



# Nordisk Microfiber

## Life Cycle Assessment Cradle to Gate

Performance Universal Mop Max, 40  
cm

2025-12-19

# Summary



**01** | Methodology



**02** | Results



# 01

## Methodology

# Environmental Impact Assessment

<b>Functional unit</b>	The functional unit of this analysis is "Product 'Performance Universal Mop Max, 40 cm' (product code: 1640-L) is made of 80% polyester + 20 % polyamide, weighs 0.102 kgs, and is certified under Oekotex"
<b>Impact Indicator</b>	The impact is measured through the "EF method" method
	The data source for the emission factors is Ecoinvent 3.12. The System Model used is allocation, cut-off by classification.
<b>Hypothesis</b>	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

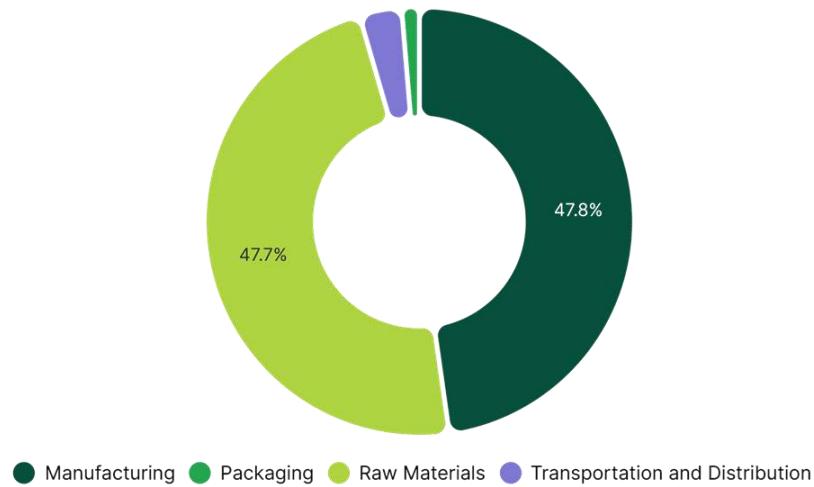
Nu m	Emission Factor	Source	Value	Unit
1	Polyethylene terephthalate, granulate, amorphous   Market for polyethylene terephthalate, granulate, amorphous   Market activity	ECOINVENT 3.12	3.70	kg
2	Nylon 6-6   Market for nylon 6-6   Market activity	ECOINVENT 3.12	8.32	kg
3	Weaving, synthetic fibre   Market for weaving, synthetic fibre   Market activity	ECOINVENT 3.12	0.56	kg
4	Fibre, polyester   Polyester fibre production, finished   Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
5	Printed paper   Market for printed paper   Market activity	ECOINVENT 3.12	2.54	kg
6	Corrugated board box   Market for corrugated board box   Market activity	ECOINVENT 3.12	1.27	kg
7	Transport, freight, lorry, diesel, unspecified   Market for transport, freight, lorry, unspecified   Market activity	ECOINVENT 3.12	0.16	metric _t_km
8	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

Performance Universal Mop Max, 40 cm

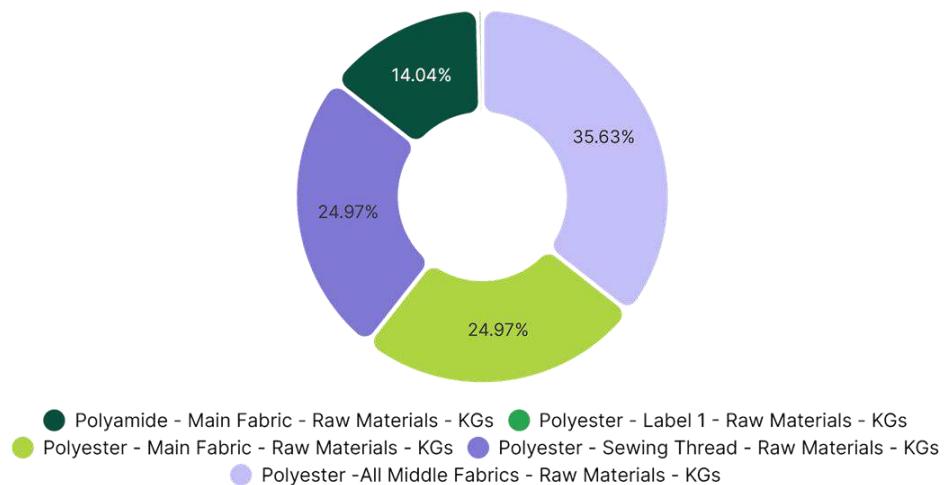
## Climate Change



Step	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing	0.55	47.76 %
Raw Materials	0.55	47.73 %
Transportation and Distribution	0.04	3.18 %
Packaging	0.02	1.32 %
<b>TOTAL</b>	<b>1.14</b>	<b>100.00 %</b>

Performance Universal Mop Max, 40 cm

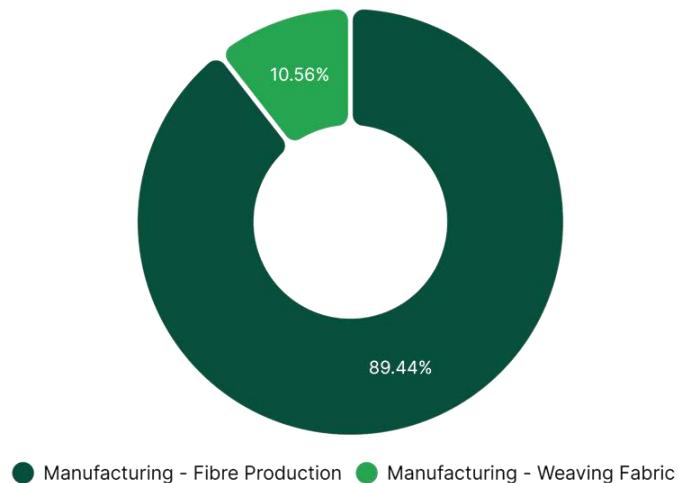
## Climate Change - Raw Materials



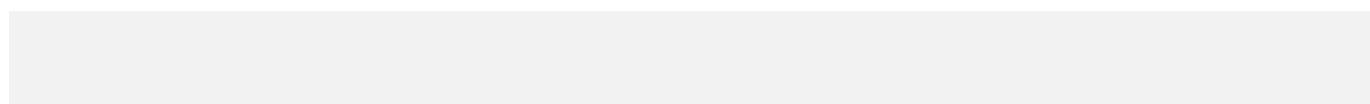
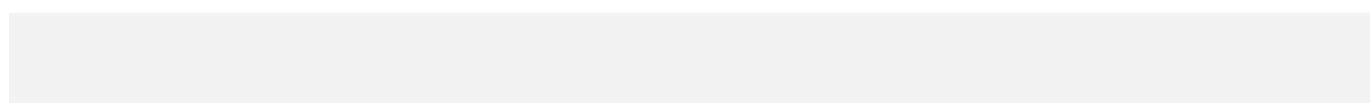
Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Polyester -All Middle Fabrics - Raw Materials - KGs	1	0.05	kg	0.19	35.63 %
Polyester - Main Fabric - Raw Materials - KGs	1	0.04	kg	0.14	24.97 %
Polyester - Sewing Thread - Raw Materials - KGs	1	0.04	kg	0.14	24.97 %
Polyamide - Main Fabric - Raw Materials - KGs	2	9.19 · 10 <sup>-3</sup>	kg	0.08	14.04 %
Polyester - Label 1 - Raw Materials - KGs	1	5.8 · 10 <sup>-4</sup>	kg	2.14 · 10 <sup>-3</sup>	0.39 %
TOTAL				0.55	100.00 %

Performance Universal Mop Max, 40 cm

## Climate Change - Manufacturing



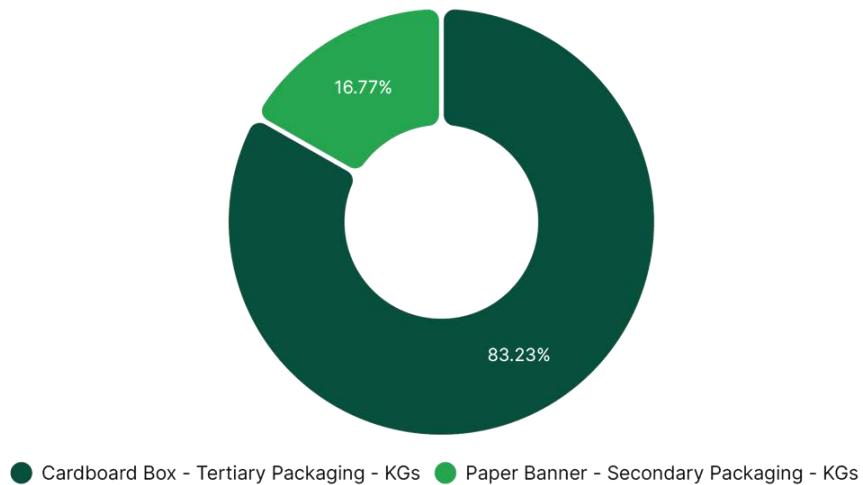
Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing - Fibre Production	4	0.1	kg	0.49	89.44 %
Manufacturing - Weaving Fabric	3	0.1	kg	0.06	10.56 %



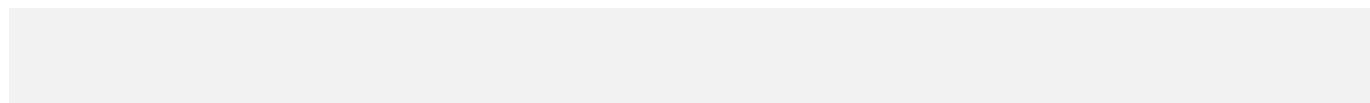
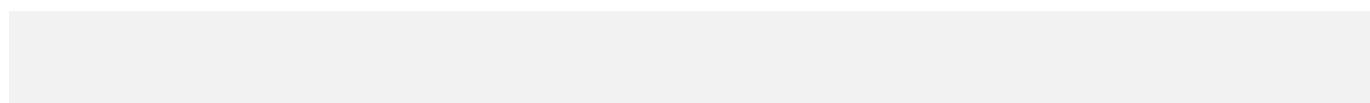
TOTAL		0.55	100.00 %
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Performance Universal Mop Max, 40 cm

## Climate Change - Packaging



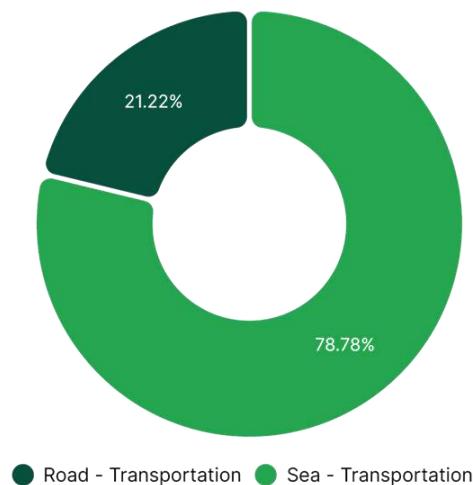
Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Cardboard Box - Tertiary Packaging - KGs	6	$9.93 \cdot 10^{-3}$	kg	0.01	83.23 %
Paper Banner - Secondary Packaging - KGs	5	$1 \cdot 10^{-3}$	kg	$2.53 \cdot 10^{-3}$	16.77 %



TOTAL		0.02	100.00 %
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Performance Universal Mop Max, 40 cm

## Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Sea - Transportation	8	2.97	metric_t_km	0.03	78.78 %
Road - Transportation	7	0.05	metric_t_km	7.71 · 10 <sup>-3</sup>	21.22 %
<b>TOTAL</b>				0.04	100.00 %

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