SOYANG ® | Green Innovation, Responsible Manufacturing

Soyang firmly believe sustainability is not an option but the only viable form of the future. Transparency is the cornerstone of trust,we openly share our footprints, methods, and challenges. Soyang，beyond production, we protect what matters.

As part of our comprehensive Life Cycle Assessment (LCA), we provide detailed insights into the Product Carbon Footprint (PCF, CO_2 equivalent) content.

Scope of Study

Product Name: Premium Mesh (Mesh-12)

Functional Unit: Polyester base fabric coated with PVC resin

Boundary: Cradle - to - gate+Shipping from Shanghai, China to Rotterdam, the Netherlands

Impact Indicator: Carbon Footprint | CO_2 eq

Inventory Findings

ECO

Total Carbon Footprint

1.466kg CO_2 eq

GWP： IPCC 2021

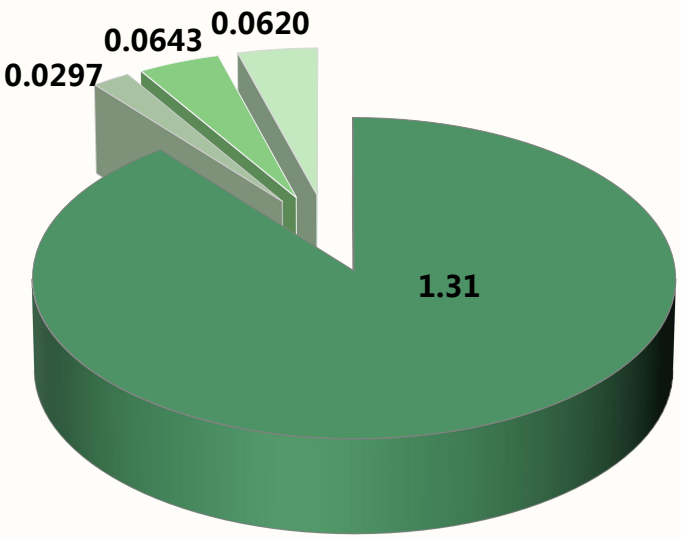
Methodology : IPCC 2021 GWP100

Data Sources : CPCD、 Ecoinvent 、Provided by upstream suppliers、Data research

Calculation Period : 2025-01-01 to 2025-12-31

Functional Unit : 1m²

MATERIALS	89.36%	1.31kg CO_2 eq
PRODUCTION	2.02%	0.0297kg CO_2 eq
PACKAGING	4.39%	0.0643kg CO_2 eq
TRANSPORT	4.23%	0.0620kg CO_2 eq
FINAL DISPOSAL	0%	0kg CO_2 eq



SOYANG ® | Every Product Carries Our Care for the Planet

This report adopts the ISO 14067：2018 standards and covers the stages of raw material acquisition, production and processing, packaging, and transportation. Carbon emission data is calculated based on internationally recognized emission factor databases and actual production data from the company.

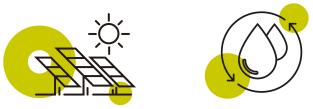
MATERIALS	**1.31kg CO_2 eq**	The impact at this stage primarily originates from the production of core raw materials. Through the use of polyester yarn, PVC resin, and process optimizations that boost material efficiency, we have effectively lowered the baseline emissions of these key components.
PRODUCTION	**0.0297kg CO_2 eq**	The emissions at this stage mainly come from energy consumption during the production process. Our production uses 32% rooftop solar PV, with operations fully supported by clean natural gas, and a closed-loop water system achieving 50% recycling.
PACKAGING	**0.0643kg CO_2 eq**	The packaging stage is mainly driven by the environmental impact caused by the production of the outer packaging of the paper tubes.
TRANSPORT	**0.0620kg CO_2 eq**	The emissions at this stage mainly come from long-distance transportation(Shanghai to Rotterdam by sea) The finished product transportation prioritize a low-carbon logistics model combining land and sea freight. By optimizing container loading rates and giving preference to sea freight and eco-friendly shipping routes in our logistics strategy, we have effectively optimized transportation emissions.

PVC FREE

PVC-Free Coating Technology

Global Recycled Standard

Recycled Yarn Application



32% solar-generated Power
Annual circulating water over 1.5 million tons