

**Nordisk Microfiber**

**Life Cycle Assessment  
Cradle to Gate**

Lommemoppe til mopstativ, TenTax,  
blå, akryl, 100 cm

2025-12-19

# Summary



## 01 | Methodology



## 02 | Results

# 01

## Methodology

# Environmental Impact Assessment

## Functional unit

The functional unit of this analysis is "Product 'Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm' (product code: F-100-A) is made of 100% polyester, weighs 0.262 kgs, and is certified under Oekotex"

## Impact Indicator

The impact is measured through the "EF v3.1 method" method

## Hypothesis

The data source for the emission factors is EcolInvent 3.12. The System Model used is allocation, cut-off by classification.

Where data was not available from NMF, conservative estimates have been applied.

Assumptions include; origin of raw materials (GLO, IN averages) and manufacturing processes (GLO averages).

# Environmental Impact Assessment

## System Boundaries

The scope of this study is Cradle-to-Gate and assesses according to EF v3.1 as LCIA (Life Cycle Impact Assessment) method is developed by the European Commission.

This method is compatible with ISO 14040/44 and PEF. This LCA has not been independently reviewed.

## Exclusions

The following stages have been excluded: Downstream Transportation, Use and End-of-Life.

# Emission Factor Inventory

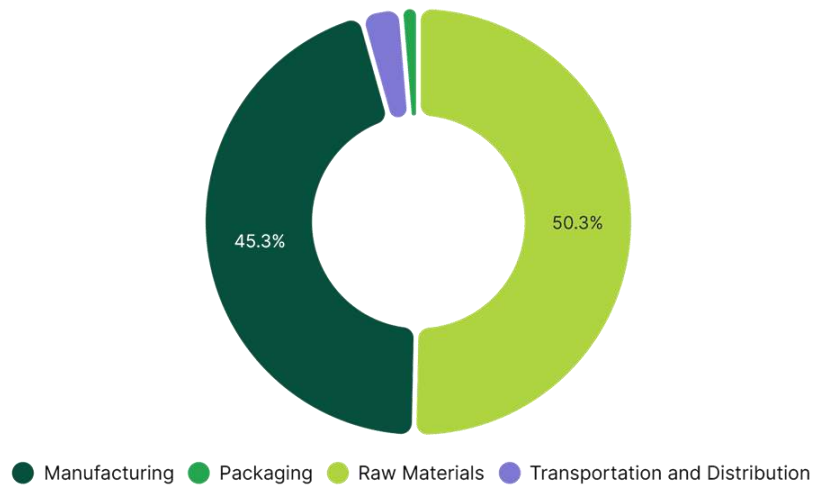
Nu m	Emission Factor	Source	Value	Unit
1	Polyethylene terephthalate, granulate, amorphous   Market for polyethylene terephthalate, granulate, amorphous   Market activity	ECOINVENT 3.12	3.70	kg
2	Fibre, polyester   Polyester fibre production, finished   Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
3	Weaving, synthetic fibre   Market for weaving, synthetic fibre   Market activity	ECOINVENT 3.12	0.56	kg
4	Printed paper   Market for printed paper   Market activity	ECOINVENT 3.12	2.54	kg
5	Corrugated board box   Market for corrugated board box   Market activity	ECOINVENT 3.12	1.27	kg
6	Transport, freight, lorry, diesel, unspecified   Market for transport, freight, lorry, unspecified   Market activity	ECOINVENT 3.12	0.16	metric_t_km
7	Transport, freight, sea, container ship, heavy fuel oil   Market for transport, freight, sea, container ship, heavy fuel oil   Market activity	ECOINVENT 3.12	0.01	metric_t_km

# 02

## Results

Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm

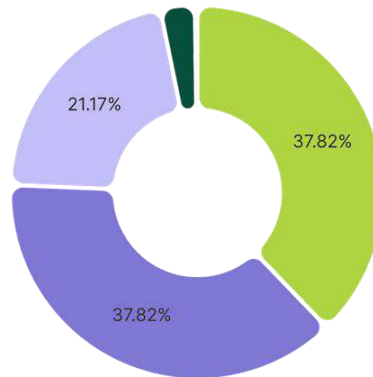
# Climate Change



Step	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Raw Materials	1.56	50.33 %
Manufacturing	1.4	45.31 %
Transportation and Distribution	0.09	3.04 %
Packaging	0.04	1.33 %
TOTAL	3.09	100.00 %

Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm

## Climate Change - Raw Materials

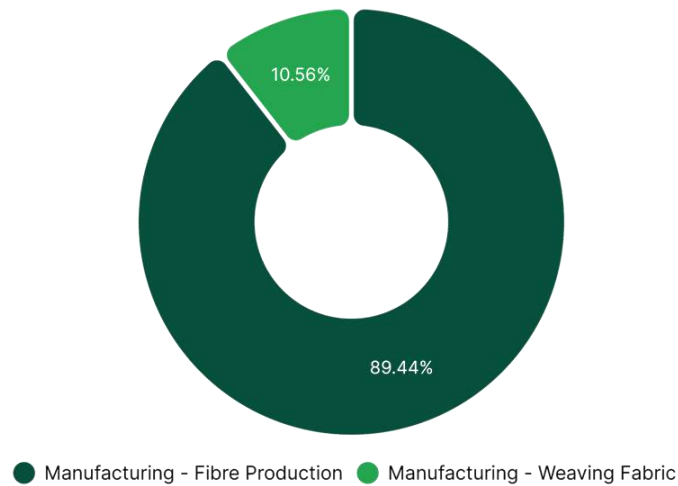


● Polyester - Edge Tape - Raw Materials - KGs ● Polyester - Label 1 - Raw Materials - KGs  
● Polyester - Main Fabric - Raw Materials - KGs ● Polyester - Sewing Thread - Raw Materials - KGs  
● Polyester - All Middle Fabrics - Raw Materials - KGs

Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Polyester - Main Fabric - Raw Materials - KGs	1	0.16	kg	0.59	37.82 %
Polyester - Sewing Thread - Raw Materials - KGs	1	0.16	kg	0.59	37.82 %
Polyester - All Middle Fabrics - Raw Materials - KGs	1	0.09	kg	0.33	21.17 %
Polyester - Edge Tape - Raw Materials - KGs	1	0.01	kg	0.05	2.97 %
Polyester - Label 1 - Raw Materials - KGs	1	$8.8 \cdot 10^{-4}$	kg	$3.25 \cdot 10^{-3}$	0.21 %
TOTAL				1.56	100.00 %

Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm

# Climate Change - Manufacturing

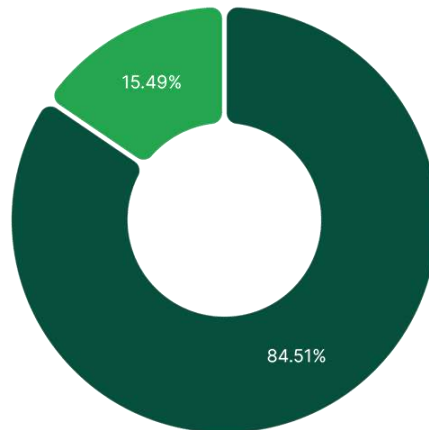


Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing – Fibre Production	2	0.26	kg	1.25	89.44 %
Manufacturing – Weaving Fabric	3	0.26	kg	0.15	10.56 %

TOTAL	1.4	100.00 %
-------	-----	----------

Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm

# Climate Change - Packaging



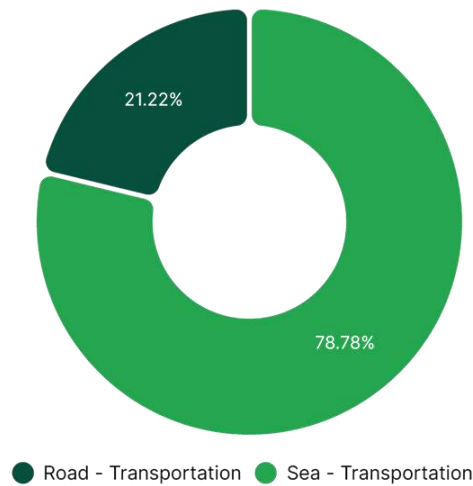
● Cardboard Box - Tertiary Packaging - KGs ● Paper Banner - Secondary Packaging - KGs

Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Cardboard Box – Tertiary Packaging – KGs	5	0.03	kg	0.03	84.51 %
Paper Banner – Secondary Packaging – KGs	4	2.5 · 10 <sup>−3</sup>	kg	6.34 · 10 <sup>−3</sup>	15.49 %

TOTAL	0.04	100.00 %
-------	------	----------

Lommemoppe til mopstativ, TenTax, blå, akryl, 100 cm

## Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Sea - Transportation	7	7.66	metric_t_km	0.07	78.78 %
Road - Transportation	6	0.12	metric_t_km	0.02	21.22 %

--

--

TOTAL				0.09	100.00 %
-------	--	--	--	------	----------

This LCA was carried out by Sustaina Company using the Greenly software. This LCA has not been third party verified.