

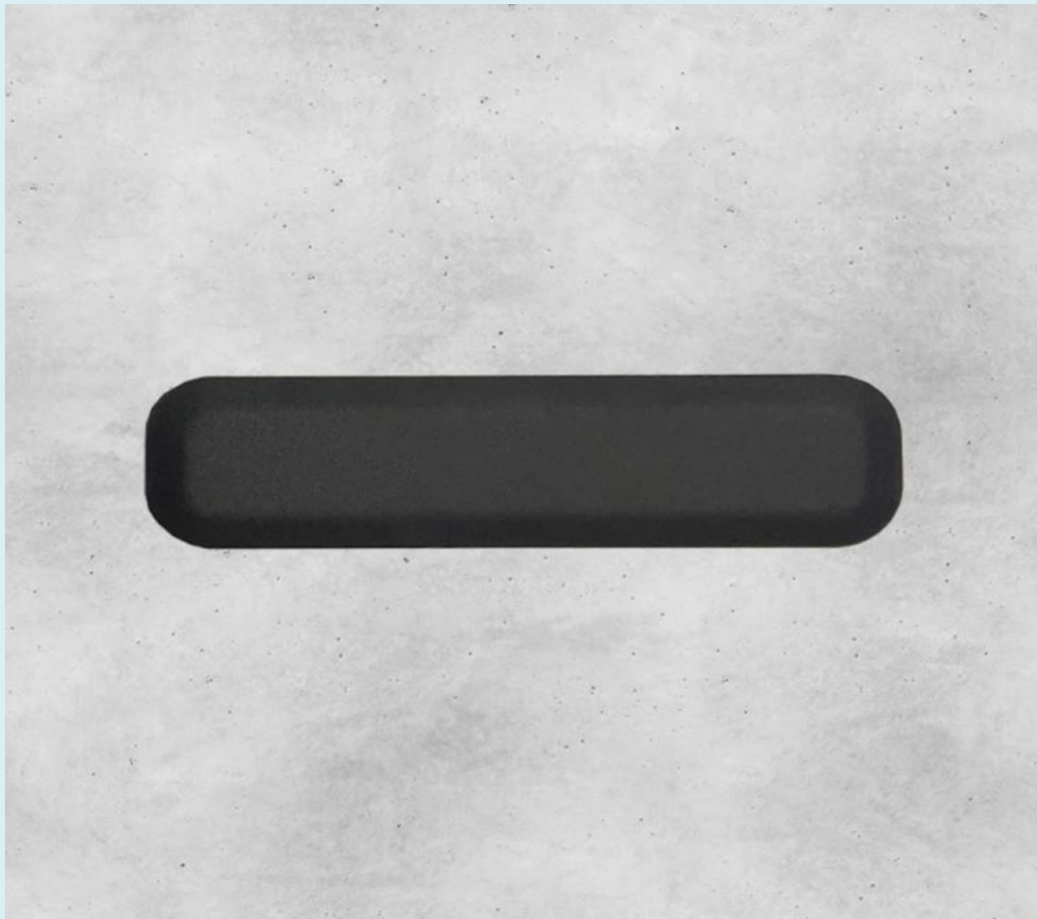
**ENVIRONMENTAL PRODUCT DECLARATION**

in accordance with ISO 14025, ISO 21930 and EN 15804

Eier av deklarasjonen:	Taktila AS
Program operatør:	The Norwegian EPD Foundation
Utgiver:	The Norwegian EPD Foundation
Deklarasjon nummer:	NEPD-3100-1760-EN
Publiserings nummer:	NEPD-3100-1760-EN
ECO Platform registreringsnummer:	-
Godkjent dato:	16.09.2021
Gyldig til:	16.09.2026
Dual registration programme operator:	The International EPD System
EPD registration number (EPD International):	S-P-06924

**Taktila 120 mm**

Taktila AS

[www.epd-norge.no](http://www.epd-norge.no)**TAKTILA**®

## General information

### Product:

Taktila 120 mm

### Program operator:

The Norwegian EPD Foundation  
 Post Box 5250 Majorstuen, 0303 Oslo, Norway  
 Phone: (+47) 23 08 80 00  
 e-mail: [post@epd-norge.no](mailto:post@epd-norge.no)

### Declaration number:

NEPD-3100-1760-EN

### ECO Platform reference number:

### This declaration is based on Product Category Rules:

CEN Standard EN 15804 serves as core PCR

### 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:

### Declared unit with option: (A1-A5)

1 pc Taktila 120 mm

### Functional unit:

1 tactile element used to mark elevators, stairs or other, installed in a building

### Verification:

The CEN Norm EN 15804 serves as the core PCR. Independent verification of the declaration and data, according to ISO14025:2010

internal  eksternt

Third party verifier:

*Julie Lytle Skillestad*

Independent verifier approved by EPD Norway

### Owner of the declaration:

Taktila AS  
 Contact person: Øyvind Haugan  
 Phone: (+47) 40 555 001  
 e-mail: [oyvind@taktila.no](mailto:oyvind@taktila.no)

### Manufacturer:

Taktila AS  
 Taktila AS, Teglgata 5, 7502 Stjørdal  
 Norway

### Place of production:

Leksvik/Stjørdal

### Management system:

N/A

### Organisation no:

917324239

### Issue date:

16.09.2021

### Valid to

16.09.2026

### Year of study:

Consumption data is based on production in 2020. LCA was performed in 2021.

### Comparability:

EPD of construction products may not be comparable if they not comply with EN 15804 and seen in a building context.

Vidar L. Yttersian, Asplan Viak AS

*V. Yttersian*

asplan  
viak 

Approved

*Håkon Hauan*

Håkon Hauan  
 Managing Director of EPD-Norway

## Product

### Product description:

Taktila 120 mm is an oblong tactile element used to mark stairs, elevators, or as guidelines between important functions in buildings. It consists of a mixture of recycled plastic and fiberglass.

The product is sold in Norway, but can also be sold worldwide.

### Product specification:

Taktila 120 mm weighs 10,1 grams finished with tape.

The material composition of the declared unit is given in the table below.

Materials	Gram	%
Recycled plastic PA6 plastic with 15 % glass fiber	7,7	76,2 %
Color	0,4	4,0 %
Tape 3M two-sided	2,0	19,8 %
<b>SUM</b>	<b>10,1</b>	<b>100,0 %</b>

### Technical data:

A taktila 120 mm is 120 mm long, 30 mm wide and 3,6 mm high.

Available in colour NCS 3000, NCS 8000 and NCS 9000.

For additional information, see:

<https://butikk.taktila.no/produkt/korte-enkeltelementer/>

### Market:

Norway/The Nordic region

### Reference service life, product:

Not relevant

## LCA: Calculation rules

### Declared unit:

1 pc Taktila 120 mm

### System boundary:

Modules are declared in accordance with EN 15804. Declared units include A1-A3, A4 and A5, as shown in Figure 1.

Gray boxes describe modules that have not been declared.

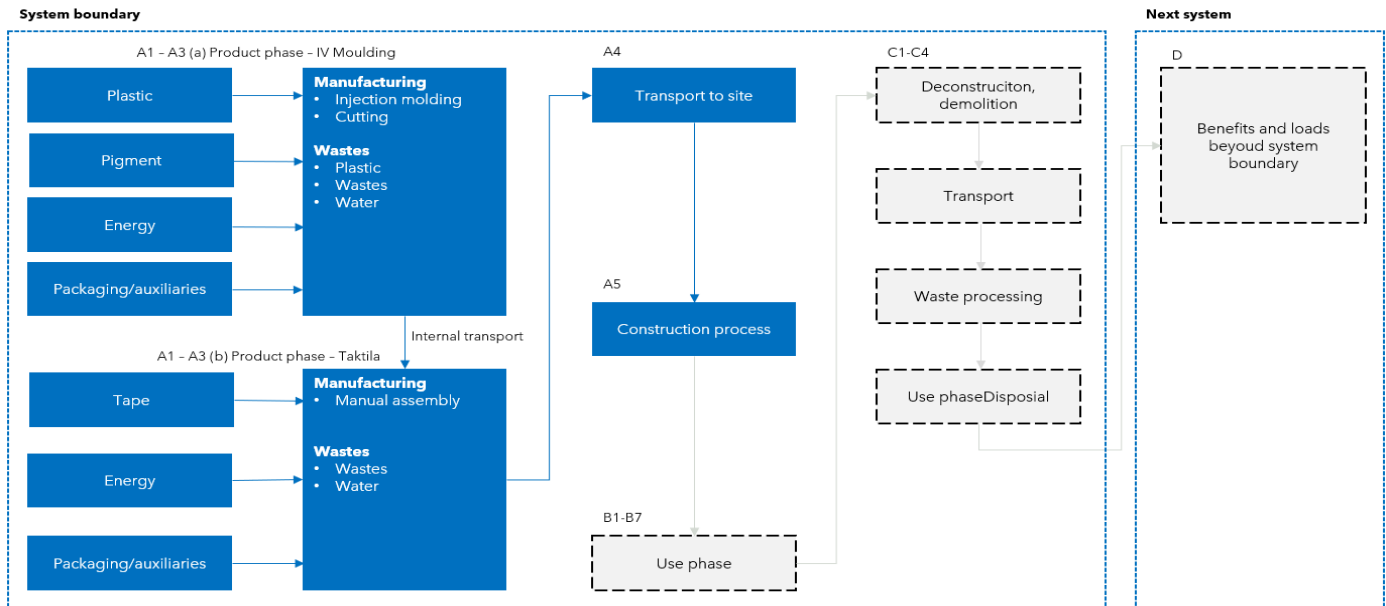


Figure 1: System boundaries. EoL: Waste management

### Data quality:

General requirements and guidance related to the use of generic and specific data and the quality of these are described in EN 15804: 2012+A1:2013, clauses 6.36 and 6.37., Including ISO 14044: 2006, 4.2.3.6. The data base is representative in terms of temporal, geographical and technological requirements. Database used for modeling is ecoinvent v. 3.6, Allocation, Cut-Off by Classification (2018), and Agri-Footprint. Upstream data is obtained from the manufacturer. Calculations are performed in SimaPro v 9.1.1.1. Classification factors from EN 15804: 2012+A1: 2013 have been used.

### Temporal:

Data for module A3 has been handed over by the EPD owner and consists of consumption data and calculated quantities of specific material and energy consumption. Data have been collected for the year 2020. Generic data has been prepared or updated within the last 10 years. Any exceptions are described in the LCA report.

### Geographical:

The product included in the EPD is manufactured in Norway and is representative of the Norwegian market. Best available approaches are used where specific data for Norway is unavailable.

### Technology:

Data represents the technology in use.

### Allocation:

Allocation is made in accordance with the provisions of EN 15804. Incoming energy and water, as well as production of waste in own production are allocated equally between all products through mass allocation.

### Cut-off criteria:

All important raw materials and all important energy use are included. The production process for the raw materials and energy streams that are included with very small quantities (<1%) is not included, according to NS 15804. These cut-off criteria do not apply to hazardous materials and substances. Cut-off criteria also follow the EPD-Norway GPI.

### Benefits and loads beyond the system boundary (module D)

Module D is not declared in this EPD.

## LCA: Scenarios and additional technical information

Transport, module A4, is included as a scenario in the analysis. All numbers are per declared unit. Module A5, assembly, is also included. Installation is done by hand, and thus has no energy consumption and thus no emissions.

### Transport from production place to user (A4)

Type	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	
Truck	28 %	Euro 6	300	0,1305 l/tkm	39,143 l/t

### Assembly (A5)

	Unit	Value
Auxiliary	kg	0,0
Water consumption	m <sup>3</sup>	0,0
Electricity consumption	kWh	0,0
Other energy carriers	MJ	0,0
Material loss	kg	0,0
Output materials from waste treatment	kg	0,0
Dust in the air	kg	0,0

## LCA: Results

The results for environmental impact in the different modules are presented below.

Declared unit is per 1 pc Taktila 120 mm

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

Product stage			Assembly stage		Use stage								End of life stage				Beyond the system boundaries
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	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	

## Environmental impact

Parameter	Unit	A1-A3	A4	A5
GWP	kg CO2 - ekv.	1,60E-02	1,54E-03	0,00E+00
ODP	kg CFC11- ekv.	1,54E-09	3,33E-10	0,00E+00
POCP	kg C2H4 - ekv.	1,19E-05	2,07E-07	0,00E+00
AP	kg SO2 - ekv.	9,66E-05	3,77E-06	0,00E+00
EP	kg PO43-- ekv	6,25E-04	4,52E-07	0,00E+00
ADPM	kg Sb - ekv	3,33E-07	7,66E-08	0,00E+00
ADPE	MJ	1,50E-01	2,31E-02	0,00E+00

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

## Resource use

Parameter	Unit	A1-A3	A4	A5
RPEE	MJ	3,00E-01	4,94E-04	0,00E+00
RPEM	MJ	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	3,29E-01	4,94E-04	0,00E+00
NRPE	MJ	2,35E-01	2,31E-02	0,00E+00
NRPM	MJ	5,80E-02	0,00E+00	0,00E+00
TRPE	MJ	2,93E-01	2,31E-02	0,00E+00
SM	kg	8,05E-03	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00
W	m3	2,38E-01	3,27E-06	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

## End of life - Waste

Parameter	Unit	A1-A3	A4	A5
HW	kg	1,41E-04	1,44E-06	0,00E+00
NHW	kg	4,94E-03	7,00E-04	0,00E+00
RW	kg	3,78E-06	1,53E-07	0,00E+00

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

## End of life - Output flow

Parameter	Unit	A1-A3	A4	A5
CR	kg	0,00E+00	0,00E+00	0,00E+00
MR	kg	7,01E-04	0,00E+00	0,00E+00
MER	kg	4,05E-04	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	0,00E+00

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 =  $9,0 \cdot 10^{-3} = 0,009$

## Additional Norwegian requirements

### Greenhouse gas emission from the use of electricity in the manufacturing phase

Production Norway: National market mix with imports of high voltage/low voltage, including production of transmission lines and grid losses, is used for electricity in the production process (A3). High voltage is used at IV Molding's factory and low voltage at Taktila's premises.

Data source	Amount	Unit
Ecoinvent v3.6, high voltage electricity	0,0169	kg CO <sub>2</sub> -ekv/kWh
Ecoinvent v3.6, low voltage electricity	0,0233	kg CO <sub>2</sub> -ekv/kWh

### Dangerous substances

- The product contains no substances given by the REACH Candidate list or the Norwegian priority list
- The product contains substances given by the REACH Candidate list or the Norwegian priority list that are less than 0,1 % by weight.
- The product contain dangerous substances, more then 0,1% by weight, given by the REACH Candidate List or the Norwegian Priority list, see table.
- The product contains no substances given by the REACH Candidate list or the Norwegian priority list. The product is classified as hazardous waste (Avfallsforskiten, Annex III), see table.

### Indoor environment

No tests have been carried out on the product concerning indoor climate.




### Climate declaration - biogenic carbon

Climate footprints from biogenic carbon uptake have not been calculated for this product.



## Bibliography

NS-EN ISO 14025:2010	<i>Environmental labels and declarations - Type III environmental declarations - Principles and procedures</i>
NS-EN ISO 14044:2006	<i>Environmental management - Life cycle assessment - Requirements and guidelines</i>
NS-EN 15804:2012+A1:2013	<i>Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products</i>
ISO 21930:2007	<i>Sustainability in building construction - Environmental declaration of building products</i>
Yttersian, V.Y. (2021)	<i>LCA_report_Tactile elements. LCA-rapport nr. 632284-12 fra Asplan Viak AS</i>
NPCR Part A:2017	<i>PCR-Part A: Construction products and services, version 1.0</i>
Ecoinvent v. 3.6	<i>Swiss Centre of Life Cycle Inventories</i>
SimaPro, v 9.1.1.1	<i>LCA software, developed by PRé Sustainability, <a href="http://www.simapro.com">www.simapro.com</a></i>
Raadal, H. L., Modahl, I. S., & Lyng, K. A. (2009)	<i>Klimaregnskap for avfallshåndtering. Fase I og II: Glassemballasje, metalemballasje, papir, papp, plastemballasje, våtorganisk avfall, treavfall og restavfall fra husholdninger (climate account for waste management. Phase I and II: Glass packaging, Metal Packaging, Paper, Cardboard, Plastic Packaging, Wet Organic Waste, Tree Waste and Refuse Waste from Households). Avfall Norge–Rapport 5/2009.</i>

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