut-off rule does not apply for hazardous materials and substances

Allocation:
Where virgin materials are used, emissions and energy consumption connected with extraction and production are included.
Where recycled materials are used in the product, emissions and energy consumption related to the recycling process are included.
Emissions from incineration are allocated to the product system that uses the recovered energy.
Emissions from incineration of waste are allocated to the product system that uses the recovered energy.

LCA: Scenarios and additional technical information

Transportation to an average customer in Norway (Jessheim) is 1306 km : (A4: average European lorry > 32 tonnes) 881,55 km by lorry (>32) and 424,45km by sea transport.

In the end of life stage, the transport distance for waste to waste processing is 72 km (C1). The reuse, recovery and recycling stage is beyond the system boundaries (D). It is assumed that the solution is dismantled and the materials recycled or combusted according to the general Norwegian treatment of industrial waste (see the table below). The transport distance to reuse, recovery or recycling is varying for each material, but the average distance is 373 km. The vehicles used and associated data are described in detail in [5].

	Material recovery	Energy recovery	Disposal
Aluminium	70,1 %	0,0 %	30 %
Steel	70,1 %	0,0 %	30 %
Plastic	64,3 %	30,8 %	5 %
Cardboard	94,5 %	5,5 %	0 %

LCA: Results

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

System boundaries (X=included, MND=modul not declared, MNR=modul not relevant)

Product stage			Construction stage		Use stage				End of life			Beyond the system boundaries
Raw materials	Transport	Manufacturing	Transport	Construction	Maintenance	Repair	Replacement	Operational energy use	Transport	Waste Processing	Disposal	Reuse-recovery-recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	C1	C2	C3	D
x	x	x	x	MNR	x	MNR	MNR	MNR	x	x	x	x

Environmental impact (INA = Indicator Not Assessed)

Parameter	A1	A2	A3	A1-A3	A4	B1	C1	C2	C3	C1-C3	D
GWP	92,2	14,6	12,6	119,4	10,5	0,0	5,1	5,7	17,8	28,6	-12,2
ODP	6,5E-06	1,1E-06	6,2E-07	8,2E-06	7,6E-07	0,0	INA	INA	INA	INA	0,0
POCP	4,1E-02	2,1E-03	2,5E-03	4,6E-02	1,7E-03	0,0	INA	INA	INA	INA	0,0
AP	0,1	1,5E-02	4,4E-02	0,2	1,1E-02	0,0	INA	INA	INA	INA	0,0
EP	0,5	0,1	0,1	0,6	4,8E-02	0,0	INA	INA	INA	INA	-0,1
ADPM*	2,3E-04	4,7E-05	2,0E-05	3,0E-04	3,3E-05	0,0	INA	INA	INA	INA	0,0
ADPE	1504,3	224,6	151,7	1880,6	161,0	0,0	INA	INA	INA	INA	-140,4

GWP Global warming potential (kg CO2-eqv.); ODP Depletion potential of the stratospheric ozone layer (kg CFC11-eqv.); POCP Formation potential of tropospheric photochemical oxidants (kg C2H4-eqv.); AP Acidification potential of land and water (kg SO2-eqv.); EP Eutrophication potential (kg PO4-3-eqv.); ADPM Abiotic depletion potential for non fossil resources (kg Sb -eqv.); ADPE Abiotic depletion potential for fossil resources (MJ);

* Some processes use Ecoinvent 3.0.1. and thus data on renewable resources is omitted. The true ADPM, RPEE, RPEM and TPE may be higher than indicated. This issue will be addressed in a new version of Ecoinvent 3, data from which was not available when this declaration was prepared.

Resource use (INA = Indicator Not Assessed)

Parameter	A1	A2	A3	A1-A3	A4	B1	C1	C2	C3	C1-C3	D
RPEE*	141,4	0,0	16,6	158,1	0,0	0,0	INA	INA	INA	INA	-0,5
RPEM*	898,0	1,1	20,1	919,2	0,8	0,0	INA	INA	INA	INA	-3,5
TPE*	1039,4	1,1	36,7	1077,3	0,8	0,0	INA	INA	INA	INA	-4,0
NRPE	17405,6	226,0	176,7	17808,4	162,1	0,0	INA	INA	INA	INA	-139,4
NRPM	42,1	0,0	0,0	42,1	0,0	0,0	INA	INA	INA	INA	0,0
TNRPE	17447,7	226,0	176,7	17850,4	162,1	0,0	INA	INA	INA	INA	-139,4
SM	35,6	0,0	0,0	35,6	0,0	0,0	INA	INA	INA	INA	-21,6
RSF	2,8E-04	0,0	0,0	2,8E-04	0,0	0,0	INA	INA	INA	INA	0,0
NRSF	9,6E-04	0,0	0,0	9,6E-04	0,0	0,0	INA	INA	INA	INA	0,0
W	16,0	6,0E-04	92,1	108,1	4,3E-04	0,0	INA	INA	INA	INA	-173,6

RPEE Renewable primary energy resources used as energy carrier (MJ); RPEM Renwable primary energy resources used as raw materials (MJ); TPE Total use of renewable primary energy resources (MJ); NRPE Non renewable primary energy resources used as energy carrier (MJ); NRPM Non renewable primary energy resources used as materials (MJ); TNRPE Total use of non renewable primary energy resources (MJ); SM Use of secondary materials (kg); RSF Use of renewable secondary fuels (MJ); NRSF Use of non renewable secondary fuels (MJ); W Use of net fresh water (m3);

End of life - Waste and Output flow (INA = Indicator Not Assessed)

Parameter	A1	A2	A3	A1-A3	A4	B1	C1	C2	C3	C1-C3	D
HW	2,0E-02	2,8E-04	2,9E-04	2,1E-02	2,0E-04	0,0	INA	INA	INA	INA	0,0
NHW	41,4	19,7	2,9	64,0	13,8	0,0	INA	INA	INA	INA	-1,6
RW	0,0	0,0	0,0	0,0	0,0	0,0	INA	INA	INA	INA	0,0
CR	0,0	0,0	0,0	0,0	0,0	0,0	INA	INA	INA	INA	0,0
MR	3,7E-02	0,0	0,0	3,7E-02	0,0	0,0	INA	INA	INA	INA	0,0
MER	0,0	0,0	0,0	0,0	0,0	0,0	INA	INA	INA	INA	0,0
EEE	0,0	0,0	0,0	0,0	0,0	0,0	INA	INA	INA	INA	0,0
ETE	0,0	0,0	0,0	0,0	0,0	0,0	INA	INA	INA	INA	0,0

HW Hazardous waste disposed (kg); NHW Non hazardous waste disposed (kg); RW Radioactive waste disposed (kg); CR Components for reuse (kg); MR Materials for recycling (kg); MER Materials for energy recovery (kg); EEE Exported electric energy (MJ); ETE Exported thermal energy (MJ);

Specific Norwegian requirements

Electricity

The electricity consumed is assumed to be from East pool mix in the East European countries. European mix and energy mix in Lituania is based on data from the Wold bank. (Based on data 2011.)

Electricity mix: 0,053 kg CO2 eqv/MJ (East Europen mix)

Dangerous Substances
None of the following substances have been added to the product: Substances on the REACH Candidate list of substances of very high concern (of '15.06.2015) substances on the Norwegian Priority list (pr.03.09.2015) and substances that lead to the product being classified as hazardous waste. The chemical content of the product complies with regulatory levels as given in the Norwegian Product Regulations.

Indoor environment
Our furniture doesn't contain any substraces that affect indoor climate.

Climate declaration
Not relevant

Bibliography

[1] NS-EN ISO 14025:2006, Environmental labels and declarations-Type III environmental declarations-Principles and procedures.

[2] NS-EN ISO 14044:2006, Environmental management - Life cycle assessment - Requirements and guidelines

[3] EN 15804:2012 + A1:2013 Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products

[4] PCR for seating solution: PRODUCT-CATEGORY RULES(PCR) for preparing an environmental product declaration (EPD) for Product Group “Seating solution”, PCR 2008:NPCR 003, extended version

[5] Raadal, H. L., Modahl, I. S., Lyng, K. A. (2009). Klimaregnskap for avfallshåndtering, Fase I og II. OR 18.09. ISBN : 978-82-7520-611-2, 82-7520-611-1

[6] Brekke, A., Møller, H., Baxter, J., Askham, C. (2014). Verktøy - miljødeklarasjon for møbel Dokumentasjon som grunnlag for verifisering, Ostfold Research

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