carboncalcpcf.com

Product Carbon Footprint Dashboard

Product: hffdxmnizr | **Total Footprint:** 145.34 kg CO2e per unit

Report Generated: May 24, 2026

Key Metrics

TOTAL PRODUCT FOOTPRINT

145.34

kg CO2e

Per 1.0 unit of hffdxmnizr

CARBON INTENSITY (PER UNIT)

145.34

kg CO2e / unit

Functional Unit: 1.0 unit

TOP MATERIAL HOTSPOT

Aluminum Alloy

3.0 kg CO2e (73.3% of material impact)

PRIMARY EMISSION SCOPE

Scope 3

(Category 11)

Dominated by Use Phase

Emissions Breakdown

Lifecycle Stage Contribution

Use Phase	140.0 kg CO2e (96.3%)
Materials	4.10 kg CO2e (2.8%)
Manufacturing	2.44 kg CO2e (1.7%)
Transport	0.10 kg CO2e (0.1%)
End-of-Life	-1.30 kg CO2e (-0.9%)

Material Carbon Impact (Upstream)

Aluminum Alloy	3.0 kg CO2e (73.3%)
Polycarbonate	0.7 kg CO2e (17.1%)
Silicon Wafer	0.15 kg CO2e (3.7%)
Copper Wire	0.125 kg CO2e (3.1%)
Packaging Cardboard	0.12 kg CO2e (2.9%)

Highlights & Critical Impacts

- The **Use Phase** is the overwhelmingly dominant emission hotspot for 'hffdxmnizr', accounting for approximately 96.3% of the total product carbon footprint. This highlights energy consumption during product operation as the most significant environmental impact.
- **Scope 3 emissions** are the primary concern for kssevtppqq, encompassing major contributions from materials, manufacturing, transport, and the critical use phase, demonstrating comprehensive value chain accountability.
- Within upstream emissions, **Aluminum Alloy** stands out as the top material hotspot, contributing 73.3% of the total material-related carbon footprint due to its high emission factor.

Opportunities for Carbon Reduction

- ✓ **Use Phase Optimization:** Invest in Research & Development for more energy-efficient designs for hffdxmnizr, reducing energy consumption during its lifespan. Explore smart features that optimize energy usage and consider regional differences in energy grid intensity.
- ✓ **Renewable Energy Sourcing:** Actively pursue 100% renewable energy procurement or on-site generation for the manufacturing facility in China to significantly reduce associated Scope 3 (Category 3) emissions.
- ✓ **Circular Economy Integration:** Leverage and expand the established national program for take-back and recycling ('weihnjsokt') to maximize material recovery and explore design-for-disassembly to further increase recyclability beyond 80% ('vsdjfoizsx').
- ✓ **Supply Chain Engagement:** Collaborate proactively with material suppliers and logistics providers to identify and implement lower-carbon alternatives and more efficient transport routes across the supply chain.

Report prepared by qqsmmwhoki for kssevtppqq, adhering to GHG Protocol standards and 2026 LSR requirements. Functional Unit: 1.0 unit.