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Product Carbon Footprint Analysis

Fake Leather Wallet

Total PCF: 8.39 kg CO₂e

Per 1.0 unit · Factory-Gate Boundary · GHG Protocol Standard · China Production

Total Footprint

8.39 kg CO₂e

per unit

Primary Emission Scope

Scope 3

99.33% of total

Top Material Hotspot

Fake Leather (PU)

7.90 kg CO2e

GHG Protocol 2026 Adherence

95%+ Scope 3 Coverage

99.33% achieved

Carbon Footprint Breakdown by Lifecycle Stage

Materials (99.27%)	8.33 kg CO2e
Production Energy (0.66%)	0.06 kg CO2e
Logistics (0.05%)	0.00 kg CO2e
Waste (0.04%)	0.00 kg CO2e
Scope 1 (Direct) (0.00%)	0.00 kg CO2e

Material Contribution to PCF

Fake Leather (PU)	7.90 kg
Polyester Lining	0.27 kg
Metal Components	0.08 kg
Cardboard Packaging	0.03 kg
Polyester Thread	0.03 kg
Adhesive	0.01 kg
Polybag Packaging	0.01 kg

Key Insights & Hotspots

- ✓ The production of **raw materials, specifically fake leather (PU)**, is the overwhelming driver of the product's carbon footprint, accounting for approximately **99%** of the total emissions.
- ✓ The analysis strictly adheres to the **GHG Protocol 2026 standards**, achieving a robust **99.33% Scope 3 coverage**, highlighting a comprehensive value chain assessment.
- ✓ While comparatively minor, **purchased electricity** for manufacturing in China contributes a noticeable portion, reflecting the country's grid emission intensity. Upstream transportation and operational waste have minimal impact.

Action Plan: How to Reduce Emissions

- ✓ **Prioritize Material Innovation:** Actively research and integrate lower-carbon alternative faux leather options (e.g., bio-based, recycled content) with proven reduced cradle-to-gate impacts.
- ✓ **Enhance Supplier Engagement:** Collaborate closely with fake leather suppliers to understand and influence their manufacturing processes, encouraging adoption of cleaner energy and more efficient production methods.
- ✓ **Optimize Energy Efficiency & Sourcing:** Implement energy-saving measures in the Chinese manufacturing facility and explore opportunities for sourcing renewable electricity (e.g., solar, wind power purchase agreements).
- ✓ **Minimize Waste & Promote Circularity:** Refine material cutting patterns and manufacturing processes to reduce waste generation. Investigate and establish recycling programs for fake leather and fabric offcuts.

Report by Remko Weingarten, Senior Sustainability Consultant | Data as of April 14, 2026

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