



Nordisk Microfiber

Life Cycle Assessment Cradle to Gate

Clean Plus Damp Mop

2025-12-19

Summary



01 | Methodology



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01

Methodology

Environmental Impact Assessment

Functional unit	The functional unit of this analysis is "Product 'Clean Plus Damp Mop' (product code: 4040) is made of 40% polyester + 60% cotton, weighs 0.185 kgs, and is certified under Oekotex"
Impact Indicator	The impact is measured through the "EF v3.1 method" method
Hypothesis	<p>The data source for the emission factors is Ecoinvent 3.12. The System Model used is allocation, cut-off by classification.</p> <p>Where data was not available from NMF, conservative estimates have been applied.</p> <p>Assumptions include; origin of raw materials (GLO, IN averages) and manufacturing processes (GLO averages).</p>

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

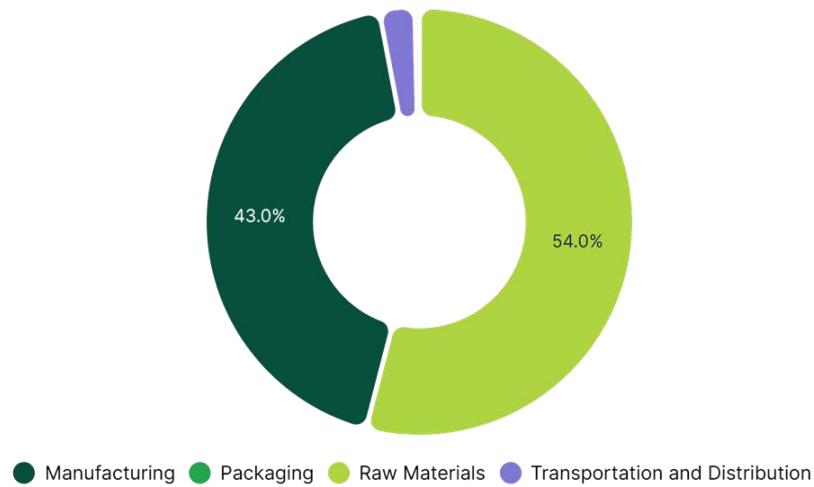
Nu m	Emission Factor	Source	Value	Unit
1	Polyethylene terephthalate, granulate, amorphous Market for polyethylene terephthalate, granulate, amorphous Market activity	ECOINVENT 3.12	3.70	kg
2	Yarn, cotton Market for yarn, cotton Market activity	ECOINVENT 3.12	7.61	kg
3	Weaving, synthetic fibre Market 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

Clean Plus Damp Mop

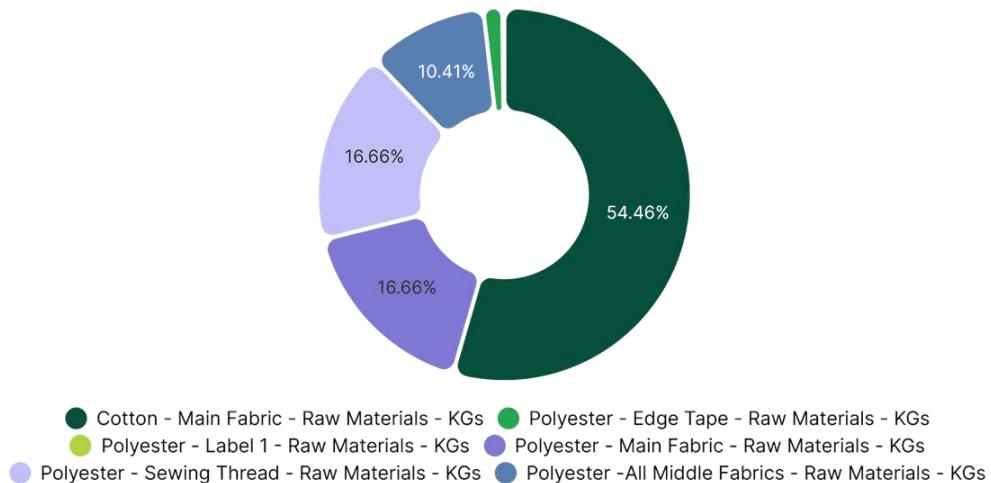
Climate Change



Step	Impact (kg CO ₂ eq)	Percentage (%)
Raw Materials	1.24	54.03 %
Manufacturing	0.99	42.97 %
Transportation and Distribution	0.06	2.66 %
Packaging	7.89 · 10 ⁻³	0.34 %
TOTAL	2.3	100.00 %

Clean Plus Damp Mop

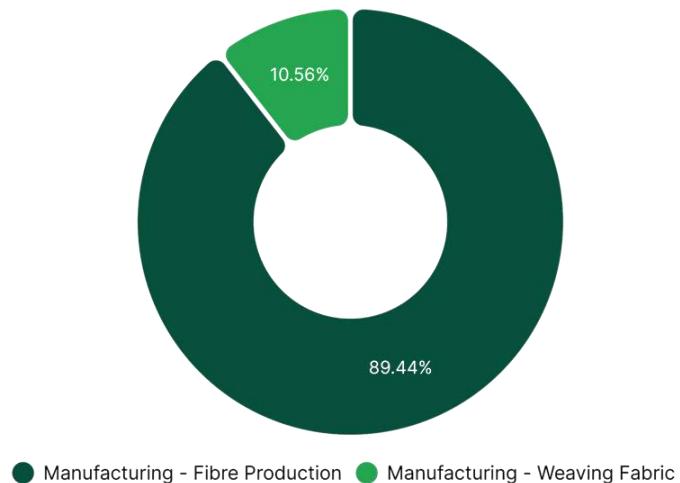
Climate Change - Raw Materials



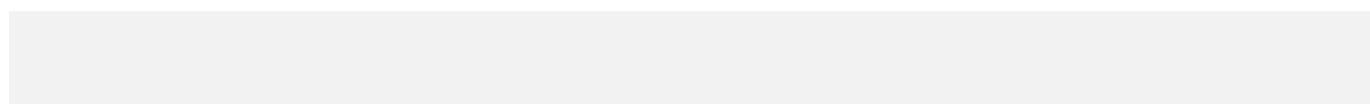
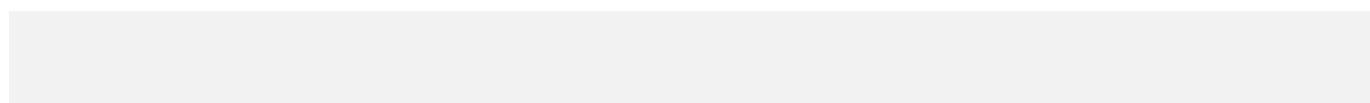
Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Cotton - Main Fabric - Raw Materials - KGs	2	0.09	kg	0.68	54.46 %
Polyester - Sewing Thread - Raw Materials - KGs	1	0.06	kg	0.21	16.66 %
Polyester - Main Fabric - Raw Materials - KGs	1	0.06	kg	0.21	16.66 %
Polyester - All Middle Fabrics - Raw Materials - KGs	1	0.04	kg	0.13	10.41 %
Polyester - Edge Tape - Raw Materials - KGs	1	$5.49 \cdot 10^{-3}$	kg	0.02	1.64 %
Polyester - Label 1 - Raw Materials - KGs	1	$5.8 \cdot 10^{-4}$	kg	$2.14 \cdot 10^{-3}$	0.17 %
TOTAL				1.24	100.00 %

Clean Plus Damp Mop

Climate Change - Manufacturing



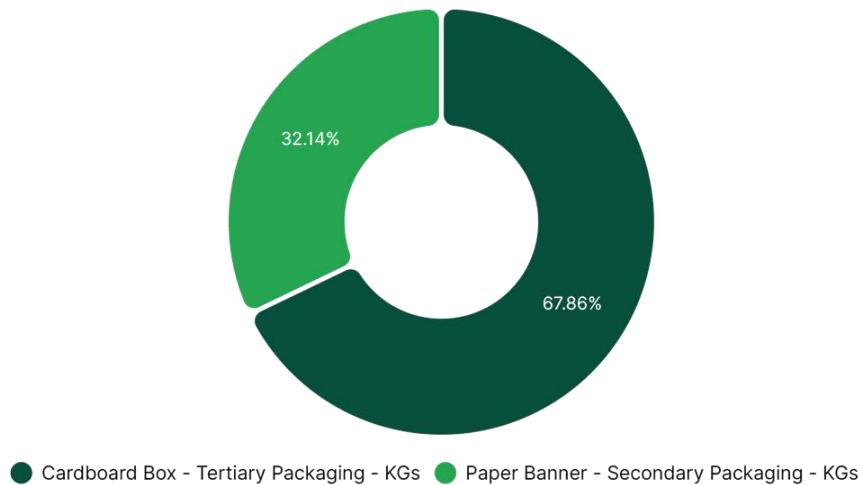
Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Manufacturing - Fibre Production	4	0.19	kg	0.88	89.44 %
Manufacturing - Weaving Fabric	3	0.19	kg	0.1	10.56 %



TOTAL	0.99	100.00 %
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Clean Plus Damp Mop

Climate Change - Packaging



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Cardboard Box - Tertiary Packaging - KGs	6	$4.23 \cdot 10^{-3}$	kg	$5.36 \cdot 10^{-3}$	67.86 %
Paper Banner - Secondary Packaging - KGs	5	$1 \cdot 10^{-3}$	kg	$2.53 \cdot 10^{-3}$	32.14 %
TOTAL				$7.89 \cdot 10^{-3}$	100.00 %

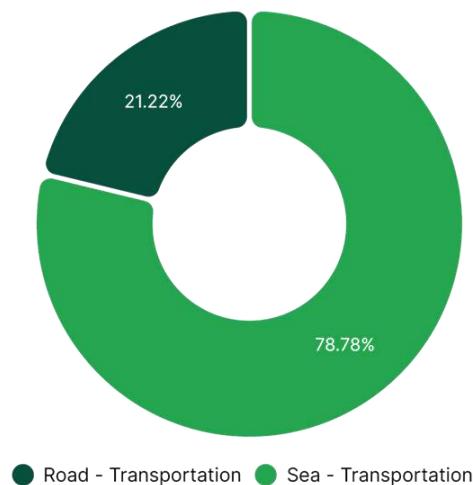
TOTAL

 $7.89 \cdot 10^{-3}$

100.00 %

Clean Plus Damp Mop

Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Sea - Transportation	8	5	metric_t_km	0.05	78.78 %
Road - Transportation	7	0.08	metric_t_km	0.01	21.22 %
TOTAL				0.06	100.00 %

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