# ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

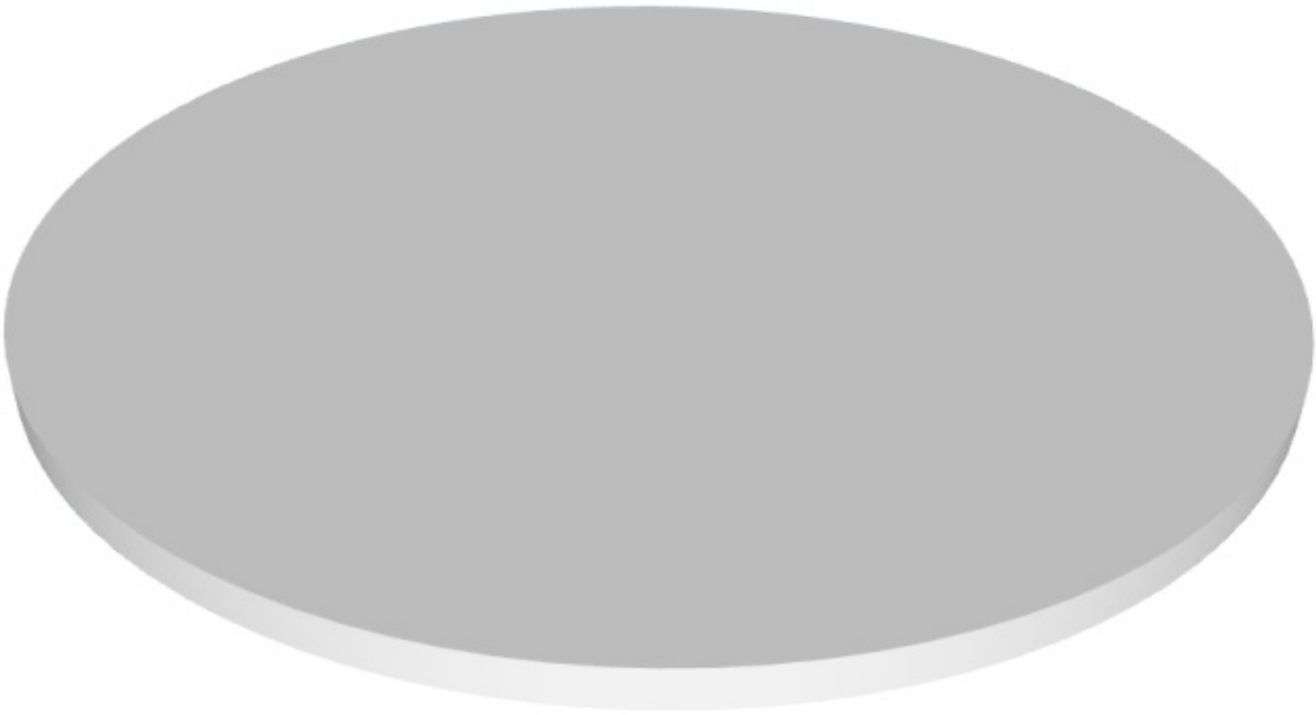
| | |
|---|---|
| Owner of the declaration: | Scan Sørlie |
| Program operator: | The Norwegian EPD Foundation |
| Publisher: | The Norwegian EPD Foundation |
| Declaration number: | |
| Registration number: | NA |
| ECO Platform reference number: | NA |
| Issue date: | 29.09.2022 |
| Valid to: | |

# Tabletop, MFC, round, Ø70 X 2,5

Scan Sørlie

SCAN SØRLIE

www.epd-norge.no



SCAN SØRLIE

# General information

**Product:**

Tabletop, MFC, round, Ø70 X 2,5

**Owner of the declaration:**

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

**Program operator:**

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

**Manufacturer:**

Scan Sørlie

**Declaration number:**

**Place of production:**

Scan Sørlie
Vistergrenda 80 1719 Greåker
Norway

**ECO Platform reference number:**

**Management system:**

**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

**Organisation no:**

926 646 990

**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.

**Issue date:**

29.09.2022

**Valid to:**

**Declared unit:**

1 Pcs Tabletop, MFC, round, Ø70 X 2,5

**Year of study:**

2022

**Declared unit with option:**

A1,A2,A3,A4

**Comparability:**

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

**Functional unit:**

Tabletop, MFC, round, Ø70 X 2,5

**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

**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.

**Approved:**

Sign

Erik Svanes, Norsus AS

(no signature required)

Håkon Hauan, CEO EPD-Norge

| Key environmental indicators | Unit | Cradle to gate A1 - A3 |
|---|---|---|
| Global warming | kg CO2 eqv | 18,00 |
| Total energy use | MJ | 458,97 |
| Amount of recycled materials | % | 6,74 |

## Product

**Market:**

**Product description:**

Tabletop, MFC, round, Ø70 X 2,5

**Product specification**

**Technical data:**

Melamine faced chipboard, ABS edge-band (thickness: 2 mm), round, diameter: 70 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) | 0,13 | 1,96 | 0,00 | 0,00 |
| Wood - Chipboard | 6,20 | 96,82 | 0,00 | 0,00 |
| Glue for wood | 0,02 | 0,34 | 0,00 | 0,00 |
| Plastic - Melamine | 0,06 | 0,88 | 0,00 | 0,00 |
| Total: | 6,40 | | 0,00 | |

| Packaging | kg | | Recycled share in material (kg) | Recycled share in material (%) |
|---|---|---|---|---|
| Packaging - Cardboard | 0,62 | | 0,47 | 76,30 |
| Total including packaging | 7,02 | | 0,47 | |

## LCA: Calculation rules

**Declared unit:**

1 Pcs Tabletop, MFC, round, Ø70 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:**

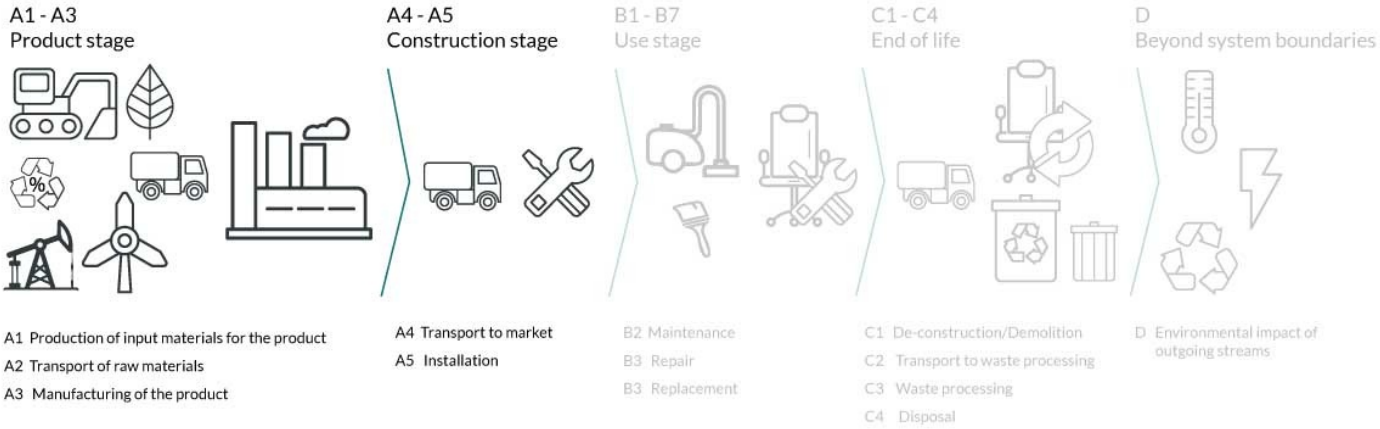
The allocation is made in accordance with the provisions of EN 15804. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

**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:**

## 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)**

| Type | 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)**

| . | 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 | |

**Use (B1)**

| . | Unit | Value |
|---|---|---|
| | | |

**Maintenance (B2)/Repair (B3)**

| . | Unit | Value |
|---|---|---|
| Maintenance cycle* | | |
| Auxiliary | | |
| Other resources | | |
| Water consumption | $m^3$ | |
| Electricity consumption | kWh | |
| Other energy carriers | MJ | |
| Material loss | kg | |
| VOC emissions | kg | |

**Replacement (B4)/Refurbishment (B5)**

| . | Unit | Value |
|---|---|---|
| Replacement cycle* | | |
| Electricity consumption | kWh | |
| Replacement of worn parts | | |

* Described above if relevant

**Operational energy (B6) and water consumption (B7)**

| . | Unit | Value |
|---|---|---|
| Water consumption | $m^3$ | |
| Electricity consumption | kWh | |
| Other energy carriers | MJ | |
| Power output of equipment | kW | |

**End of Life (C1, C**

| . | Unit | Value |
|---|---|---|
| Hazardous waste disposed | kg | |
| Collected as mixed construction wa | kg | |
| Reuse | kg | |
| Recycling | | |
| Energy recovery | | |
| To landfill | kg | |

Scenarios after A1-A4 are not included

**Transport to waste processing (C2)**

| Type | 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 | | | Construction installation stage | | User stage | | | | | | | End of life stage | | | | . | Beyond the system bondaries |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Raw materials | Transport | Manufacturing | Transport | Assembly | 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 | X | 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 | 4,13E+00 | 1,31E-01 | 1,37E+01 | 1,26E+00 |
| ODP | kg CFC11 -eq | 4,57E-07 | 2,41E-08 | 6,78E-07 | 2,30E-07 |
| POCP | kg $C_2H_4$-eq | 1,70E-03 | 2,13E-05 | 2,63E-03 | 2,06E-04 |
| AP | kg $SO_2$ -eq | 1,99E-02 | 4,18E-04 | 6,61E-02 | 4,39E-03 |
| EP | kg $PO_4^{3-}$ -eq | 3,38E-03 | 6,96E-05 | 8,70E-03 | 7,60E-04 |
| ADPM | kg Sb -eq | 1,44E-05 | 4,00E-07 | 2,14E-05 | 3,63E-06 |
| ADPE | MJ | 6,56E+01 | 1,97E+00 | 1,53E+02 | 1,88E+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

## Resource use

| Parameter | Unit | A1 | A2 | A3 | A4 |
|---|---|---|---|---|---|
| RPEE | MJ | 8,59E+01 | 2,87E-02 | 3,46E+01 | 2,83E-01 |
| RPEM | MJ | 5,33E+01 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| TPE | MJ | 1,39E+02 | 2,87E-02 | 3,46E+01 | 2,83E-01 |
| NRPE | MJ | 7,44E+01 | 2,02E+00 | 2,62E+02 | 1,93E+01 |
| NRPM | MJ | 5,35E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| TRPE | MJ | 7,98E+01 | 2,02E+00 | 2,62E+02 | 1,93E+01 |
| SM | kg | 4,73E-01 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| RSF | MJ | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| NRSF | MJ | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| W | $m^3$ | 2,84E-02 | 3,78E-04 | 1,26E-01 | 3,67E-03 |

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 | 7,23E-05 | 1,18E-06 | 3,16E-04 | 1,15E-05 |
| NHW | kg | 1,29E+00 | 1,06E-01 | 3,25E+00 | 9,68E-01 |
| 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 | 6,83E-01 | 0,00E+00 |
| MER | kg | 0,00E+00 | 0,00E+00 | 7,77E-04 | 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 on the REACH Candidate list or the Norwegian priority list at or above 100 ppm, 0,01 % by weight.

**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, round, Ø90 X 2,5 | 20,75 | 582,82 | 6,37 |
| Tabletop, MFC, round, Ø100 X 2,5 | 22,39 | 657,42 | 6,37 |
| Tabletop, MFC, round, Ø120 X 2,5 | 25,38 | 786,85 | 6,83 |
| Tabletop, MFC, round, Ø140 X 2,5 | 29,07 | 950,54 | 7,01 |

## 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.
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Vold et al., (2019) EPD generator for Norsk Industri, Background information for industry application and LCA data, LCA.no report number 06.19.
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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|---|---|---|---|
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