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Product Carbon Footprint for ppyzhzlfym

Report Date: May 27, 2026

Total Carbon Footprint

108.08 kgCO₂e

Functional Unit

1.0 unit

ppyzhzlfym

System Boundary

Factory Gate

Cradle-to-gate perspective

Production Country

China

GHG Protocol Standard

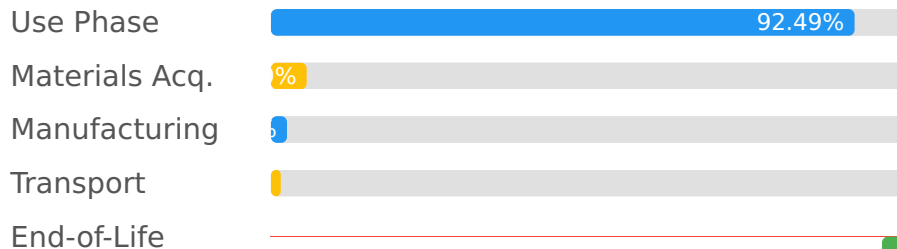
Primary Emission Hotspot

Use Phase

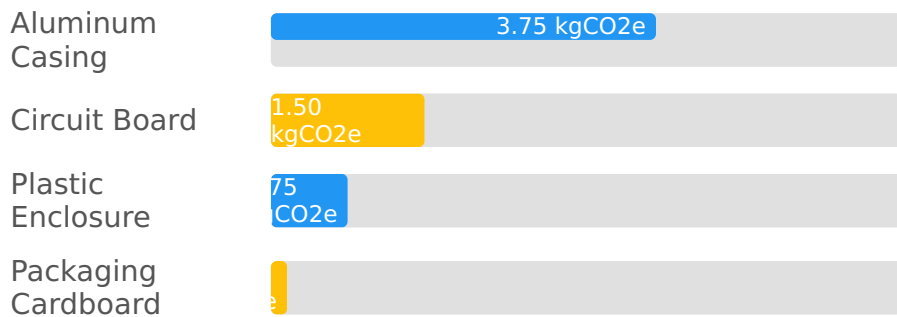
92.49% of total footprint

Carbon Footprint Breakdown

Lifecycle Stage Contributions



Material Carbon Impact (Top Contributors)



Highlights & Key Insights

- The **Use Phase** is the most significant hotspot, contributing approximately 92.49% of the total product emissions, primarily due to assumed energy consumption over its 5-year lifespan.
- The **End-of-Life** stage results in a net carbon saving of -1.21 kgCO2e/unit due to the high recyclability percentage (70%) and the existence of circular programs, effectively offsetting disposal emissions.

Recommendations for Emission Reduction

- Material Acquisition & Pre-processing represents the second largest contributor, accounting for 5.69% of the total footprint, with Aluminum Casing being the largest material impact.
1. **Use Phase Optimization:** Invest in R&D to significantly reduce the product's energy consumption during its use phase through energy-efficient components or smart energy management.
 2. **Renewable Energy Sourcing:** Increase the percentage of renewable energy used in manufacturing facilities beyond the current 50% to further reduce Scope 2 emissions.

