

Nordisk Microfiber

Life Cycle Assessment Cradle to Gate

Tentax akrylmoppe, 60 cm

2025-12-19

Summary



01 | Methodology



02 | Results

01

Methodology

Environmental Impact Assessment

Functional unit

The functional unit of this analysis is "Product 'Tentax akrylmoppe, 60 cm ' (product code: F-60-A) is made of 100% polyester , weighs 0.139 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 Ecolnvent 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

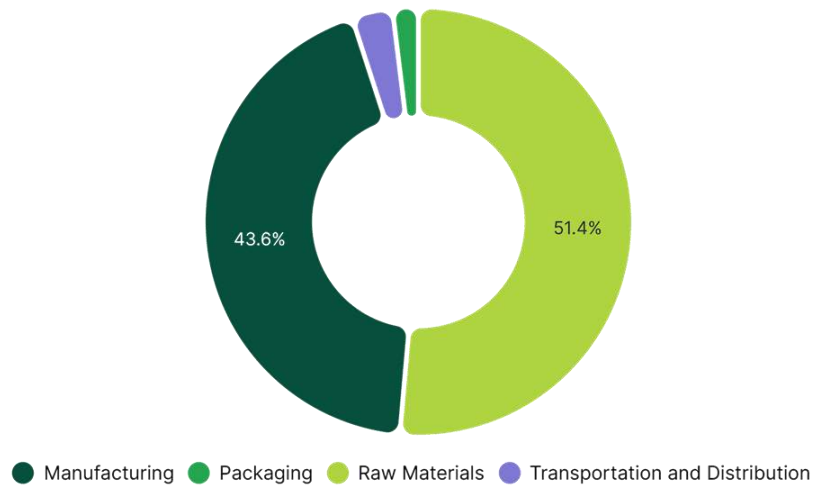
Nu m	Emission Factor	Source	Value	Unit
1	Polyethylene terephthalate, granulate, amorphous Market for polyethylene terephthalate, granulate, amorphous Market activity	ECOINVENT 3.12	3.70	kg
2	Fibre, polyester Polyester fibre production, finished Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
3	Weaving, synthetic fibre Market for weaving, synthetic fibre Market activity	ECOINVENT 3.12	0.56	kg
4	Corrugated board box Market for corrugated board box Market activity	ECOINVENT 3.12	1.27	kg
5	Printed paper Market for printed paper Market activity	ECOINVENT 3.12	2.54	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

Tentax akrylmoppe, 60 cm ?

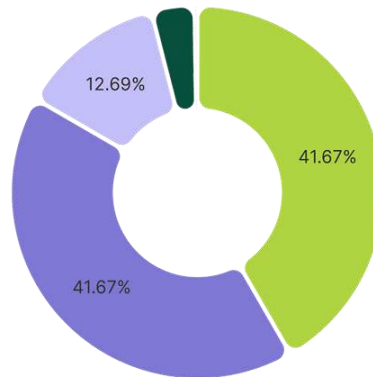
Climate Change



Step	Impact (kg CO ₂ eq)	Percentage (%)
Raw Materials	0.87	51.39 %
Manufacturing	0.74	43.61 %
Transportation and Distribution	0.05	3.07 %
Packaging	0.03	1.94 %
TOTAL	1.7	100.00 %

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Climate Change - Raw Materials

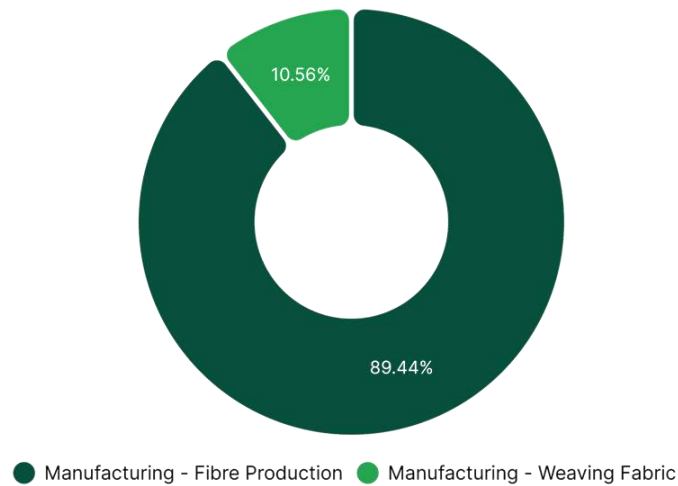


● Polyester - Edge Tape - Raw Materials - KGs ● Polyester - Label 1 - Raw Materials - KGs
● Polyester - Main Fabric - Raw Materials - KGs ● Polyester - Sewing Thread - Raw Materials - KGs
● Polyester - All Middle Fabrics - Raw Materials - KGs

Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Polyester - Sewing Thread - Raw Materials - KGs	1	0.1	kg	0.36	41.67 %
Polyester - Main Fabric - Raw Materials - KGs	1	0.1	kg	0.36	41.67 %
Polyester - All Middle Fabrics - Raw Materials - KGs	1	0.03	kg	0.11	12.69 %
Polyester - Edge Tape - Raw Materials - KGs	1	$8.8 \cdot 10^{-3}$	kg	0.03	3.72 %
Polyester - Label 1 - Raw Materials - KGs	1	$5.8 \cdot 10^{-4}$	kg	$2.14 \cdot 10^{-3}$	0.25 %
TOTAL				0.87	100.00 %

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Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Manufacturing – Fibre Production	2	0.14	kg	0.66	89.44 %
Manufacturing – Weaving Fabric	3	0.14	kg	0.08	10.56 %

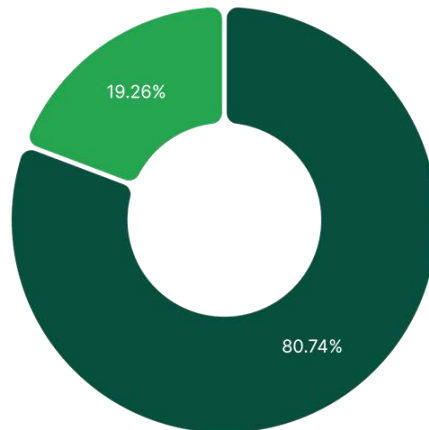
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TOTAL				0.74	100.00 %
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Tentax akrylmoppe, 60 cm ?

Climate Change - Packaging



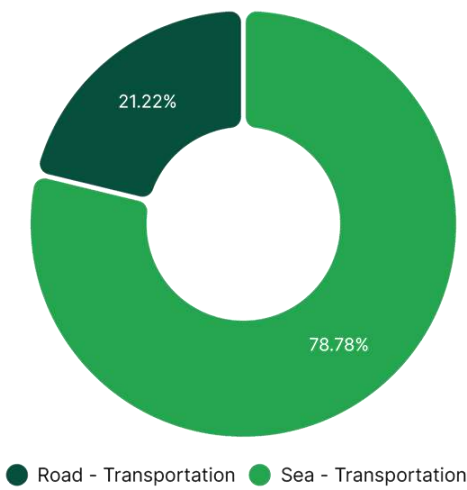
● Cardboard Box - Tertiary Packaging - KGs ● Paper Banner - Secondary Packaging - KGs

Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Cardboard Box – Tertiary Packaging – KGs	4	0.02	kg	0.03	80.74 %
Paper Banner – Secondary Packaging – KGs	5	2.5 · 10 ^{−3}	kg	6.34 · 10 ^{−3}	19.26 %

TOTAL	0.03	100.00 %
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Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO ₂ eq)	Percentage (%)
Sea - Transportation	7	4.26	metric_t_km	0.04	78.78 %
Road - Transportation	6	0.07	metric_t_km	0.01	21.22 %
TOTAL				0.05	100.00 %

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