

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804 $\,$

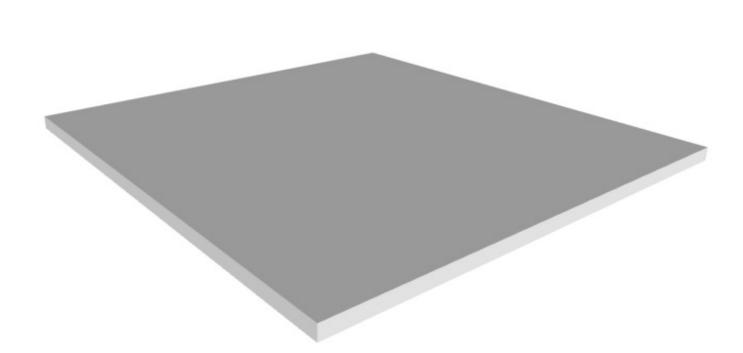
Scan Sørlie				
The Norwegian EPD Foundation				
The Norwegian EPD Foundation				
NEPD-3754-2692-EN				
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11.10.2022				
11.10.2027				

Tabletop, MFC, 80 X 80 X 2,5

Scan Sørlie

www.epd-norge.no

SCAN SØRLIE



General information

Product:

Tabletop, MFC, 80 X 80 X 2,5

Program operator:

The Norwegian EPD Foundation Pb. 5250 Majorstuen, 0303 Oslo Phone: +47 23 08 80 00 e-mail: post@epd-norge.no

Declaration number:

NEPD-3754-2692-EN

ECO Platform reference number:

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A1:2013 serves as core PCR NPCR 026:2018 Part B for furniture

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Declared unit:

1 Pcs Tabletop, MFC, 80 X 80 X 2,5

Declared unit with option:

A1,A2,A3,A4

Functional unit:

Tabletop, MFC, 80 X 80 X 2,5

General information on verification of EPD from EPD tools:

Independent verification of data, other environmental information and the declaration according to ISO 14025:2010, § 8.1.3 and § 8.1.4. Individual third party verification of each EPD is not required when the EPD tool is i) integrated into the company's environmental management system, ii) the procedures for use of the EPD tool are approved by EPDNorway, and iii) the proccess is reviewed annualy. See Appendix G of EPD-Norway's General Programme Instructions for further information on EPD tools.

Verification of EPD tool:

Independent third party verification of the EPD tool, background data and test-EPD in accordance with EPDNorway's procedures and guidelines for verification and approval of EPD tools.

Erik Svanes, Norsus AS

(no signature required)

Key environmental indicators	Unit	Cradle to gate A1 - A3
Global warming	kg CO2 eqv	24,61
Total energy use	MJ	640,52
Amount of recycled materials	%	5,15

Owner of the declaration:

Scan Sørlie Contact person: Dalius Ginaitis Phone: +47 69 22 75 50 e-mail: dalius@scansorlie.com

Manufacturer:

Scan Sørlie

Place of production:

Scan Sørlie Vistergrenda 80 1719 Greåker Norway

Management system:

Organisation no:

926 646 990

Issue date: 11.10.2022

Valid to: 11.10.2027

Year of study:

2022

Comparability:

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

Development and verification of EPD:

The declaration has been developed and verified using EPD tool lca.tools ver EPD2020.11, developed by LCA.no AS. The EPD tool is integrated into the company's environmental management system, and has been approved by EPD-Norway

Developer of EPD:

Dalius Ginaitis

Reviewer of company-specific input data and EPD:

Jurate Jasiuniene

Approved:

Sign

Håkon Hauan, CEO EPD-Norge

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Product

Market:

Product description:

Tabletop, MFC, 80 X 80 X 2,5

Product specification

Technical data:

Melamine faced chipboard, ABS edge-band, length: 80 cm, width: 80 cm, thickness: 25 mm.

Reference service life, product

5 years warranty, 15 years expected lifecycle.

Reference service life, building

Materials	kg	%	Recycled share in material (kg)	Recycled share in material (%)
Plastic - Acrylonitrile butadiene styrene (ABS)	0,18	1,65	0,00	0,00
Wood - Chipboard	10,00	90,53	0,00	0,00
Glue for wood	0,03	0,29	0,00	0,00
Plastic - Melamine	0,83	7,53	0,00	0,00
Total:	11,05		0,00	
Packaging	kg		Recycled share in material (kg)	Recycled share in material (%)
Packaging - Cardboard	0,80		0,61	76,30
Total including packaging	11,85		0,61	

LCA: Calculation rules

Declared unit:

1 Pcs Tabletop, MFC, 80 X 80 X 2,5

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

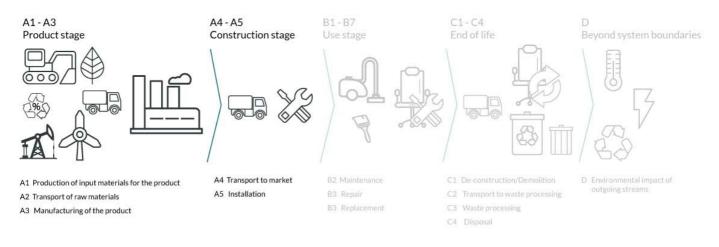
The allocation is made in accordance with the provisions of EN 15804. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Plastic - Acrylonitrile butadiene styrene (ABS)	ecoinvent 3.4	Database	2015
Glue for wood	ecoinvent 3.4	Database	2017
Packaging - Cardboard	ecoinvent 3.4	Database	2017
Plastic - Melamine	ecoinvent 3.4	Database	2017
Wood - Chipboard	ecoinvent 3.4	Database	2017

System boundary:



Additional technical information:

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LCA: Scenarios and additional technical information

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

Transport from production place to user (A4)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/t)
Truck	38,8 %	Truck, 16-32 tonnes, EURO 5	1030	0,044606	l/tkm	45,94
Railway					l/tkm	
Boat	71,0 %	Ship, Coastal Barge (250 - 3000t load)	270	0,011179	l/tkm	3,02
Other Transportation					l/tkm	

Assembly (A5)		Use (B1)			
•	Unit	Value	•	Unit	Value
Auxiliary	kg				
Water consumption	m ³				
Electricity consumption	kWh				
Other energy carriers	MJ				
Material loss	kg				
Output materials fr ste treatment	kg				
Dust in the air	kg				
VOC emissions	kg				
Maintenance (B2)/Repair (B3)			Replacement (B4)/Refurbishment (B5)		

Main	tenance	(B2)/R	(epair	(B3)

	Unit	Value		Unit	Value
Maintenance cycle*	0		Replacement cycle*		
Auxiliary	cha.		Electricity consumption	kWh	
Other resources	"IC		Replacement of worn parts		
Water consumption	m ³	A6 "	* Described above if relevant		
Electricity consumption	kWh		r.		
Other energy carriers	MJ		47.		
Material loss	kg		· Ad		
VOC emissions	kg		T are		
Operational energy (B6) and water consumption ((B7)		Replacement cycle* Electricity consumption Replacement of worn parts * Described above if relevant A 7. A A are not included End of Life (C1, ~ Not included)		
	Unit	Value	inc.	Unit	Value
Water consumption	m ³		Hazardous waste disposed	kg	

·		 		
Water consumption	m ³	Hazardous waste disposed	kg	
Electricity consumption	kWh	Collected as mixed construction was	kg	
Other energy carriers	MJ	Reuse	kg	
Power output of equipment	kW	Recycling		
		Energy recovery		
		To landfill	kg	

Transport to waste processing (C2)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (l/t)
Truck					l/tkm	
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

LCA: Results

The LCA results are presented below for the declared unit defined on page 2 of the EPD document.

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

	Product stage			instal	uction lation age		User stage							End of	life stage	9	Beyond the system bondaries
Raw materiale	Transhort		Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	W aste processing	Disposal	Reuse-Recovery- Recycling- potential
A1	A	2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	. D
Х	Х	(Х	Х	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	. MND

Environmental impact

Parameter	Unit	A1	A2	A3	A4
GWP	kg CO ₂ -eq	1,06E+01	2,25E-01	1,38E+01	2,13E+00
ODP	kg CFC11 -eq	1,26E-06	4,16E-08	6,83E-07	3,87E-07
POCP	kg C ₂ H ₄ -eq	3,57E-03	3,67E-05	2,64E-03	3,47E-04
AP	kg SO ₂ -eq	5,52E-02	7,20E-04	6,63E-02	7,41E-03
EP	kg PO4 ³⁻ -eq	8,78E-03	1,20E-04	8,75E-03	1,28E-03
ADPM	kg Sb -eq	4,33E-05	6,89E-07	2,14E-05	6,11E-06
ADPE	MJ	1,69E+02	3,40E+00	1,53E+02	3,17E+01

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009 *INA Indicator Not Assessed

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Resource use

Unit	A1	A2	A3	A4		
MJ	1,40E+02	4,95E-02	4,48E+01	4,77E-01		
MJ	8,47E+01	0,00E+00	0,00E+00	0,00E+00		
MJ	2,25E+02	4,95E-02	4,48E+01	4,77E-01		
MJ	1,89E+02	3,48E+00	2,63E+02	3,25E+01		
MJ	7,79E+00	0,00E+00	0,00E+00	0,00E+00		
MJ	1,97E+02	3,48E+00	2,63E+02	3,25E+01		
kg	6,10E-01	0,00E+00	0,00E+00	0,00E+00		
MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00		
MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00		
m ³	5,66E-02	6,51E-04	1,26E-01	6,19E-03		
	MJ MJ MJ MJ MJ MJ kg MJ MJ MJ	MJ 1,40E+02 MJ 8,47E+01 MJ 2,25E+02 MJ 1,89E+02 MJ 7,79E+00 MJ 1,97E+02 kg 6,10E-01 MJ 0,00E+00 MJ 0,00E+00	MJ 1,40E+02 4,95E-02 MJ 8,47E+01 0,00E+00 MJ 2,25E+02 4,95E-02 MJ 1,89E+02 3,48E+00 MJ 7,79E+00 0,00E+00 MJ 1,97E+02 3,48E+00 MJ 1,97E+02 3,48E+00 MJ 0,00E+00 0,00E+00 MJ 0,00E+00 0,00E+00 MJ 0,00E+00 0,00E+00	MJ 1,40E+02 4,95E-02 4,48E+01 MJ 8,47E+01 0,00E+00 0,00E+00 MJ 2,25E+02 4,95E-02 4,48E+01 MJ 1,89E+02 3,48E+00 2,63E+02 MJ 7,79E+00 0,00E+00 0,00E+00 MJ 1,97E+02 3,48E+00 2,63E+02 MJ 0,00E+00 0,00E+00 0,00E+00 MJ 0,00E+01 0,00E+00 0,00E+00 MJ 0,00E+00 0,00E+00 0,00E+00 MJ 0,00E+00 0,00E+00 0,00E+00		

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009 *INA Indicator Not Assessed

End of life - Waste

Parameter	Unit	A1	A2	A3	A4	
HW	kg	1,85E-04	2,03E-06	3,17E-04	1,94E-05	
NHW	kg	3,08E+00	1,83E-01	3,28E+00	1,63E+00	
RW	kg	INA*	INA*	INA*	INA*	
HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed						
Reading example: 9,0 E-03 = 9,0*10-3 = 0,009 *INA Indicator Not Assessed						

End of life - Output flow

Parameter	Unit	A1	A2	A3	A4
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	0,00E+00	0,00E+00	1,10E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	1,13E-03	0,00E+00
EEE	MJ	INA*	INA*	INA*	INA*
ETE	MJ	INA*	INA*	INA*	INA*
CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy					

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

*INA Indicator Not Assessed

Additional Norwegian requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Data source	Amount	Unit
Energy, electricity, European average: 1 kWh	ecoinvent 3.4	594,20	g CO2-ekv/kWh

Dangerous substances

The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

Indoor environment

Additional environmental information

Key environmental indicators for variants for this EPD: Cradle to Gate analyse from A1 to A3

Variant number	Global warming (kg CO2)	Total energy use (MJ)	Share of recycled material in product(%)
Tabletop, MFC, 100 X 80 X 2,5	21,88	633,07	5,47
Tabletop, MFC, 120 X 80 X 2,5	23,45	704,27	5,45
Tabletop, MFC, 140 X 80 X 2,5	25,03	775,48	5,44
Tabletop, MFC, 160 X 80 X 2,5	26,03	833,46	4,15
Tabletop, MFC, 180 X 80 X 2,5	27,86	908,85	5,44
Tabletop, MFC, 200 X 80 X 2,5	29,54	978,86	5,49
Tabletop, MFC, 220 X 80 X 2,5	31,11	1 048,34	5,50

Bibliography

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ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines.

EN 15804:2012+A1:2013 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products.

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NPCR Part A: Construction products and services. Ver. 1.0. April 2017, EPD-Norge.

NPCR 026 Part B for Furniture. Ver. 2.0 October 2018, EPD-Norge.

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