carboncalcpcf.com

Product Carbon Footprint for eyeuftevny

Total PCF: -- kgCO2e per unit

Total Footprint

-- kgCO2e

for 1 unit of eyeuftevny

Carbon Intensity

-- kgCO2e/unit

Per Functional Unit

Top Material Hotspot

--

Highest impact material

Primary Emission Scope

--

Highest contributing scope (GHG Protocol)

Lifecycle Stage Breakdown

Material Carbon Impact

Highlights & Emission Hotspots

Use Phase Dominance: The product's energy consumption during its 5-year lifespan contributes significantly (27.00 kgCO2e) to the overall footprint, making it the largest hotspot.

Last-Mile Logistics Impact: Despite a relatively short distance (50 km assumed), last-mile delivery has a substantial impact (15.00 kgCO2e) due to the assumed high emission factor for delivery vans.

Material Acquisition & Manufacturing: Upstream material production (6.52 kgCO2e) and manufacturing in China (3.72 kgCO2e) are also significant contributors, particularly given the reliance on the local grid mix.

Action Plan for Reduction

1. **Enhance Use Phase Efficiency:** Focus on product design innovations to reduce energy consumption during the 5-year use phase (currently 20 kWh/year) and consider lower-carbon electricity sources for end-users if applicable.
2. **Optimize Logistics:** Explore more carbon-efficient transport modes for the main leg (currently Road Freight for 1000 km) and optimize last-mile delivery routes/vehicles to reduce the 15.00 kgCO2e impact.
3. **Increase Renewable Energy in Manufacturing:** Expand the current 60% renewable energy usage in the China production facility to further diminish Scope 2 emissions (currently 3.72 kgCO2e).
4. **Strengthen Circularity:** Leverage the 80% recyclability and company-wide take-back program to maximize avoided emissions from End-of-Life, potentially increasing the current credit of -3.65 kgCO2e.
5. **Supplier Engagement for Materials:** Engage with suppliers to obtain primary emission data for high-impact materials like Steel Casing (2.4 kgCO2e) to identify and implement targeted reductions.