



# Nordisk Microfiber

## Life Cycle Assessment Cradle to Gate

ECO-TEX SOFT, 40x40 cm blå

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 'ECO-TEX SOFT, 40x40 cm blå' (product code: 5040-B) is made of 80% polyester + 20 % polyamide, weighs 0.052 kgs, and is certified under Oekotex"
<b>Impact Indicator</b>	The impact is measured through the "EF v3.1 method" method
<b>Hypothesis</b>	<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

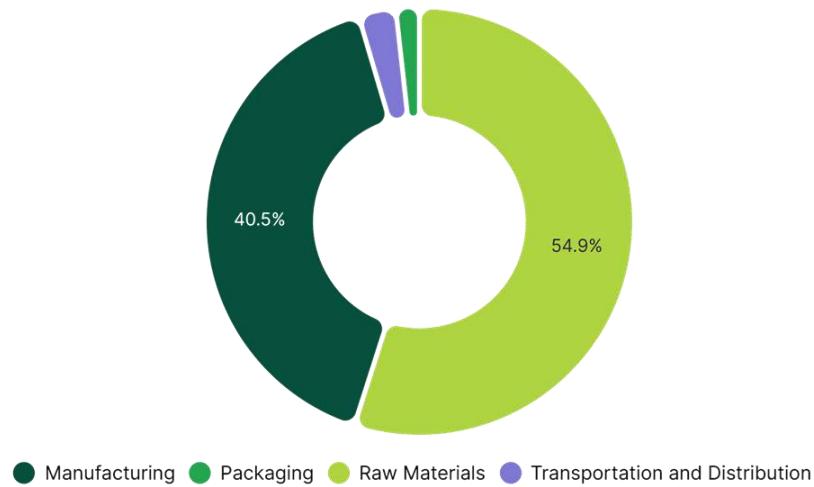
Nu m	Emission Factor	Source	Value	Unit
1	Nylon 6-6   Market for nylon 6-6   Market activity	ECOINVENT 3.12	8.32	kg
2	Polyethylene terephthalate, granulate, amorphous   Market for polyethylene terephthalate, granulate, amorphous   Market activity	ECOINVENT 3.12	3.70	kg
3	Fibre, polyester   Polyester fibre production, finished   Ordinary transforming activity	ECOINVENT 3.12	4.78	kg
4	Weaving, synthetic fibre   Market for weaving, synthetic fibre   Market activity	ECOINVENT 3.12	0.56	kg
5	Corrugated board box   Market for corrugated board box   Market activity	ECOINVENT 3.12	1.27	kg
6	Printed paper   Market for printed paper   Market activity	ECOINVENT 3.12	2.54	kg
7	Packaging film, low density polyethylene   Market for packaging film, low density polyethylene   Market activity	ECOINVENT 3.12	3.37	kg
8	Transport, freight, lorry, diesel, unspecified   Market for transport, freight, lorry, unspecified   Market activity	ECOINVENT 3.12	0.16	metric_t_km
9	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

ECO-TEX SOFT, 40x40 cm blå

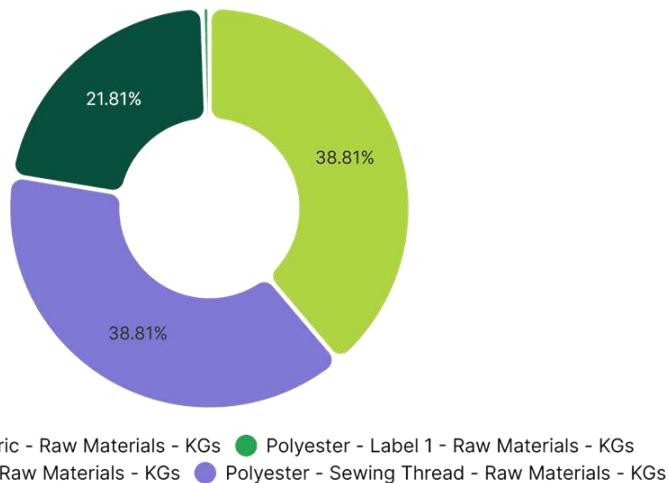
## Climate Change



Step	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Raw Materials	0.38	54.93 %
Manufacturing	0.28	40.49 %
Transportation and Distribution	0.02	2.81 %
Packaging	0.01	1.76 %
<b>TOTAL</b>	<b>0.69</b>	<b>100.00 %</b>

ECO-TEX SOFT, 40x40 cm blå

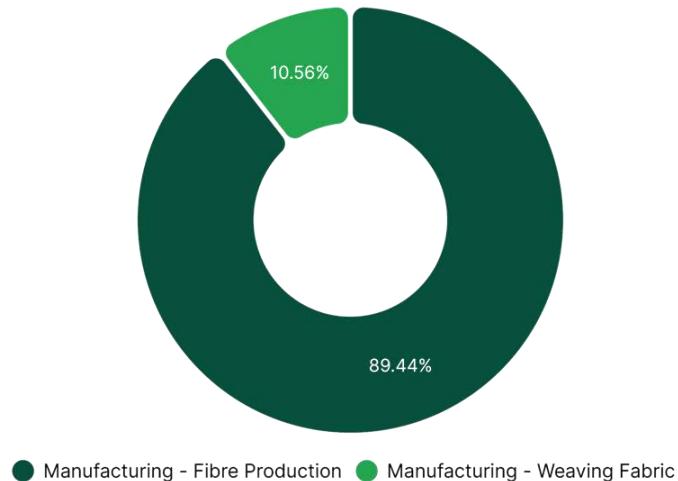
# Climate Change - Raw Materials



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Polyester - Sewing Thread - Raw Materials - KGs	2	0.04	kg	0.15	38.81 %
Polyester - Main Fabric - Raw Materials - KGs	2	0.04	kg	0.15	38.81 %
Polyamide - Main Fabric - Raw Materials - KGs	1	9.92 · 10 <sup>-3</sup>	kg	0.08	21.81 %
Polyester - Label 1 - Raw Materials - KGs	2	5.8 · 10 <sup>-4</sup>	kg	2.14 · 10 <sup>-3</sup>	0.57 %
<b>TOTAL</b>				<b>0.38</b>	<b>100.00 %</b>

ECO-TEX SOFT, 40x40 cm blå

## Climate Change - Manufacturing



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Manufacturing - Fibre Production	3	0.05	kg	0.25	89.44 %
Manufacturing - Weaving Fabric	4	0.05	kg	0.03	10.56 %

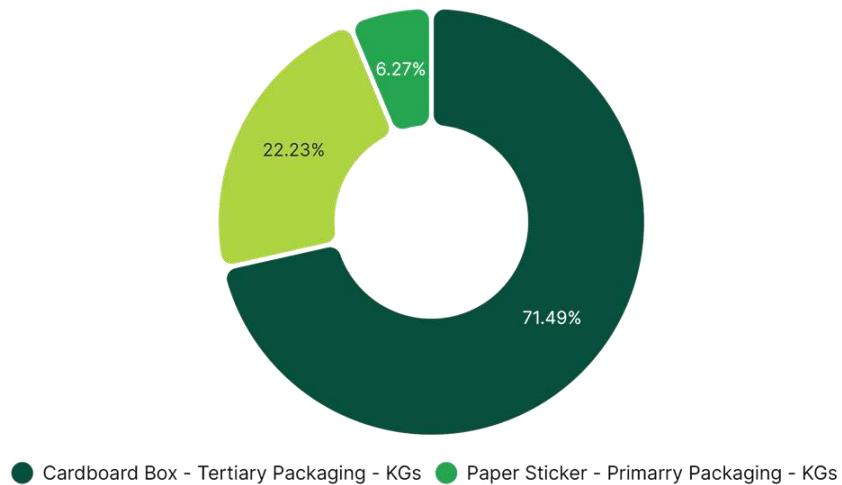
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TOTAL	0.28	100.00 %
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ECO-TEX SOFT, 40x40 cm blå

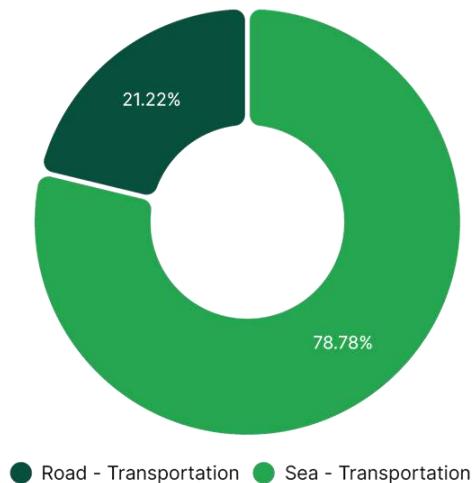
## Climate Change - Packaging



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Cardboard Box – Tertiary Packaging – KGs	5	$6.85 \cdot 10^{-3}$	kg	$8.68 \cdot 10^{-3}$	71.49 %
Polyethelyne – Primary Packaging – KGs	7	$8 \cdot 10^{-4}$	kg	$2.69 \cdot 10^{-3}$	22.23 %
Paper Sticker – Primary Packaging – KGs	6	$3 \cdot 10^{-4}$	kg	$7.61 \cdot 10^{-4}$	6.27 %
TOTAL				0.01	100.00 %

ECO-TEX SOFT, 40x40 cm blå

# Climate Change - Transportation and Distribution



Activity	Emission Factor Num	Quantity	Unit	Impact (kg CO <sub>2</sub> eq)	Percentage (%)
Sea - Transportation	9	1.58	metric_t_km	0.02	78.78 %
Road - Transportation	8	0.03	metric_t_km	4.1 · 10 <sup>-3</sup>	21.22 %

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TOTAL		0.02	100.00 %
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This LCA was carried out by Sustaina Company  
using the Greenly software. This LCA has not  
been third party verified.